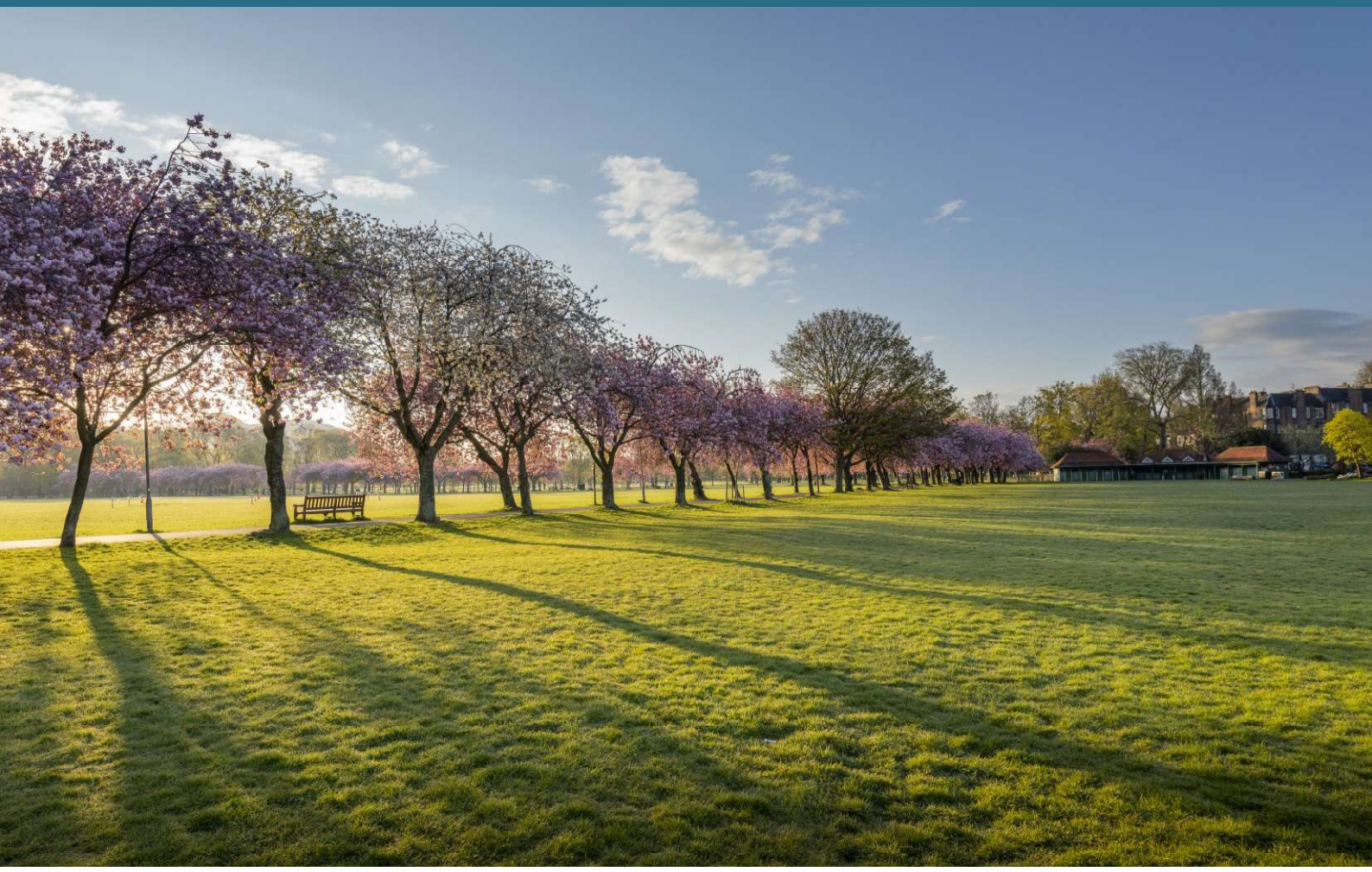
ISSTI

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

Newsletter

No. 46 | November 2024



In this issue of the ISSTI Newsletter, we are pleased to share recent accomplishments and developments within our community. This edition highlights an impressive array of major new research awards. We also celebrate new appointments and the recognition of achievements by staff, students and alumni. We welcome visiting scholars who continue to enrich ISSTI's interdisciplinary environment. Our strong contribution to the international EASST-4S conference provides an opportunity to reflect upon the diverse strengths of the ISSTI community.

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£14.25M UKRI Advanced Therapeutics Hub

Earlier this year, **Prof Jane Calvert** and **Dr Rob Smith** became co-investigators on a five-year, £14.25M Engineered Genetic Control Systems for Advanced Therapeutics Hub, a multi-institutional project to advance gene therapy for serious conditions. The Hub is one of six hubs launched as part of a £100M UK investment in engineering biology, funded by the UKRI Technology Missions Fund and the Biotechnology and Biological Sciences Research Council (BBSRC). This Hub adopts an engineering approach to biology, developing a suite of new biological tools to help treat cancers, cardiovascular disease, and rare diseases, while training future biological engineers. A key component is the responsible research and innovation (RRI) workstream led by Jane and Rob. Joining them are two other STIS team members, **Dr Reuben Message** and **Dr Sophie Stone**, both of whom have taken up research fellowship positions in the new Hub. Together, they will explore field-specific imaginaries, examine understandings of living medicines and cognate technologies, and work with those involved to anticipate and engage with future trajectories. It's early days, but there are some ambitious plans afoot. These include hosting an array of interdisciplinary workshops, as well as a collaborative consultation to shape a social science research agenda for the field. Perhaps most excitingly for those involved, the Hub also offers new opportunities to foreground interdisciplinary collaboration, building on the team's existing interests in space, time, and championing thinking *with* people as a way to build capacity for RRI across the Hub and beyond.

If pollinators designed gardens, what would humans plant? Using living artworks and citizen science to drive evidence-based pollinator conservation

A new research project, led by the universities of Exeter and Edinburgh, and funded by UKRI's cross research council funding scheme, brings together art, ecology, social science and philosophy to reimagine what gardens are, and what they are for. Using Alexandra Daisy Ginsberg's Pollinator Pathmaker (pollinator.art) artwork, participants in a village in Cornwall will plant gardens algorithmically designed for pollinators rather than people. Ginsberg is leading the artistic side of the project, Chris Kaiser-Bunbury (PI), an ecologist from the University of Exeter, will measure the impact of the gardens on pollinator diversity, and **Jane Calvert** from STIS in Edinburgh will carry out social scientific research to explore how participants relate to their new gardens. This work will all be informed by philosophical reflections on art, nature and gardens, led by Professor John Dupré at the University of Exeter. The project aims to contribute to novel conservation methods, challenge traditional human-centred perspectives, and ask how interdisciplinary research can be harnessed to benefit both human and nonhuman worlds. For more information, visit the news "'Art for insects' could help save pollinators" on the University of Exeter website.

Pollinator Pathmaker Eden Project Edition. Photo Royston Hunt. Courtesy Alexandra Daisy Ginsberg Ltd.

Research Awards

£11M UKRI UK Energy Research Centre

ISSTI members in the School of Social and Political Science (SPS) are part of a new phase of funding for the UK Energy Research Centre (UKERC). UKERC has been awarded £11 million for the next four years from the Engineering and Physical Sciences Research Council (EPSRC) and the Economic and Social Research Council (ESRC), part of UK Research and Innovation (UKRI). Within this, SPS researchers have been awarded around £700,000. The University of Edinburgh was a founding partner of UKERC in 2004 and, building on 20 years of success, this new investment marks a significant step forward in advancing the UK's energy transition, focusing on interdisciplinary research and innovative solutions to real-world energy challenges.

Dr Mark Winskel, Senior Lecturer in Science, Technology and Innovation Studies, is a UKERC Deputy Director, leading on interdisciplinary research integration and academic engagement, and contributing to UKERC's Responsive Research theme. Dr Winskel co-Chairs the Energy@Edinburgh network. **Dr Jess Britton**, Research Fellow in Sociology, is leading a research theme on equity, affordability, and economic impacts of GB energy decarbonisation. **Prof Jan Webb**, Professor of Sociology of Organisations, is leading a project on place-based approaches to accelerating delivery of net zero energy systems.

Dr Britton says "It's essential that energy systems decarbonise in ways that are fair, affordable, and responsive to people's needs. We're looking forward to carrying out research to provide evidence on the varying impacts and opportunities of net zero energy systems across society, within localities, and for the wider economy". Dr Winskel added "being part of the UK Energy Research Centre offers the chance to understand societal challenges from different disciplinary perspectives and collaborate in a supportive interdisciplinary environment. Science, Technology and Innovation Studies is very well placed to help bridge divides between social and natural sciences!" For further information on UKERC's research, visit www.ukerc.ac.uk.

Dr Jess Britton

Dr Mark Winskel

Professor Jan Webb

This is the Newsletter of the Institute for the Study of Science, Technology and Innovation (ISSTI). This interdisciplinary network, founded in 2001 by Robin Williams, brings together colleagues from across the University of Edinburgh studying science, technology and innovation, and is hosted by the Science, Technology and Innovation Studies (STIS) Subject Group. Find us on our website: www.issti.ed.ac.uk.

The 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.

ISSTI Newsletter Editorial Team: *Huayu Xin (Editing and Layout); Robin Williams and Matjaz Vidmar (Overall Editorial Supervision).*

£4.7M Wellcome Trust Discovery Award "Medicine without Doctors: Reimagining Care and Voice through Play"

Who can define what care is? What happens when medical expertise is actively displaced to other medical positions, technological advances, or community stakeholders?

Researchers at the University of Edinburgh have been awarded £4.7 million through a prestigious Wellcome Discovery Award for the project "Medicine Without Doctors: Reimagining Care and Voice Through Play". This six-year interdisciplinary research study will fundamentally shape our understanding of contemporary and fast-paced disruption to the practice of medicine. While change and shifts in authority are not new, the present historical moment demands that the humanities and social sciences reckon with an intensification of technological, social and political upheaval. Combining expertise from history, sociology, philosophy, law, design, and science and technology studies, Medicine Without Doctors investigates medicine practised otherwise. Medicine Without Doctors is led by: PI: Dr Ingrid Young, Senior Lecturer, Centre for Biomedicine, Self and Society; Dr Agomoni Ganguli-Mitra, Senior Lecturer, School of Law; Dr Nayha Sethi, Senior Lecturer, Centre for Biomedicine, Self and Society; **Dr Lukas Engelmann**, Senior Lecturer, Science, Technology and Innovation Studies; **Dr Catherine Montgomery**, Senior Lecturer, Science, Technology and Innovation Studies; Dr Will Nutland at The Love Tank; Santini Basra at Andthen. To stay in the loop, sign up for the Medicine without Doctors Newsletter here: MwD Newsletter.

Data and the Healthcare 'Revolution' (DARE) Project

"Data and Healthcare 'Revolution'" (DARE) is a five-year research project selected by the European Research Council (ERC) and funded by the UKRI Frontier Research Guarantee scheme, exploring the intersection of data, care and learning in the era of data-driven transformations in healthcare. Led by **Dr Catherine Montgomery** at the University of Edinburgh, the project engages with academics, healthcare practitioners, patients, policy makers, and industry representatives engaged in data-driven innovation across a range of initiatives. Case studies for the project include decentralised clinical trials in paediatric rare diseases facilitated by global medical technology companies; cutting-edge advances in critical care through the use of time critical precision medicine trials; and the development of person-centred data-sharing through the use of personal data stores.

In July, the project welcomed three new postdocs to Edinburgh: **Dr Max Perry** is a sociologist with interests in bureaucracy, technology and infrastructures. His research focuses on the ways that technological innovation is processed and produced through policy making practices. **Dr Abby King** is an anthropologist whose work has focused on the use of telehealth in the provision of mental health care; the implementation of electronic prescribing technologies in hospital; and the meanings and cultures guiding understandings of 'access to care'. **Dr Nicola Sugden** is a historian of medicine whose work has interrogated evolution and genetics; psychoanalysis, psychology, and psychiatry; disability, inclusion, and ethics; and reproductive technologies. For further information about the project, visit: https://dare.ed.ac.uk/.

DARE

£5M Wellcome Trust Discovery Award "Between Deception and Dissent: Regulating Unproven, Disproven, or Misleading Health-Related Claims"

From May 2025, **Martyn Pickersgill** will be co-leading with Emilie Cloatre (U Kent, PI) a new Wellcome Trust Discovery Award: "Between Deception and Dissent: Regulating Unproven, Disproven, or Misleading Health-Related Claims". Emilie and Martyn will be leading this £5M, six-year project with a team of other Co-Is—Caesar Atuire (U. Ghana), Máiréad Enright (U. Birmingham), Phoebe Friesen (McGill U.), Patricia Kingori (U. Oxford), Tidiane Ndoye (Université Cheikh-Anta-Diop), and Nayeli Urquiza (Lancaster U.)—along with additional Collaborators, over seven countries. Martyn has also been awarded funds with Miranda Waggoner (Rice U.) for a one-year project on the dynamics between what are regularly schematised as 'care' and 'research' in global health and clinical trials.

Building Sustainability on a Foundation of Care: A Pilot Study in the Highlands of Scotland

Dr Sarah Parry is leading a ACCESS Flex Fund Project titled "Building Sustainability on a Foundation of Care: A Pilot Study in the Highlands of Scotland." This project seeks to reframe environmental decision-making, which often prioritises economic and technical perspectives, by developing a socioecological care approach that enhances people-planet relations. Inspired by Murphy's (2024) vision of diverse, caring places, it emphasises care as an ethical-political stance, valuing relationships, interdependencies, and qualities like respect and solidarity. Such an approach not only foregrounds marginalised perspectives but also addresses the inequalities within caring relations (Tronto, 2013), highlighting everyday caring practices as transformative dynamics.

Through collaboration with social scientists, community co-researchers, and musicians, the project will blend social science insights with lived experiences, building skills in communities around socioecological care. It will focus on three case studies in the Highlands of Scotland—a green space, a regenerative farm, and a landscape restoration project—to illustrate diverse socioecological care challenges. Key outputs include a toolkit for communities, explanatory case studies, and Scottish music compositions that explore care themes, ultimately enhancing scholarship and empowering communities to engage in sustainable environmental practices. For further details, please visit the project website: Building Sustainability on a Foundation of Care.

Data Benefits Project

Bank records. Medical records. Proof of identity. This is just some of the personal information people need to provide when applying for benefits or social security payments. But what happens to this data? Who has access to it? And how do we design systems that help support people who need it most?

Morgan Currie and Vicky Gorton are conducting a new research project called "Data Benefits", which builds on the UKRI ESRC-funded "Automating Universal Credit" project. This study includes insights from stakeholders involved in current data sharing activities in the UK, as well as the views and experiences of individuals who receive social security payments in Scotland. Findings from the study will support efforts towards social security reforms, including evaluating the viability of offering a minimum income guarantee to all Scottish citizens. The research was presented at the ESRC's Festival of Social Science on 24th October 2024 and 7th November 2024. More details can be found on the project website: Data Benefits.

Image Source: Data Benefits.

Independent Evaluation of NHS AI Lab

Prof Kathrin Cresswell (Usher Institute) has been awarded £500,000 to evaluate NHS England's £250 million groundbreaking initiative to promote wider uptake of Artificial Intelligence (AI) in Health and Social Care. Kathrin leads an interdisciplinary team including **Robin Williams**, **Miguel Bernabeu** (Usher), **Stuart Anderson** (Informatics), **Hajar Mozaffar** (Business School), as well as Sheena Dungey and Sally Eason from NHS Arden and Greater East Midlands Commissioning Support Unit.

This independent mixed-methods evaluation of the NHS AI Lab seeks to understand and assess the processes, impact, and value for money of the programme both now and in the future. Its aim is to capture key insights, demonstrate value for money and accountability to stakeholders, and establish specific and generalisable knowledge to inform future AI Lab activities and similar initiatives.

The objectives of this evaluation include gathering objective and robust evidence on the implementation processes, programme outcomes, and financial efficiency of the AI Lab. It also aims to identify lessons learned that can support the design and delivery of ongoing AI Lab projects. Additionally, it seeks to generate actionable insights for future AI programmes within public sector healthcare and the broader public sector.

Employing a retrospective and prospective mixed-methods approach, including both formative and summative evaluation, the evaluation will work closely with commissioners to examine the conception, progress, and evolution of the AI Lab in England. The evaluation is organised into five work packages, covering areas such as establishing liaison mechanisms and defining key stakeholders, assessing the processes surrounding the implementation of the AI Lab, evaluating the AI Lab's impact, assessing both short- and long-term value for money in health and care, and identifying the overall lessons learned, results, and cost-effectiveness of the programme. For further details, please visit the project page.

Digital and Artificial Intelligence Transformation Lab

The Digital and AI Transformation (DAIT) Lab was officially launched on the 8th of October 2024. Focused on bridging academia, industry, and future technology adopters, the DAIT Lab underscores the importance of using diverse methods and multidisciplinary research to bring AI into practical applications. At the launch event, **Dr Hajar Mozaffar** (University of Edinburgh Business School), Director of the Lab, highlighted how understanding market trends, adoption patterns, and macro-environmental influences is essential not only for forecasting AI's future but also for driving real-world impact.

The DAIT Lab is a multidisciplinary team of academics, researchers, and students dedicated to researching the transformative potential of digital technologies and fostering their practical adoption. Key areas of focus include exploring complex digital transformations across work, organisations, and sectors; building cross-organisational knowledge ecosystems; and evaluating digital transformation initiatives. In the realm of AI, the lab explores the roles of intermediaries in shaping AI markets, conducts qualitative and mixed-method evaluations of AI technologies, and develops practical AI use cases, with a strong focus on Responsible AI practices and the adoption and effects of Generative AI. More information on DAIT Lab's projects and strategic directions can be found on the DAIT Lab page.

Call for Contributions: Rebuilding the Digital PICT Paper Collection

Many of you may know the influential set of *Edinburgh PICT Working Papers* produced in the 1986-95 period when Edinburgh was a node in the ESRC's flagship Programme on Information and Communication Technologies. Sadly, the online collection of Edinburgh PICT papers was lost during a server upgrade. We only have electronic versions of Papers 3, 8 and 54. We would like to rebuild the collection. Please get in touch if you have an electronic version of any others. Email Robin.Williams@ed.ac.uk.

Research Awards

2024 SSN Outstanding Achievement Award

Professor Emeritus Charles Raab has received the Surveillance Studies Network (SSN) 2024 Outstanding Achievement Award. The SSN is a large international research community of scholars from many disciplines working in all dimensions of the study of surveillance and related topics. The award is presented biennially at the SSN Conference, which this year took place in Ljubljana, Slovenia, from 29–31 May. Read the announcement from the SSN here.

2022 I&O's Best Paper Awards

The I&O's Best Paper Awards (2022) have been awarded to: **Pollock, N., Williams, R., & D'Adderio, L. (2022). *Figuring out IT markets: How and why industry analysts launch, adjust and abandon categories.* Information and Organization, 32(1).** and Qureshi, I., Bhatt, B., Parthiban, R., Sun, R., Shukla, D. M., Hota, P. K., & Xu, Z. (2022). *Knowledge commoning: Scaffolding and technoficing to overcome challenges of knowledge curation.* Information and Organization, 32(2).

Explaining more about this year's choices, Michael Barrett, Editor-in-Chief of *I&O*, notes that Pollock, Williams, and D'Adderio's 2022 paper, *Figuring out IT markets*, stands out as an exceptional work connecting category theory and digital (IT) markets—two fields rarely combined. The authors skilfully bridge these literatures to highlight how IT organisations respond to the positioning created by industry analysts, dedicating substantial marketing and thought leadership resources to secure a favourable spot on the competitive grid. Such positive analyses are highly valued, frequently featured in business development proposals, used to reassure existing clients, and leveraged to strengthen HR recruitment efforts.

This paper sheds light on how and why industry analysts formulate technology market categories and, at times, adjust them quite abruptly. The insights from this paper provide valuable implications for IT organizations as they go about understanding and navigating industry analyst categories. This longitudinal study spanning nine years exemplifies rigorous methodology, theoretical richness, and the potential for research impact and relevance to practitioners.

2024 Andrew Webster PhD Prize

Benedetta Catanzariti, currently a British Academy Fellow in STIS, has won the Andrew Webster prize for her dissertation "*Seeing Affect: Knowledge Infrastructures in Facial Expression Recognition Systems*." Benedetta's thesis examines affective computing applications and their promise to 'decode human affective experience' – in essence, to read the face and its emotions, from frustration to boredom and depression – with scientific objectivity. The nomination noted how she brings historical context to these practices by grounding them in older psychological theories (including overtly racist ones) and longstanding Western claims that there are universal emotions and acknowledges an important legacy of critiques of such projects.

Vassilis Galanos has also received a commendation for his thesis, "*Expectations and Expertise in Artificial Intelligence*." The commendation highlights his work as "an outstanding piece of research that offers novel insights into the relationships between AI technologists and those involved in AI governance, bringing together the sociology of expectation and studies of experience and expertise in new ways." Please see details at the AsSIST-UK website: https://assistuk.org/news/.

Special Feature: ISSTI at EASST-4S 2024, Amsterdam

The joint EASST and 4S conference—held this year in Amsterdam, the Netherlands, in July—is the main international event for scholars in our field. Approximately **60** ISSTI members participated, offering papers and convening over **20** panels. This does not include scores of our former PhD students now working around the world. This highlights the breadth and dynamism of ISSTI's research community.

ISSTI brings together a diverse community of scholars dedicated to exploring the policies and societal impacts of science, technology, and innovation. This work cuts across disciplinary boundaries not only within social sciences and the humanities but also involving close collaborations with science, medicine and engineering Rafols et al. (2012).

Research Themes

Analysis of the panels and papers contributed to EASST/4S by ISSTI members reveals our broad and interdisciplinary research engagement across many key areas of enquiry: Health and Biomedicine, Artificial Intelligence and Data Studies, Space and Planetary Studies, Social Equity and Inclusion, and Financial and Capitalist Studies. The Health and Biomedicine theme addresses topics such as biomedical diversity, pharmaceutical innovation, and data infrastructures in epidemiology, providing critical insights into social and ethical challenges. Artificial Intelligence and Data Studies emphasises responsible AI, public engagement, data asymmetry, and transparency in AI applications, reflecting ISSTI's commitment to exploring the societal impact of data technology. The Space and Planetary Studies theme integrates planetary science, ecology, astronomy, and marine conservation to examine the intricate relationships between humans, Earth, and the cosmos. Social Equity and Inclusion investigates diversity, equity, and inclusion in science and technology, incorporating Indigenous and minority perspectives. Financial and Capitalist Studies discuss the assetisation of knowledge and the economic structures within digital platforms, focusing on the interactions between technology, capital, and knowledge in capitalist contexts.

Research Methods and Approaches

ISSTI's research methodologies are diverse, reflecting a commitment to interdisciplinary collaboration and social relevance. The STS Methodologies theme focuses on participatory approaches, boundary work, and critical analysis of "hype cycles" in science and technology studies, offering tools for addressing complex societal issues. Community Engagement highlights the role of public involvement in science and technology decision-making, especially in AI and data studies, underlining the importance of societal interaction. Critical Analysis applies a rigorous critical approach to fields like science, mathematics, and education, uncovering power structures and implicit biases. Sociotechnical Perspectives examine AI's interactivity and transparency, exploring how technology influences society through social interaction. Lastly, Ethics and Governance focuses on bioethics, anticipatory governance, and governance of technology, reflecting a strong ethical and cultural dimension in ISSTI's research.

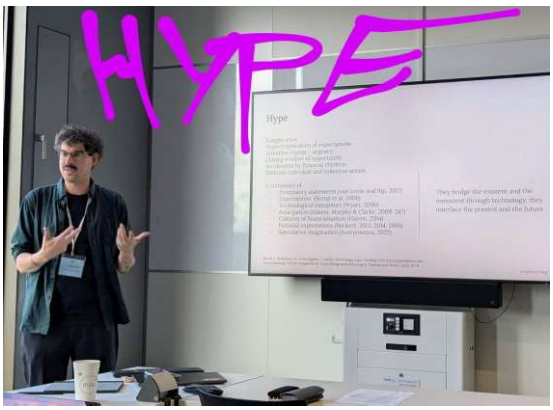



Photo providers: Vassilis Galanos, Robin Williams, and Huayu Xin.

For example, the *"Datafied Publics"* panel, convened by **Morgan Currie, Karen Gregory, and Cath Montgomery**, explored how "datafied publics" mobilised politically in response to opaque data governance by commercial and government entities. Focusing on organising participation, resisting big-tech power, and pushing for transparency, the panel examined how these publics demanded democratic oversight in areas like regional planning, social security, and public safety, challenging the algorithmic control that shapes their lives.

The *"What is to be done? Data infrastructures and doable problems in epidemiology, biomedicine, and beyond"* panel, convened by **Carolina Mayes, Cristina Moreno Lozano, Lukas Engelmann, and John Nott**, explored how data infrastructures shape what becomes "doable" in health research. Focusing on research priorities, visibility, and infrastructural constraints, the panel examined how these factors influenced which health issues gained attention in fields like epidemiology and biomedicine, challenging the material conditions shaping scientific inquiry.

The contribution of the ISSTI community to EASST-4S 2024 highlighted Edinburgh's strengths in interdisciplinary collaboration. Drawing on connections established since 1966, ISSTI exemplifies an inclusive, practice-oriented research culture, demonstrating a commitment to fostering robust collegial links internally across diverse fields, along with strong collaborative ties externally across Europe, North America, Australia, among others.

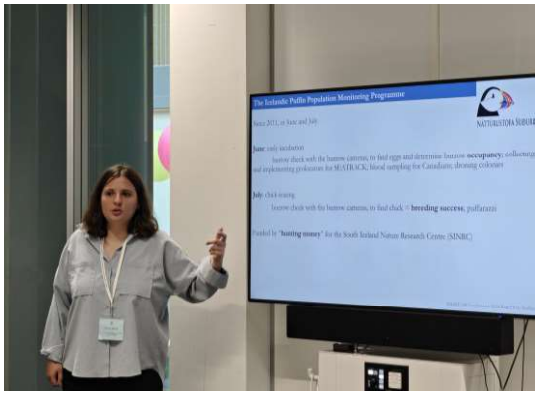
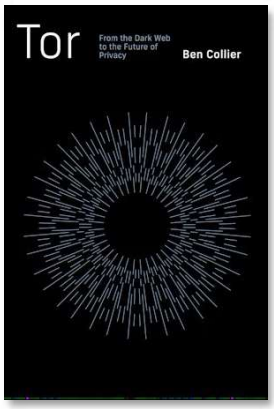



Photo providers: Eugénia Rodrigues, and Huayu Xin.

Tor Book Launch



Dr Ben Collier's latest book, *Tor: From the Dark Web to the Future of Privacy*, delves into the often hidden story of Tor, a foundational yet misunderstood technology within the digital age. Known as the infrastructure behind the so-called Dark Web, Tor's true significance lies in its complex role in global power structures and privacy politics. Collier traces Tor's origins to the 1990s in the US Navy's Naval Research Lab, where its development involved an unlikely alliance between military scientists and the hacker collective Cypherpunks. Through interviews with developers, activists, and users, and drawing on decades of archival material, the book reveals how different groups—from engineers to privacy advocates—have influenced Tor's evolution. Collier's analysis unpacks how these diverse visions shape Tor's ongoing relevance in digital privacy and its future implications.

The book launch, held on 24th April, introduced *Tor* within the framework of the Biography of Artifacts and Practices (BOAP) approach. BOAP, a methodology that Collier employs throughout the book, traces how technologies evolve across various cultural and political contexts. At the event, the discussant reflected on how BOAP sheds light on Tor's unique journey, from its military roots to its role in today's privacy debates, revealing the social, political, and technological influences that have shaped it. This discussion offered insights into the value of BOAP for studying digital infrastructures, highlighting the broader implications of technology as it moves through multiple spheres of influence.

Presentations

1. On 11th April, at the Institut Français in Edinburgh, a preview of *Ectocarpus*, an interdisciplinary performance blending dance and science, took place as part of the Edinburgh Science Festival. This event, which won the 2022 Royal Society of Edinburgh's Saltire Award for "Geography of Collaborations", offered a unique look into the collaboration between art and research. The performance featured dancers from Frichti Concept, Virginie Avot and Brendan Le Delliou, with insights from **Professor Niki Vermeulen** of the University of Edinburgh and **Dr Marion Maisonobe** from Centre national de la recherche scientifique (CNRS). The full performance followed on 12th April, at the Bayes Centre.

2. **Charles Raab** gave a keynote presentation at the International Workshop on AI and Surveillance in Policing and Law and Order: Opportunities, Threats, Perspectives, and Cases, held by the Department of Applied Information Technology at the University of Gothenburg, Sweden, from 16–18 October 2024.

3. This year, **Martyn Pickersgill** co-organised two workshops in Edinburgh and Dublin in relation to his AHRC grant on "Targeting Therapies: Exploring the Cultural and Normative Dimensions of 'Targeted' Approaches to Biomedicine and Public Health" (with Susi Geiger, UC Dublin), along with various public and policy engagement activities (including with Norwegian MPs as part of a Consulate event, and with Audit Scotland). Linked to this and his prior work on neuroscience and society, Martyn gave a conference keynote on "The Ambivalent Life of the Brain in the Twenty-First Century" this June in Denmark. He has also recently returned from Australia, where he was the launch speaker for the University of Melbourne Medical Humanities Lab.

Announcements

1. In January, **Pippa Goldschmidt**'s book *Night Vision* was published by Broken Sleep Books. This essay explores the personal, social, and cultural meanings of outer space, tracing its shift from a realm of religious awe to one of potential commercial capital. *Night Vision* has since been longlisted for Scotland's National Book Awards in the non-fiction category. An excerpt from *Night Vision* can be found at *The Drouth*.

In May, Goldschmidt's short story *Lord of the Fruit Flies* about the geneticist Herman Muller was broadcast on Radio 4 and is available here. In July, her review of *Literature, Science and Public Policy: From Darwin to Genomics* by Jay Clayton (CUP) was published in the TLS.

In August, Goldschmidt's short story collection, *Schrödinger's Wife (and other possibilities)*, was published by Goldsmiths Press/Gold SF. The collection follows the lives of women as scientists, technicians, patients, doctors, and spouses, capturing their encounters with modern science in various forms. An extract from *Schrödinger's Wife (and other possibilities)* is available at the MIT Press Reader here.

2. **Jarita Holbrook** was selected as the 2024 Visiting Fellow at the International Centre for Radio Astronomy Research (ICRAR). During this fellowship, Holbrook will screen two films: *Black Suns* and the ASTROMOVES short film *Imposter Syndrome*. Holbrook's initial plan involved extending their research on astronomy technopoles from the Square Kilometre Array (SKA) in South Africa's Karoo region to the SKA site in Western Australia. They are using their fellowship to explore this prospect. Holbrook has previously produced three films on SKA Africa, including *Echoes of the SKA*, available here. The University of Edinburgh and STIS also hold streaming rights to *Black Suns: An Astrophysics Adventure*, accessible here for classroom discussions.

In another recent highlight, Holbrook was interviewed by Loretta Cannon of H'ad Astra Historia for the *365 Days of Astronomy* podcast, discussing the launch of the American Astronomical Society's Oral History Project. Part 1 of the podcast, released on 26th September, is freely available here. Additionally, Holbrook premiered a new ASTROMOVES short film, *Impostor Syndrome & Belonging*, for radio astronomers in Perth. This film is part of Holbrook's ongoing effort to re-edit ASTROMOVES footage into thematic short films. Holbrook has written a blog post about this release, which includes the film, available here.

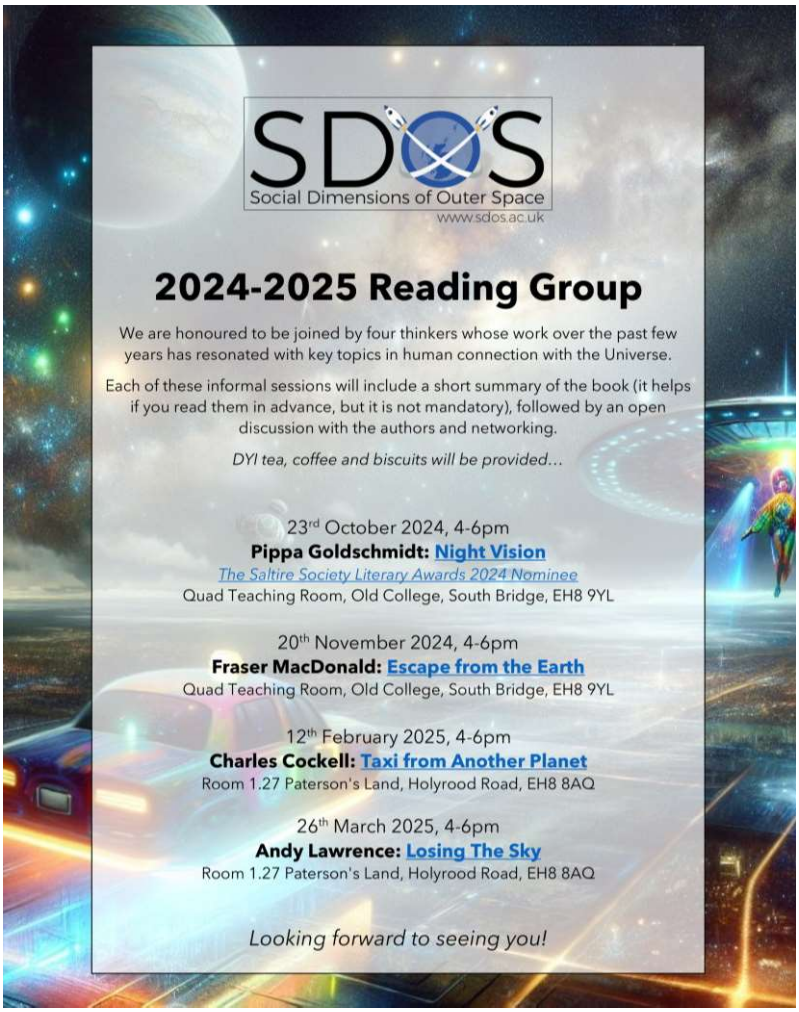
3. The website AICS History is a collaborative project by **Xiao Yang**, a PhD candidate at STIS, **Dr Vassilis Galanos**, an STIS alumnus currently at the University of Stirling, and Professor Chris Williams from the School of Informatics. Among the oral history interviews collected for the site is a notable one-hour conversation with Edinburgh alumnus and Nobel laureate Professor Geoffrey Hinton.

Dr Vassilis Galanos was invited to contribute a three-part blog series to the University of Edinburgh's *Teaching Matters*. This thought piece examines the rise of Generative AI alongside established academic metrics, such as grading and journal rankings, as well as internet numerical cultures (likes, follows, and favourites). The series includes: *It's the metrics, not the Matrix: Part 1 Higher Education State Critical*; *Part 2 Rigorously Established Fear*; *Part 3 Degenerative AI*.

4. An interdisciplinary team across the University of Edinburgh and Fife College has been awarded over £500,000 from the UK Space Agency for a new training programme. This is one of five awards made by the UK Space Agency in a very competitive scheme to provide critical skills for the growing space sector. Ten new courses are being developed, with five advanced studies options at the University of Edinburgh and five entry level offerings at Fife College. These cover both technical skills as well as critical societal dimensions of working with emerging space technology. The project is led by Prof Iain Woodhouse, **Dr Matjaz Vidmar**, Kristina Tamane and Teresa Ironside (The University of Edinburgh/Bayes Centre), and Jenni Doonan (Fife College). More information is available on the website here.

Other updates from **Dr Matjaz Vidmar**: (1) *The New Real* will conclude its "4 Generation" project with an exhibition at InSpace in late December. More details here. (2) Edition Two of *The New Real Magazine* is being released. Further information available here. (3) A two-part blog series, *Is ChatGPT Spelling the End of Take-Home Essays as a Form of Assessment?*, examines the implications of ChatGPT for assessment practices. It includes: *Part 1: The Principles*; *Part 2: The Practice*.

Social Dimensions of Outer Space (SDOS) Reading Group



Global Connections

Linking up with the Chinese STS community

Xiaobai Shen and Robin Williams gave presentations at the Science and Technology Ethics International Symposium, organised by the Academic Divisions of the Chinese Academy of Sciences, Shanghai, on 14th October 2024. This was the start of a series of presentations and research workshops with the Shanghai Institute for Science of Sciences and Shanghai Jiao Tong University, the Institute of the History of Natural Sciences, Chinese Academy of Sciences in Beijing, and the Sino-Danish Workshop on Global Innovation and Policy Transitions, University of Chinese Academy of Science in Lake Yanqi. The trip provided an opportunity to renew and extend our contacts with the burgeoning Chinese STS community. For more information about ISSTI's Chinese links contact Xiaobai Shen (xiaobai.shen@ed.ac.uk).

ISSTI Alumnus: Juan Pablo Pardo-Guerra

Juan Pablo Pardo-Guerra has been promoted to Full Professor in Sociology at the University of California, San Diego. He is also a founding faculty member of the Halicioğlu Data Science Institute, co-founder of the Computational Social Science program at UCSD, and Associate Director of the Latin American Studies Program at UC San Diego. His research concerns markets and their location in contemporary societies, with an emphasis on finance, knowledge, and organizations. He was trained in physics at the Universidad Nacional Autónoma de México and Science and Technology Studies at the University of Edinburgh.

ISSTI Alumna: Eun Sun Kim

Eun Sun Kim received her PhD in Science and Technology Studies at the University of Edinburgh in 2015. Dr Kim currently serves as Director-General of the Data Analysis Division at the Korea Institute of Science and Technology Information (KISTI) and holds an associate professorship in the Department of Science and Technology Policy Management at the University of Science and Technology (UST). Since 2021, she has also been a member of the National Industry-Academic Cooperation Committee. Her research focuses on developing models for the stages of technology commercialisation within public R&D projects, establishing analytical data infrastructure to support evidence-based S&T policy, and creating a robust ecosystem for nationwide industry-academic collaboration.

Recognition

1. **Martyn Pickersgill** has been reappointed to the ESRC Strategic Advisory Network. He has also joined the UK All Party Parliamentary Group on Social Science and Policy. In his role as a member of the Scottish Science Advisory Committee, Martyn is part of a new working group on engineering biology.

2. As of March 2024, **Giulia De Togni** has become a Turing Fellow. More information here.

New Staff

Jenny Bangham

Jenny Bangham arrives in STIS from the School of History, Queen Mary University of London. A long time before that, she spent a few years as a biologist at the University of Edinburgh, where she fell in love with the city. Afterward, she retrained as a historian in Cambridge, Berlin and London and now studies the history of medicine and science.

Jenny brings to Edinburgh a Wellcome-funded project that seeks to trace how clinical genetics in the UK has been shaped by disability rights, racial politics, and the disciplinary and gender politics of the NHS. Like her first book, this project seeks to recover how genetics has historically become understood as such a powerful authority on human health, history, and identity. She also has long-standing interests in loss and invisibility; her recent co-edited volume *Invisible Labour in Modern Science* (Rowman & Littlefield, 2022) considers how people and practices are concealed, eclipsed, or anonymised in scientific and medical research. Jenny is developing a new project to chart the history of 'rarity' in biomedicine.

Janja Komljenovic

Janja Komljenovic is a Senior Lecturer in Digital Futures at the Centre for Research in Digital Education, Moray House School of Education and Sport. Her research focuses on the political economy of higher education digitalisation; the digitalisation, datafication, and platformisation of universities; and new forms of economic and social value in digital higher education. Previously at Lancaster University, she led an ESRC-funded research project investigating digital rentiership in higher education, especially how things like digital data, content, and platforms are constructed as assets; the role of venture capital investors; and the EdTech start-up industry. Applying a theoretical lens of assetization, the research team was especially interested in the value of personal data. Her approach intersects economic sociology, science and technology studies, and higher education research.

Recent Visiting PhD Students

Charlotte H. Grøder

Charlotte H. Grøder is a PhD candidate from the Department of Computer Science at the Norwegian University of Science and Technology (NTNU) and is visiting the University of Edinburgh this semester. Her research focuses on the early-stage implementation of responsible AI in public welfare from a sociotechnical perspective, specifically examining the planning phase where AI applications are envisioned for various public services, including design considerations, future scenarios, and visions for AI use. During her visit, she aims to build connections and foster networks for AI-related research, contributing actively to the university's academic—and social—community.

Kevin Wiggert

Kevin Wiggert is a PhD student in the Department of Sociology of Technology and Innovation at the Technical University of Berlin. As part of a project team, he explores innovative approaches to human-robot collaboration in industry and the care sector, with his own research focus on care applications. His dissertation, however, takes a unique theoretical and empirical approach, investigating how clinical knowledge structures are transformed by machine learning-based decision support systems. From August to December 2024, he has been a visiting scholar at ISSTI, where he intends to concentrate on the empirical analysis for his thesis. He looks forward to engaging in lively discussions on researching medical AI from a social science perspective.

Recently Completed PhD Work

The Promise of Power - The Power of Promise

Mark Cassidy has recently moved to a visiting position within STIS following previous work with **Steve Yearley** on the UKRI TransFIRe project. Building from his recent PhD in the History of Technology, supervised by Matthew Eisler at Strathclyde University, Mark is using his visiting position to further develop his research agenda around the multiple roles played by promissory materials and technologies in energy transitions.

His PhD research followed the historical pathways of a single fuel cell type over six decades of development—that of the high temperature solid oxide fuel cell (SOFC). Drawing on his 25 years as an SOFC researcher and augmenting documentary records and oral histories with material sources, he found a device repeatedly reframed around the promise of new materials and processing. The work offers an account of how technological communities utilised promissory materials, processes, and design to mobilise wider expectation so as to sustain legitimacy of their technology and its roles within future imaginaries and policy responses; these promote potential solutions to various energy crises.

Building on this work, his developing research programme will remain set within the contexts of technological optimism, technocratic thinking and notions of the technological fix, where technologies are proposed as solutions to social issues. The aim is to get beyond the reductive rhetoric of technical, policy and regulatory documents, enhancing visibility of the roles that social and cultural relations play in shaping values and assumptions around promissory technologies and energy transitions, thereby enabling more complete engagement with the barriers and opportunities to delivering transitional practices around energy and sustainability.

Although his work is currently embedded within energy transitions, Mark is also keen to explore how promise and expectation have been mobilised in other areas where technological and social transitions intersect, so would be interested to discuss potential directions for such research.

Construction of publics: an examination of how visions of digital health technologies shape publics' potential roles in governance practices of such technologies

Esther Gonzalez Hernando successfully completed her PhD at the Centre for Biomedicine, Self and Society, CMVM. Her research focused on the study outlined in the title. Her supervisors were **Nayha Sethi** (Usher/CMVM), **Lukas Engelmann** (STIS/ISSTI), and **Martyn Pickersgill** (Usher/CMVM).