UK Association for Studies in Innovation, Science and Technology

AsSIST-UK

Newsletter

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Issue 16

In this issue:

This is the Newsletter from AsSIST-UK. The Newsletter is sent to all registered members of the Association. Please ensure your contact details are up to date, and if they have changed, contact us at assistuk.info@gmail.com. For all ongoing news about the Association visit the website at www.assist-uk.com

In this issue…

This issue features a range of AsSIST members' new projects and activities and highlights the extent to which members are involved and contributing to multi-disciplinary settings.

Adrian Ely and Katerina Psarikidou report on a panel organised for the 2021 AsSIST conference. The focus was on perspectives of genetic technologies in agriculture.

Claire Waterton provides video and social media links arising from a project on ecological reparation.

New initiatives include:

A project at Edinburgh which will evaluate the role of novel artificial intelligence tools in the detection of lung cancer.

Update on recent activities at the Science and Technology Studies Unit, University of York

Launch of the Kavli Centre for Ethics, Science and the Public at the University of Cambridge.

A 'Big Data Bootcamp' organised by Julia Kasmire for the National Centre for Research Methods.

Genetic Technologies in Agriculture

Adrian Ely and Katerina Psarikidou from the Science Policy Research Unit at the University of Sussex, organised a panel session at the 2021 AsSIST conference entitled "GM Nation + 20? Reflections on the Past and Future of Genetic Technologies in Agriculture"

The objective was to provide an opportunity for the AsSIST UK community collectively to reflect and re-examine the role that STIS can play in understanding, critiquing and supporting decision-making in this rapidly changing field.

Alongside advances in medical biotech, the GM debates two decades ago provided the backdrop to the establishment of the ESRC Genomics Network and an explosion of STIS research activity across the UK. Recalling this history, the session considered contemporary shifts in the UK

governance of agricultural biotechnology, including the Defra consultation on 'Regulation of Genetic Technologies' (January-March 2021), to which colleagues from Sussex had responded.

The session heard introductions from Adrian Ely, who spoke about gene editing (GE) in plants and Ann Bruce (Innogen Institute, University of Edinburgh), who focused on genetic technologies in livestock. They highlighted differences in the current technological, geo-political, market and governance contexts in comparison to the earlier period of controversy. Ehsan Masood (Senior Editor, Nature) commented on the changing role of the Defra Chief Scientific Advisor over the decades, and the current administration's approach to media, while Pat Thomas (Beyond GM & A Bigger Conversation) suggested a democratic deficit was apparent in current moves to de-regulate gene-editing. Brian Wynne (Lancaster) concluded the panel by challenging the government's neglect of uncertainties pertaining to GE and calling for engagement from the STS community.

A report from 'UK in a Changing Europe' discusses more recent changes - a statutory instrument removing the need for licensing of GE field trials in January 2022 and the government's stated intention to introduce primary legislation allowing the commercialisation of GE foods. The story continues...

Adrian Ely is author of the 'Bioscience' chapter in UK in a Changing Europe: Policy After BREXIT, which focuses on gene editing in agriculture.

Ecological Reparation

Claire Waterton at Lancaster University has been part of an edited book project, led by Maddalena Tachetti, Dimitris Papdopoulos and Maria Puig de la Bellacasa which focused on ecological reparation

The project explored the issue of repairing damaged ecologies which exist precariously in different social contexts and geographies. Academics from a range of disciplines, including science, technology and innovation studies, ecology, art, design sociology and anthropology considered different practices of reparation, offering insights on conservation, mending, care and empowerment of human and nonhuman ecologies. A number of videos and social media sites have been made available to demonstrate aspects of the project, following the links below.

1. Link to YouTube Channel:

https://www.youtube.com/channel/UCLPR23DQu5W4W6EARdDCT2Q

2. Link to Ecological Reparation Preview 1:

https://www.youtube.com/watch?v=oZVkt_LvQLA

3. Link to Ecological Reparation Preview 2:

https://www.youtube.com/watch?v=ZLgriwXi7EY

4. The Facebook Page is also public and has the 2 videos posted and the info and links to the channel:

https://www.facebook.com/ecological.reparation

5. The Instagram account is also public now and links to the YouTube Channel:

https://www.instagram.com/ecological.reparation/

6. The Twitter account is:

https://twitter.com/EcoReparation

The Role of Artificial Intelligence in Lung Cancer Care

Kathrin Cresswell and Robin Williams are participating in research to examine the impact of artificial intelligence on radiology decision making in the lung cancer pathway

The project, called INPACT, is a collaboration between Aidence, clinical consultancy Hardian Health, and the University of Edinburgh, led by Miguel Bernabeu, Senior Lecturer in Medical Informatics at the university. The project is being supported by an NHSX AI in Health and Care Award, funded by the National Institute for Health Research.

Early detection and diagnosis of cancerous lung nodules is crucial, and can have life changing consequences, at a stage where a cure may still be possible. Research into AI medical imaging solutions is often centred around their performance in controlled research conditions that do not match real clinical workflows. INPACT aims to gain insight into this understudied area by evaluating the impact of AI technology on human decisions in actual use of these tools. Aidence's Veye Lung Nodules software which automatically finds, segments, measures, and tracks the growth of pulmonary nodules on chest CT scans will be implemented in 20 hospitals in the UK. The programme will investigate how this influences the way radiologists perform their lung nodule analysis.

For more information: **INPACT programme** – *Investigating Nodule Protocol Adherence using CADe/x Technology: A real-world evaluation of the impact on, and outcomes from, radiology decision making using AI software for pulmonary nodule management*

Andrew Webster PhD Prize

We are inviting supervisors to nominate their successful doctoral students for the AsSIST-UK Andrew Webster PhD Prize

AsSIST-UK will award an **annual prize, currently £250, for a PhD thesis** that demonstrates outstanding quality in the linked fields of Science and Technology Studies (STS) and Innovation Studies field. The Prize is an important way in which the Association supports the work of new scholars.

From 2021 onwards, the prize is dedicated to the memory of the co-founder and former Executive Secretary of AsSIST-UK, **Professor Andrew Webster.**

The Prize will be awarded for a thesis that meets **one or more of the following criteria**:

- exploring the links between STS and Innovation Studies
- links to other disciplines and working across the sciences and humanities
- different forms of public/policy impact and engagement
- opening up novel areas of inquiry for STIS

PhDs awarded in the 2021 calendar year are eligible.

Nominations can be made by **15th March 2022** by PhD Supervisors who are Members of the Association.

The nomination form is available here: AW-PhD-Prize-Form

The nominations should be submitted to assistuk.info@gmail.com

Centre News: SATSU

Members of the Science and Technology Studies Unit (SATSU) at the University of York have been successful recently in extending activities of the unit.

New projects

Professor Tom McLeish from the Department of Physics will co-lead two projects funded through the Physics of Life programme. One project, in collaboration with Professor Hannah Smithson from the University of Oxford, seeks to answer questions about the way in which brains process information enable us to perform complex visual tasks. The findings of the project will contribute to understanding how tiny, ever-present eye movements contribute to vision, and will improve understanding of visual impairment and will inform design of artificial vision systems.

The second project, co-led by Professor McLeish and Professor Luke Mackinder from the Department of Biology, will develop understanding related to new ways of capturing CO2 from the atmosphere. It will explore the physics of how the complex structures of 'algal pyrenoids' form. Single-celled algae are amongst the most productive organisms on Earth for capturing carbon, and it is estimated that they trap about 30% of the planet's carbon dioxide emissions. Improved understanding could lead to new methods of capturing carbon artificially or boosting plant photosynthesis to fix more CO2.

London Arts and Health Forum

Emeritus professor Joanna Latimer is now Chair of Board of trustees for the London Arts and Health, a charity which supports artists and health professionals, promoting excellence and engagement in the field of arts and wellbeing. The aim is to extend the reach of the arts to communities and individuals.

https://londonartsandhealth.org.uk/

The Kavli Centre for
Ethics, Science, and the Public

Kavli Centre for Ethics, Science and the Public

A new centre for research on the ethical implications of scientific discovery and its impact on society has recently been launched at the University of Cambridge

The Centre is a collaboration between the University of Cambridge and Wellcome Connecting Science, with funding from The Kavli Foundation. It has the aim of tackling critical questions arising from scientific research, such as:

- Who bears responsibility for the societal and ethical implications of scientific discoveries?
- When and how should wider public views be brought into discussion about the direction of scientific research, its benefits and risks?
- How can members of the public, ethicists and scientists be empowered to take part in meaningful and constructive dialogue?
- What can we do to help researchers negotiate a path through these complexities?

The Kavli Centre will foster global conversations and pursue novel ways to build and create spaces and mechanisms for interaction on the ethical issues associated with scientific discovery. It will create a programme of innovative research and public engagement on broad scientific domains, initially focusing on three rapidly changing fields: genome editing, artificial intelligence and big data.

The inaugural Director is Professor Anna Middleton, supported by Dr Richard Milne, Deputy Director and Lead for Research, and Dr Catherine Galloway, Lead for Innovation and Translation.

For more information, visit the website https://kcesp.ac.uk/

Big Data Bootcamp

Julia Kasmire, of the UK Data Service, is running an online course for the National Centre for Research Methods (NCRM) from 26 April to 24 May 2022

Ideally, research is collaborative, well-documented, sharable, and can be reproduced by others. Not only does this make a researcher's job much easier, it makes their work more valuable, citable and extensible. This is increasingly important in light of the 'crisis of reproducibility' that risks undermining scientific research in so many fields.

This training series walks you through how to:

- Make your research ready for open science
- Apply reproducibility to social science and other "tricky" topics
- Collaborate, document and share research in diverse contexts

This course, provided by the UK Data Service, assumes no prior knowledge or experience but is not a comprehensive training course. It has been designed as an intensive experience which will help develop a deep awareness of why reproducibility matters, how to build it into every aspect of a research programme, and how to be confident that others can reproduce your work through the materials and information that you share.

For participants to get the best out of the programme, they will need to engage in multiple ways during the bootcamp (and the week before it starts). The programme is built on group instruction, independent work done out of instruction hours, and involvement in the online community built around the programme. It is vital therefore that you are able to commit at least 6 hours a week to the programme and we ask that you consider your ability to make that commitment before submitting your application for a place.

A slack channel will be created for bootcamp participants to provide accessible resources and peer-to-peer support as well as a place to ask questions of the course instructors.

Cost

For students registered at UK/EU University: £150.00
For staff at UK academic institutions, ESRC funded researchers and registered charity organisations: £300.00
For all other participants: £500.00

Research staff can apply for a NCRM bursary to cover the fee for this course.

Visit the NCRM website for more information and booking

Job opportunity

Wellcome Connecting Science are looking for an experienced quantitative social scientist with a background in sociology, psychology or the public understanding of science for a permanent post to lead a programme of quantitative research on social and ethical aspects of genomics and biodata
Further details:

https://jobs.sanger.ac.uk/vacancy/senior-social-scientist-474669.html.

Deadline: April 4th

For an informal chat about the role please contact Dr Richard Milne at rm23@sanger.ac.uk

Recent PhD awards

Adolfo Montero: Energy justice and utility wind power development in Mexico: Voices from "El Istmo", University of Edinburgh

Andrés Alberto Domínguez Hernández:Distributed Infrastructuring and Innovation: an ethnographic enquiry into collaborative modes of work in an internet of things ecosystem, University of Edinburgh

Fábio Neves da Rocha: Organising Digital Innovation in ERP Platforms, University of Edinburgh

Early Career Researchers' Summer School

Provisionally scheduled to take place at Manchester University on the 6-7 September 2022

The covid pandemic has great increased the challenges facd by PhD students and early career scholars in developing their careers. AsSIST UK has been working with the PostGrad Forum of Science and Technology Studies to develop more effective support. We are planning a face-to-face summer school (provisionally scheduled for 6-7 September 2022, Manchester Business School). This will be focused on skill development workshops and networking. We would welcome suggestions - and offers of support. Please contact us if you are interested.

Email Robin.Williams@ed.ac.uk

Membership news

A very warm welcome to all our new members.

To update existing contact details, please email us at assistuk.info@gmail.com with the subject 'contact details'.