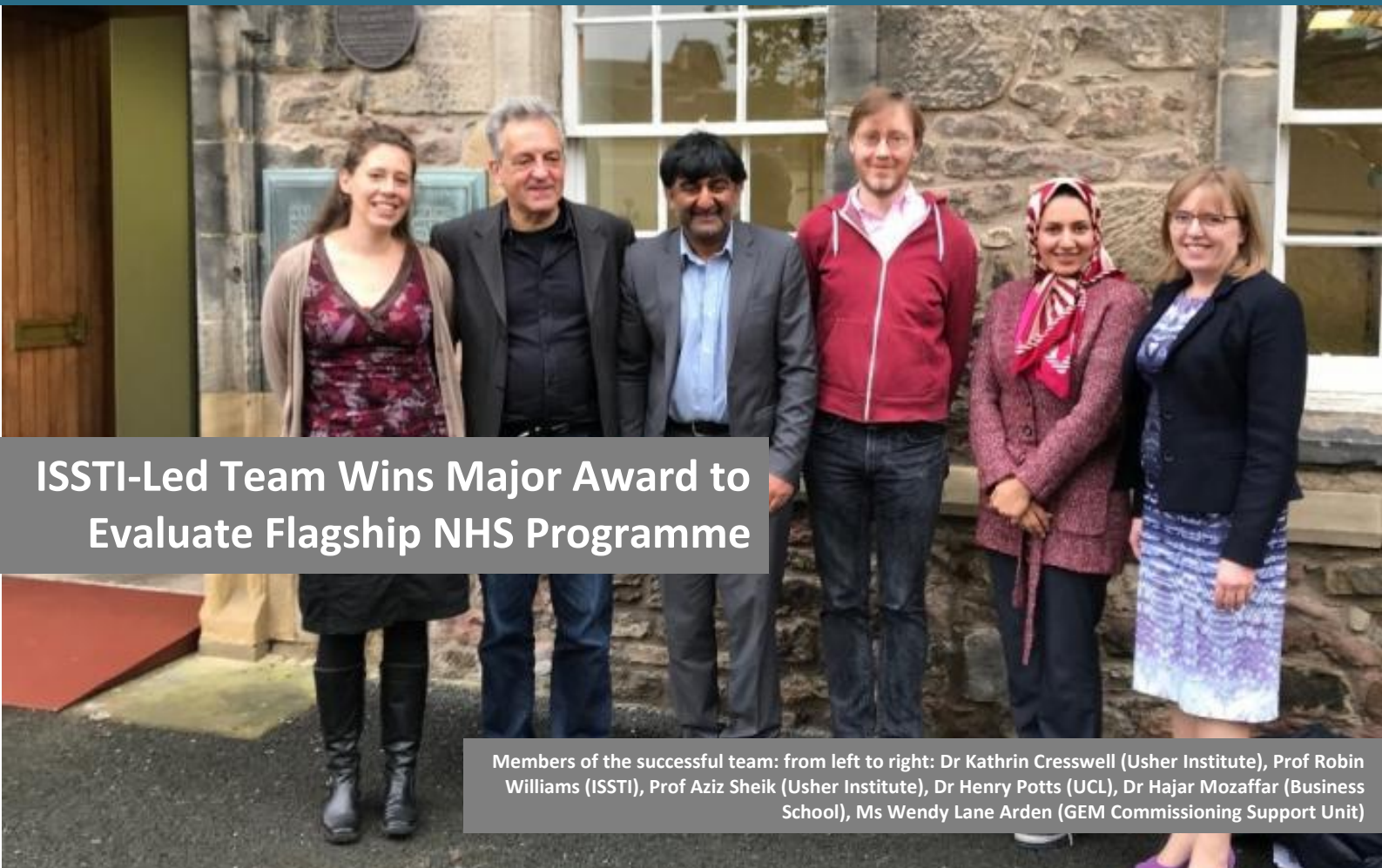


ISSTI

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

newsletter

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ISSTI-Led Team Wins Major Award to Evaluate Flagship NHS Programme

Members of the successful team: from left to right: Dr Kathrin Cresswell (Usher Institute), Prof Robin Williams (ISSTI), Prof Aziz Sheik (Usher Institute), Dr Henry Potts (UCL), Dr Hajar Mozaffar (Business School), Ms Wendy Lane Arden (GEM Commissioning Support Unit)

This first ISSTI Newsletter of 2018 provides an opportunity to review the impressive breadth and depth of publication achieved by our community during 2017. We also look into the future with exciting new projects and our flourishing engagement with partners, stakeholders and the wider communities.

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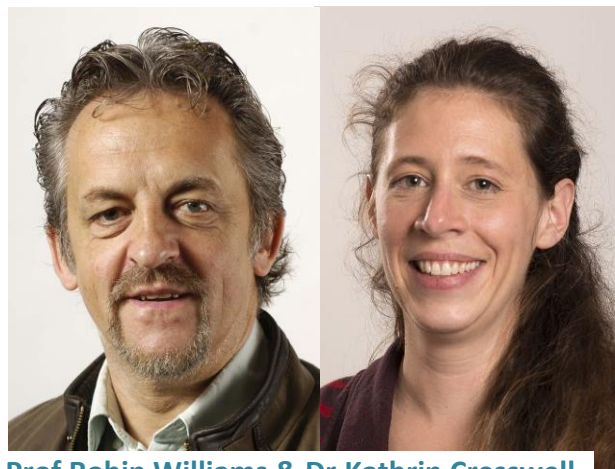
Evaluating Flagship NHS Programme



Robin Williams and Kathrin Cresswell (Usher Institute) have secured a major £1.6M award to evaluate and inform digitisation strategy in the National Health Service (NHS).

Robin and Kathrin will lead an interdisciplinary team of researchers who over the next 3 years will assess the impact of the Global Digital Exemplar programme – the UK government's flagship initiative to support the spread of best practice and IT innovations across NHS England.

This £100m programme, launched in August 2016, has created a network of hospital trusts and other providers who will pioneer the integration of digital technologies into patient care. Models that prove effective will be transferred to 'Fast Follower' sites. The goal is to help share experiences and establish proven models that can be rolled out across the NHS more broadly.

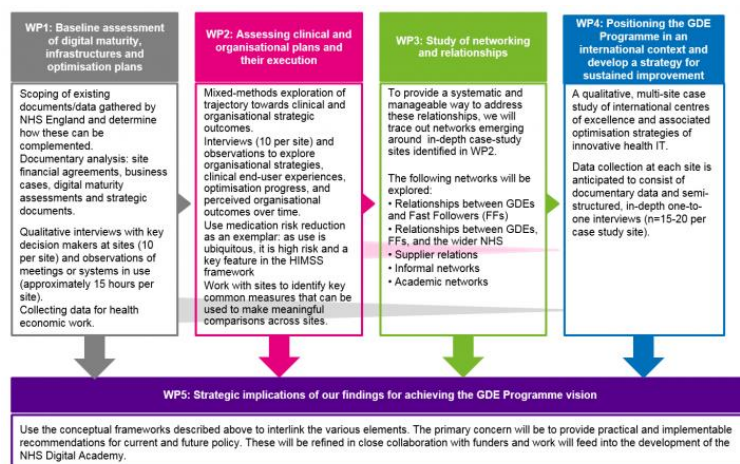


Prof Robin Williams & Dr Kathrin Cresswell

Professor Aziz Sheikh, Director of the University of Edinburgh's Usher Institute, said: "There is now widespread recognition that the NHS needs to evolve to provide higher quality, safer, more efficient healthcare that is delivered in patient-centred ways. Our work with leading international health systems has found that investing in digital and data science capacity is crucial to realising these goals."

The research team includes Edinburgh colleagues - Prof Aziz Sheikh and Andy Stoddart from Usher and Hajar Mozaffar of the Business School – in collaboration with experts at University College London, Harvard Medical School and NHS Arden & Greater East Midlands Commissioning Support Unit.

The four year evaluation will provide independent feedback to support the efforts of leading English hospital trusts to achieve international best practice in digital health. Through engaging with NHS staff, as well as international centres of excellence, and providing formative feedback to policy makers and managers, the team will seek to help ensure that the GDE Programme will achieve the potential significant benefits associated with health information technology.



Robin and Kathrin commented: "We are delighted to have been commissioned to evaluate this important national initiative. Our aim is to provide timely, constructive advice to the Department of Health on how the benefits from this investment can be maximised for health professionals and in particular for patients."

More information can be found on the project's webpage: <https://www.ed.ac.uk/usher/digital-exemplars>

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 Calls For Energy Policy To Support Local Authorities

In November 2017 the 'What We Know about Local Authority Engagement in UK Energy Systems: Ambitions, Activities, Business Structures & Ways Forward' report was launched at a half-day policy event co-hosted by UK Energy Research Centre and Energy Technologies Institute in London.

The research was undertaken by Professor Jan Webb, Dr Dave Hawkey and Mags Tingey and examines what UK local authorities are doing now about sustainable energy, why, and what could be achieved with more supportive policy. It mapped energy initiatives across all UK local authorities for the first time, revealing considerable regional and national variation in activity. The research then examined a sample of energy projects in depth from 40 local authorities and compared local authority engagement in Britain and Europe.



What We Know about Local Authority Engagement in UK Energy Systems

Ambitions, Activities, Business Structures & Ways Forward

Local authorities were found to pursue energy initiatives which are viewed as a source of revenue and an agent of transformation for local prosperity. Some cities and regions are making energy infrastructure and services central to capital investment, and creating municipal energy companies to manage new business; others are asking how they can get started.

Existing local authority initiatives help to exemplify the potential for a more mixed economy of energy, and a more distributed system, with private, public

and civil society contributors, and a significant role for municipalities. A clear energy policy agenda for local authorities could leverage further opportunities and ease problems, supported by a consensus across government on the local contribution to future energy systems.

A short blog about the research is available from: <http://www.ukerc.ac.uk/news/local-authorities-play-key-role-in-clean-energy-for-all.html>

Report and details about the project are here: <https://heatandthecity.org.uk/project/local-engagement-with-uk-energy-systems/>

STIS Perspectives on Artificial Intelligence

Robin Williams, was invited by Innovate UK to a national Workshop on Artificial Intelligence and Machine Learning, to present how the social sciences and specifically STIS might engage with this area. His presentation - which sought to open up new lines of thinking - can be found here: [Williams contribution to CIF workshop](#)

Innovate UK

Could Bitcoin Technology Help Science?

An article published in Nature, drawing on interviews with experts, including ISSTI's Dr Claudia Pagliari, discusses the various ways in which the technologies underpinning bitcoin, i.e. blockchain, are being used in scientific research, what new opportunities these present and what the risks or downsides might be. The

nature

interview with Dr Pagliari drew on her recent invited speech on ethical issues, given at a symposium on blockchain for biomedical research, which took place in London in November 2017.

Creative Scotland Supports the “Uncanny” Project

Funding was awarded by Creative Scotland to enable writer and STIS Visiting Fellow, Pippa Goldschmidt, and STIS to deliver a workshop inviting Scottish authors and social scientists to discuss the uncanny in relation to biomedical sciences and technologies. This workshop is to mark the centenary of Freud’s landmark essay ‘The Uncanny’.



Pippa Goldschmidt

The purposes of the workshop are to develop an updated concept of the uncanny by considering relevant developments in these scientific disciplines and contemporary Scottish fiction, and to support the authors to create new literary works inspired by this exploration of the uncanny.

ALBA | CHRUTHACHAIL

Additionally, Pippa was awarded a 3 month writing residency in Heidelberg as part of their UNESCO City of Literature activities and this is a joint scholarship with the Rhein-Neckar-Kreis Kulturstiftung: <http://www.cityofliterature.com/pippa-goldschmidt-invited-heidelbergs-writer-residence/>

STIS PhD Student Xiaona Wang Wins Two Prestigious Awards

Xiaona Wang has been awarded a Predoctoral “Writing-Up” Fellowship at the Max Planck Institute for the History of Science in Berlin. Xiaona will be based in Department II, where the remit is “Ideals and Practices of Rationality”. Department II is under the Direction of the distinguished historian of science, Professor Lorraine Daston. There are only two of these Predoctoral Fellowships each year, and they are endowed with a monthly stipend, so they are very competitive. The Fellowship runs from March 1 to June 30 this year, and Xiaona will be putting the finishing touches to her dissertation on the various occult traditions which were exploited by Isaac Newton in his Principia mathematica (1687 and 1713), and Opticks (1704, 1706, and 1717): “‘Though their Causes be not yet discover’d’: Occult Traditions in the Making of Newton’s Natural Philosophy”.

Additionally, she has just been awarded the Charles Schmitt Prize for the best essay in intellectual history by a doctoral student. The Charles Schmitt Prize is offered each year by the International Society for Intellectual History, and her winning essay, “‘By Analogy to the Element of the Stars’: The Divine in Jean Fernel’s and William Harvey’s Theories of Generation”, will be published in the Society’s journal, Intellectual History Review.



Xiaona Wang

Reaching Out To FesSTI(S)vals

Dr Erika Szymanski was an invited speaker at the Big Bang Weekend in Wigtown. In line with the festival’s theme, “Is it alive?”, Erika talked about her recent research into how biotechnology changes human’s relationships with microorganisms and the value of human-yeast collaboration. Find out more about the Big Bang Weekend here:

<http://www.wigtownbookfestival.com/opportunities/bigbangweekend>

Reaching out to remote parts of Scotland, STIS PhD student, Matjaz Vidmar, took part in the inaugural Sutherland Science Festival in March 2018. His involvement comes on the back of several previous projects with science festivals across Scotland, from Borders to Orkney. More information about his 750 miles long trip in the Northern Highlands can be found on his blog:

<https://wp.me/p4NO5f-bO>

We are delighted to welcome new arrivals.

Dr Lukas Engelmänn

I received my PhD in History at the Humboldt University in Berlin. My doctoral research focused on the visual medical history of AIDS/HIV. This research led to my first book, under contract with Cambridge University Press: 'Mapping AIDS. Visual Histories of an Enduring Epidemic.' In 2014, I joined Christos Lynteris' ERC project at CRASSH, University of Cambridge, to study the visual history of the Third Plague Pandemic (1890 to 1950) in North and South America.



With the Chancellor's Fellowship I work on the Long History of Digital Epidemiology. The project will illuminate historical developments in biomedicine and epidemiology that led to the emergence of an epidemiology based on models, rather than the mere counting and mapping of cases. Over the next three years, my research will show that the practices of abstraction and formalization in the history of epidemiology have had decisive influence on today's digital health landscape. To this end, I engage with epidemiological visualisation, definitions of epidemiological data and look into the historical conditions under which epidemiology became a science of modelling.

Congratulations and best wishes to colleagues moving to new positions.

Dr Sara Bea, who graduated from STIS in 2017, will be moving to Linköping University where she will join an expanding research group within the unit of Technology and Social Change, which is developing a focus on various cutting edge issues within STS. Sara will be working closely with Professor Steve Woolgar as part of a large scale project "It Could Be Otherwise". The project comprises a series of related ethnographic investigations of the nature and limits of provocation and intervention, across a variety of empirical settings.

Congratulations to our students who recently completed their PhDs.

Stacia Stetkiewicz: "Investigating Scottish spring barley production for areas of improvement in fungicide use: a mixed biological and social approach"

Tarmphong Chobisara: "Partnership and Biobank Governance"

Sara Bea: "No Heroics, Please: Mapping Deceased Donation Practices in a Catalan Hospital"

Leah Gilman: "Qualifying kinship: How do UK gamete donors negotiate identity-release donation?"

STIS Students Invited to Visit Our European Partners

Justyna Bandola-Gill, STIS PhD student, has been invited to spend four weeks in February at the Public Governance Institute at the Katholieke Universiteit Leuven. Justyna's visit is funded by a COST Action exploring professionalization and social impact of European Political Science. As a part of the project, Justyna will conduct a comparative study of science policy and research funding documents from a set of European countries. The objective of the study is to explore how the notion of 'research impact' is defined, measured and weighted in a research assessment process across different European countries.

MSc BIG student Bas Van Den Berg was invited to give a guest lecture on 'The Biobased Economy, The Circular Economy and The future' for the Process and Food Technology Programme of the Hague University of Applied Science this month. Van Den Berg reflected on the social value of circular bio-economy projects currently underway at the PFT Programme -- converting brewers spent grain into bakery products, for example -- drawing on theoretical concepts and frameworks learned in the MSc BIG course.

2017 Publications*



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