SEVEN TOP RESEARCHERS RECOGNISED AHEAD OF BRITISH SCIENCE FESTIVAL

The British Science Association (BSA) has announced the winners of its prestigious Award Lectures for 2016. Seven top UK researchers have been recognised for their cutting-edge research after a competitive selection process.

They will join an illustrious group of Award Lecture recipients, which include Professor Brian Cox (winner in 2006) Maggie Aderin-Pocock (2008) and Richard Wiseman (2002).

The winners and their respective awards are as follows:

* The Daphne Oram Award Lecture for Digital Innovation was awarded to Dr Rebecca Stewart (Queen Mary University of London)

* The Charles Darwin Award Lecture for Agricultural, Biological and Medical Sciences was awarded to Dr Carolyn McGettigan (Royal Holloway, University of London)

* The Rosalind Franklin Award Lecture for Physical Sciences and Mathematics was awarded to Dr Adam Kucharski (London School of Hygiene and Tropical Medicine)

* The Charles Lyell Award Lecture for Environmental Sciences was awarded to Dr Tamsin Edwards (Open University)

* The Isambard Kingdom Brunel Award Lecture for Engineering, Technology and Industry was awarded to Dr Rob Malkin (University of Bristol)

* The Margaret Mead Award Lecture for Social Sciences, supported by the Learned Society of Wales, was awarded to Dr Sarah Bate (Bournemouth University)

* The Jacob Bronowski Award Lecture for Science and the Arts, supported by the Learned Society of Wales, was awarded to Dr Daisy Fancourt (Royal College of Music)

Each of the Award Lecture winners will be celebrated at the British Science Festival in Swansea, where they will give a special talk about their innovative research.

**Rebecca Stewart** will discuss the rise of e-textiles. Imagine a piece of fabric that could be tapped or swiped like a touch screen. She explores how e-textiles like this could change the way we interact with the world around us.
Carolyn McGettigan will illustrate how our understanding of the biology and evolution of the human voice has been opened up by techniques such as MRI scanning.

Adam Kucharski will share his experience in working to understand new disease threats, from Ebola to pandemic flu.

Tamsin Edwards used 3,000 different computer models of Antarctica to give a range of predictions on climate change and the melting ice caps. She will discuss some of the challenges of predicting the probability of the collapse of the ice sheet and how she communicates uncertainty.

Rob Malkin will show how studying insects with fascinating hearing organs could hold the key to helping us build bio-inspired acoustic devices.

Sarah Bate explains the phenomenon of ‘super-recognisers’ and how she is working with the police to identify them amongst the force.

Daisy Fancourt looks at how music affects the inner workings of the body. With the help of the Tenovus Cancer Care choir, she will explore the impact of music on the mind and body, and consider its potential bio-evolutionary origins.

Ivvet Modinou, Head of Engagement at the BSA, said: “The Award Lectures give our winners a fantastic opportunity to showcase their abilities to communicate their work and allow audiences to access and engage with active research. We received a huge number of fantastic nominations this year so it was an incredibly difficult selection process. I am extremely pleased with our winners and look forward to working with them in Swansea and beyond.”

The Award Lectures have been presented at the British Science Festival since 1990, with the aim of promoting frontline research being carried out in the UK by early-career scientists, and recognizing their excellent communication skills.

The Festival will take place later from Tuesday 6 to Friday 9 September, hosted by Swansea University with over 120 events on campus and throughout the city. It provides an opportunity to meet researchers face-to-face and discuss cutting-edge research, innovation and ideas in science, technology and engineering. The Festival is supported by Siemens, and is followed by a Family Weekend of hands-on science fun on 10 and 11 September at the Waterfront Museum in Swansea.

All events are free, but booking is required, as spaces are limited. Booking is now open at: www.britishsciencefestival.org.

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For more details, or to arrange interviews with the winners, please contact:
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Notes for editors

1. Details of Award Lectures

Charles Darwin Award – Carolyn McGettigan
Tuesday 6th September – 2pm – Taliesin Theatre
Event title: The Voice

Talking, laughing, singing, beat boxing - the human voice is a unique instrument and almost immeasurably flexible. Carolyn McGettigan will illustrate how new techniques, such as MRI scanning, are opening up our understanding of the biology and evolution of the human voice and how it relates to the neuroscience of vocal control.

The Charles Darwin Award Lecture for agricultural, biological and medical sciences was awarded to Dr Carolyn McGettigan (Royal Holloway, University of London).

Rosalind Franklin Award – Adam Kucharski
Wednesday 7th September – 12pm – Taliesin Theatre
Event title: The calculus of contagion

One of the tools in the disease-fighter’s arsenal is mathematics. How can we measure disease spread? How can a few key people shape an outbreak? Which infections are hardest to control? Adam Kucharski shares his experience working to understand new disease threats, from Ebola to pandemic flu.

The Rosalind Franklin Award Lecture for physical sciences and mathematics was awarded to Dr Adam Kucharski (London School of Hygiene and Tropical Medicine).

Charles Lyell Award – Tamsin Edwards
Wednesday 7th September – 2pm – Taliesin Theatre
Event title: Place your bets: the collapse of the Antarctic Ice Sheet

Climate change and the melting of the polar ice caps are always making headlines, but how do scientists predict how fast it is happening? Tamsin Edwards used 3,000 different computer models of Antarctica, to give a range of predictions. She will discuss some of the challenges of predicting the probability of the collapse of the ice sheet and how she communicates uncertainty.

The Charles Lyell Award Lecture for environmental sciences was awarded to Dr Tamsin Edwards (Open University).

Isambard Kingdom Brunel Award – Rob Malkin
Thursday 8th September - 12pm – Taliesin Theatre
Event title: The acoustics of nature

From mobile phones to hearing aids, microphones are a relatively common device, yet their designs still have significant drawbacks. Could nature play a role in improving their quality? Engineer Rob Malkin will show how studying insects with fascinating hearing organs could hold the key to helping us build bio-inspired acoustic devices.
The Isambard Kingdom Brunel Award Lecture for engineering, technology and industry was awarded to Dr Rob Malkin (University of Bristol).

**Margaret Mead Award – Sarah Bate**  
Thursday 8th September – 2pm – Taliesin Theatre  
Event title: Are you a Super-Recogniser?

Could you spot an unfamiliar face in the crowd? For some this is no problem at all as they have an innate ability – super facial recognition skills. Why do some people possess this and how do they scan faces so precisely? This skill is particularly important for the police; Scotland Yard has a Super-Recognizer unit that searches CCTV footage for suspects, terrorists and missing people. Sarah Bate explains the phenomenon and how she is working with the police to identify the ‘super-recognisers’ amongst the force.

The Margaret Mead Award Lecture for social sciences, supported by the Learned Society of Wales, was awarded to Dr Sarah Bate (Bournemouth University).

**Jacob Bronowski Award – Daisy Fancourt**  
Friday 9th September – 12pm – Taliesin Theatre  
Event title: Can music change our immune system?

Research into the health benefits of music has rapidly expanded over the last decade, with studies as diverse as the playing of war songs to improve walking in Parkinson’s patients, to the use of pop music to increase speed and accuracy in operating theatres. But how much do we actually know about how music affects the inner workings of the body? With the help of the Tenovus Cancer Care choir, Daisy Fancourt will explore how music can impact on the mind and body and consider its potential bio-evolutionary origins.

The Jacob Bronowski Award Lecture for science and the arts, supported by the Learned Society of Wales, was awarded to Dr Daisy Fancourt (Royal College of Music).

**Daphne Oram Award – Rebecca Stewart**  
Tuesday 6th September – 12pm – Taliesin Theatre  
Event title: The emergence of e-textiles

Imagine a piece of fabric that can be tapped or swiped just like you would a touch screen? Or if sensors woven into the cover of your chair told you when you were slouching? Electronic textiles are where computer science, electrical engineering, textiles and design all come together. Rebecca Stewart will discuss its rise and how it could change the way we interact with the world around us.

The Daphne Oram Award Lecture for Digital Innovation was awarded to Dr Rebecca Stewart (Queen Mary University of London).

**2. About the British Science Festival**
The British Science Festival is one of Europe’s longest-established science festivals and regularly attracts hundreds of the UK’s top scientists and speakers to discuss the latest developments in science with the public. Over 10,000 visitors attend the talks, discussions and workshops.

The Festival takes place at a different location each year and was last held in Swansea in 1990. The 2016 Festival will take place from 6 – 9 September (followed by a Family Weekend) hosted by Swansea University. The headline sponsor is Siemens. For further information, visit www.britishsciencefestival.org @BritishSciFest #BSF16

Registration is free for journalists, and offers access to hundreds of events, in addition to the daily schedule of press conferences. For details, contact the BSA press office.

3. About Swansea University

Swansea University is a world-class, research-led, dual campus university. The University was established in 1920 and was the first campus university in the UK. It currently offers around 330 undergraduate courses and 120 postgraduate courses to 16,800 undergraduate and postgraduate students.

The University’s 46-acre Singleton Park Campus, established in 1920, is located in beautiful parkland with views across Swansea Bay. The University’s 65-acre science and innovation Bay Campus, which opened in September 2015, is located a few miles away on the eastern approach to the city. It has the distinction of having direct access to a beach and its own seafront promenade. Both campuses are close to the Gower Peninsula, the UK’s first Area of Outstanding Natural Beauty.

The results of the Research Excellence Framework (REF) 2014 showed the University has achieved its ambition to be a top 30 research University, soaring up the league table to 26th in the UK, with the ‘biggest leap among research-intensive institutions’ (Times Higher Education, December 2014) in the UK.

The University has ambitious expansion plans as it moves towards its centenary in 2020, as it continues to extend its global reach and moves closer to realising its ambition of being a top 200 Global University.

Swansea University is a registered charity. No.1138342. Visit www.swansea.ac.uk.

4. About Siemens

Siemens was established in the United Kingdom 170 years ago and now employs over 14,000 people in the UK. Last year’s revenues were £5 billion. As the world’s largest engineering company, Siemens provides innovative solutions to help tackle the world’s major challenges across the key sectors of energy, industry, infrastructure & cities and healthcare. Siemens has offices and factories throughout the UK, with its headquarters in Frimley, Surrey. The company’s global headquarters is in Munich, Germany. For more information, visit www.siemens.co.uk

5. About the British Science Association
The British Science Association (BSA) believes that science should be part of – rather than set apart from – society and culture, and is owned by the wider community. Our programmes encourage people of all ages and backgrounds to engage with science, become ambassadors for science, and ultimately to be empowered to challenge and influence British science - whether they work in science or not.

Established in 1831, the BSA is a registered charity that organises major initiatives across the UK, including British Science Week, the annual British Science Festival, regional and local events, the CREST Awards and other programmes for young people in schools and colleges. The BSA also organises specific activities for professional science communicators, including a specialist conference and training. For more information, please visit www.britishscienceassociation.org