



# Science Policy Newsletter – a weekly round-up of policy headlines and stories

**21 February 2019** 

News

#### Health and biomedicine

#### New report shows global shift in use of antibiotics in animals

Figures released in a new report today by the World Organisation for Animal Health (OIE) show positive global progress on the regulation and monitoring of antimicrobial use in animals. The report aims to build the capacity of all countries to collect critical data on the use of antimicrobials in animals.

#### Gene therapy could treat rare brain disorder in unborn babies

Doctors could use Crispr tool to inject benign virus into foetus's brain to 'switch on' key genes

#### Weedkiller 'raises risk of non-Hodgkin lymphoma by 41%'

Study says evidence 'supports link' between exposure to glyphosate and increased risk

#### Increase in mental health workforce

Progress towards 800 additional workers in key settings.

More people will be able to access mental health support with over 100 additional mental health workers in key settings recruited across Scotland as of January 2019. This puts the workforce on track to reach 800 additional staff by 2022.

#### Faster, better, cheaper: the rise of CRISPR in disease detection

Powerful gene-editing tool could help to diagnose illnesses such as Lassa fever early and rein in the spread of infection.

#### Multiple sclerosis enters a grey area

Studies of multiple sclerosis have long focused on the white matter of the brain. Insights into how immune cells target the brain's grey matter now illuminate the stage of the disease at which neurodegeneration occurs.

#### Making Parkinson's disease research personal

Last month, MRC Protein Phosphorylation and Ubiquitylation Unit scientists hosted a lab tour for people affected by Parkinson's disease. Clinical Programme Leader Dr Esther Sammler, also an honorary consultant neurologist at NHS Tayside, explains why listening to the experiences of people living with the disease is so important for research.

## Genetic clues can be used to predict whether early-stage cancer will form an invasive tumour

Early-stage cancerous growths can look similar under the microscope, and whether they will form an invasive tumour is hard to predict. Genomic profiles of these growths in the human lung now enable such a prediction to be made.

#### Receptor for bat influenza virus uncovers potential risk to humans

How bat influenza viruses infect cells has been unclear. The discovery that they bind to a cell receptor that is present in many different species raises concerns about their potential risk to humans.

### Classify viruses — the gain is worth the pain

Viruses hold solutions to a lot of problems, so let's fund and reward cataloguing, urge Jens H. Kuhn and colleagues.

#### Food and drink

#### 'I'm not spending money on that': the rise of the teetotal student

Universities are seeing an increase in teetotal clubs and alcohol-free accommodation. Why are students drinking less?

#### Cultured lab meat may make climate change worse

## **Agriculture and fisheries**

#### **A World To Win**

Michael Gove's speech to National Farmers Union - February 19 2019

#### Brexit: UK will apply food tariffs in case of no deal

#### Farming and climate change

Young farmers leading the way.

Four young farmers and crofters have been appointed to champion a cultural and behavioural shift towards low-carbon, environmentally sustainable farming in Scotland.

## Government urges businesses to prepare for changes to animal imports and exports in a no-deal Brexit

Guidance published today [Tuesday 20 February 2019] will help minimise disruption and allow continued movement of goods

#### How the vegan food trend made a star of the pungent jackfruit

The easy-to-grow crop has the potential to be much more than just a fashionable alternative to meat in the west

### **Forestry**

#### Scientists use oak trees for information on how infectious diseases work

#### Interested in plant science policy news?

<u>Click here</u> to find out more about RSB's plant science policy activities and the work of our Special Interest Group the UK Plant Sciences Federation (UKPSF). Sign-up via <u>mySociety</u> to our UKPSF Plant Science Newsletter for monthly policy news with a focus on the plant sciences; <u>view the latest issue as a PDF</u>.

### **Environment and ecology**

#### Why submitting your science outcomes matters to the environmental sciences

As the deadline for submitting outcomes to Researchfish® approaches on 14 March 2019, Professor Mark Bailey, Director of the NERC Centre for Ecology & Hydrology (CEH), explains how completing your returns helps us make the case for continued investment in environmental science.

#### National Nature Reserves offer £36 million of benefits to society

Natural England research demonstrates the economic value of National Nature Reserves

#### 'Brexit gap' over wildlife protection is looming

#### **New NERC Advisory Network**

NERC is adapting its governance and advisory structures to provide increased agility and broader expertise in light of new opportunities within UK Research and Innovation (UKRI).

<u>'It eats everything' – the new breed of wildfire that's impossible to predict</u>
We're fighting a different kind of wildfire whose behaviour experts are struggling to predict.

#### Ancient migration mystery could be solved after eels fitted with satellite tags

A team of researchers, led by the Environment Agency, may be close to solving one of science's most enduring mysteries – where does the European Eel spawn and what migration route do they follow to get there?

#### Water and air

#### Cooking Sunday roast causes indoor pollution 'worse than Delhi'

Scientists say roast meal can make household air dirtier than in sixth most polluted city

#### New measures to help tackle waste crime come into force

New fixed penalties to help prevent household waste being illegally dumped have passed in the Assembly and come into force tomorrow [Wednesday 21 February 2019].

**Cutting CO2 emissions from trucks: MEPs reach deal with Council** 

MEPs urge the EU to lead the way to net-zero emissions by 2050

### **Climate and energy**

#### **UK Carbon Budgets**

A House of Commons Library Briefing Paper on the UK Carbon Budgets, including information on the Climate Change Act 2008, the Committee on Climate Change's proposals for the fifth carbon budget, the Government's Clean Growth Strategy and progress against carbon budgets. Information on the Paris Agreement and possible impact of Brexit is also included.

#### Waste

#### Government sets out plans to overhaul waste system

The government launches a series of consultations to overhaul the waste system.

#### Plastics reach remote pristine environments, scientists say

Birds' eggs in High Arctic contain chemical additives used in plastics

#### Meal kits cut food waste but packaging is a problem, study finds

Deliveries 'almost always' use more energy than buying ingredients from supermarket

#### Reducing single use plastic

Protecting the marine environment. Scotland is leading the way in tackling marine litter, First Minister Nicola Sturgeon told international delegates attending Scotland's International Marine Conference today in Glasgow.

#### MPs call for 1p clothing tax and darning classes in schools to cut waste

UK fashion industry bigger source of carbon emissions than aviation and shipping

## Research funding and higher education policy

#### Universities may have to shut door on elite to hit access targets

English providers will have to enrol fewer privileged students if the sector is not allowed to expand, regulator says

#### The forthcoming review of post-18 education and funding

This House of Commons briefing paper discusses the post-18 education and student finance review and gives an outline of the post- 18 funding system in England. It suggests possible options for reform that the Review may propose, such as the lowering of higher education tuition fees and analyses the impact of these proposals.

#### 'Universities stamp out creativity': are graduates ready for work?

Universities are changing the way they teach to prepare students for a future in which lots of jobs will be automated

#### Labour would end free market in higher education, says Rayner

Shadow education secretary to outline measures including crackdown on top-tier pay

## Research England hears from senior higher education figures about challenges and opportunities

#### Campuses told to offset carbon emissions from student mobility

Study estimates that carbon footprint of global student mobility is comparable to annual emissions of Tunisia

#### Proposing a new fundraising model for universities' community work

### Open access and publication policy

## Society Publishers' Coalition publishes its consultation response on Plan S The Society Publishers' Coalition (SPC) has responded to the call for feedback on

Guidance on the Implementation of Plan S.

## <u>AMRC Open Research – The new publishing platform for charity funded</u> research

#### Open access and Plan S: how Wellcome is tackling four key concerns

There has been lots of reaction to the changes we're making to Wellcome's open access policy to ensure that no research is behind a paywall. This is how we are working to address them.

#### Interested in publication policy news?

Sign-up via <u>mySociety</u> to our Research Communication Newsletter for monthly policy news with a focus on research communication and dissemination; <u>view the latest issue as a PDF.</u>

### **Diversity and inclusion**

#### A disadvantaged background doesn't have to be a barrier to success

Six female researchers discuss how they overcame social and financial obstacles in science and engineering.

## Public engagement

#### School pupils issue fake parking tickets to tackle pollution

Tameside head came up with idea after noticing increase in asthma among children

## **Digital technologies**

#### **UK government names 16 AI doctoral training centres**

One thousand PhD places to be created over next five years

#### £200m to create a new generation of Artificial Intelligence leaders

#### Drones and big data: the next frontier in the fight against wildlife extinction

Emerging technologies are a boon for the work of conservation researchers, but not all universities are equipped for them

#### International news

#### This Nigerian doctor might just prevent the next deadly pandemic

As leader of the Nigeria Centre for Disease Control, Chikwe Ihekweazu works to protect the nation — and the world — from devastating outbreaks.

#### **UK** teams invest in freeing up time for African researchers

#### **UK and Vanuatu unite to tackle marine litter**

Environment Minister Thérèse Coffey is in Vanuatu for the South Pacific Region Commonwealth Litter Programme conference.

#### Study of Brazil favela stricken by Zika shows dengue may protect against virus

Analysis of community where 73% of residents contracted Zika in 2015 offers new clues about epidemic

#### Australia dials back effort to control 'dual use' research

Scientists welcome the independent findings, saying sweeping controls of research that could have military use would have restricted collaborations.

## 'The Darling will die': Scientists say mass fish kill due to over-extraction and drought

Australian Academy of Science panel says urgent steps needed to restore flows

#### Florida's farmers plot new course after Hurricane Michael's deadly tear

Storm's assault through Panhandle has left growers moving away from traditional farming towards alternatives like hemp and hops

#### China opens path to disease via Belt and Road trade route

#### Gene-edited animal creators look beyond US market

Tired of regulatory confusion and a lack of funding, some US researchers are taking their gene-edited livestock abroad.

#### Mystery disease killing beech trees

## **Opinion**

#### The school climate change strikes are inspiring – but they should shame us

Greta Thunberg led the way. Children skipping classes to take the moral lead is an indictment of adult complacency

#### England lacks white working-class graduates. Quick fixes won't change that

Half of universities have fewer than 5% of students from poorer white backgrounds. Just trying to boost numbers isn't enough

#### Universities and the NHS must join forces to boost student mental health

Mental health problems are on the rise in universities, but support is too fragmented

#### One month in - reflections on CaSE

CaSE's new Assistant Director Daniel Rathbone takes a look back over his first month in the role

#### To move research from quantity to quality, go beyond good intentions

Australian chief scientist Alan Finkel calls for formal action to bake in better research practices.

#### Hydropower dams can help mitigate the global warming impact of wetlands

Manage methane emissions and produce clean, cheap energy at the same time, argues Mike Muller.

#### SDGs 'failing to create transformational change'

## People

#### Climate change science pioneer Wallace Smith Broecker dies

US professor raised early alarms about climate change and popularised term 'global warming'

## **Opportunities**

#### **Vacancy: Science Policy Officer**

Royal Society of Biology (RSB)

£25,000-£28,000 (dependent on experience)

Location: Central London (WC1N)
Closing date: 3 March 2019

An exciting role: working as part of a team the Science Policy Officer will be responsible for providing specialist input and delivering a portfolio of activities with focus on policy in research funding and infrastructure across the biosciences, including policy and principles relating to research integrity, research publication and communication, and inclusivity and widening participation in research and research policy. The Science Policy Officer will also be responsible for provision of specialist input and delivery of related education policy projects and consultation responses. Apply online with a CV and covering letter.

Please direct any queries to Dr Laura Marshall, Science Policy Manager, at laura.marshall@rsb.org.uk or 020 7685 2567

## <u>Sustainable Urban Development (SME Competitiveness and Environment): call in Leeds City Region</u>

Sustainable Urban Development call to run a project to support SME competitiveness and protecting the environment and promoting resource efficiency in Leeds City Region.

Closes: 22 February 2019

#### **Biology Challenge 2019**

The Biology Challenge 2019 (6th – 26th March) for students aged 13-15 is now open for registrations. The competition stimulates students' curiosity about the natural world and encourages them to take an interest in biology outside of school. High scoring students will receive certificates and be invited to an awards ceremony in London. Please contact Raghav Selvam with any enquiries.

Closes: 27 February 2019

#### **Royal Society of Biology travel grants**

Student and early-career members of the Royal Society of Biology can now apply for a travel grant of £500 to support future overseas travel to attend a biology-related project or conference. Learn new lab and field techniques, gain professional development skills, and network with international academics with the support of a travel grant. Please visit the Society's website for further information and to read reports from previous grant recipients.

Closes: 1 March 2019

## Join the Food Standards Agency's Register of Specialists to be commissioned for scientific work

The FSA is seeking to appoint new members to its Register of Specialists. The Register is a list of pre-approved experts from whom the FSA can commission short pieces of ad hoc work under contract to provide scientific and technical services. We want to expand the Register to bring in additional experts and to cover new areas of expertise and types of work.

Your work will contribute directly to ensuring the safety of food, benefitting UK consumers and the effective, evidence-based regulation of food. Apply now through our website.

Closes: 11 March 2019

#### **The BBSRC Impact Writing Competition 2019**

Are you aware of inspiring research, supported by BBSRC, making a real, tangible difference to people's lives?

Closes: 18 March 2019

#### Future of the blue planet: Parliament conference on oceans

Worried about what is happening to our oceans? Take part in the Parliament's conference on their future taking place on 19 March.

#### New cut-off for highlight topic ideas

NERC invites the environmental science community to submit new ideas for highlight topics.

Closes: 15 May 2019

#### Countryside Stewardship opens for applications in 2019

Farmers, foresters and land managers can now apply for a range of schemes that pay for environmental benefits

## Consultations

#### Revising the rules for free allocation in the EU Emissions Trading System

Closes: 22 February 2019

Single use carrier bags: extending and increasing the charge

Closes: 22 February 2019

Deforestation and forest degradation – stepping up EU action

Closes: 25 February 2019

#### Tree and woodlands: introducing measures for felling street trees

Closes: 28 February 2019

#### Independent review of TEF: call for views

The government is seeking views on the Teaching Excellence and Student Outcomes Framework (TEF) to inform an independent review of the framework.

Closes: 1 March 2019

#### **Evaluation of the Eel Regulation**

Closes: 8 March 2019

#### Improving our management of water in the environment

Closes: 12 March 2019

#### **Knowledge Exchange Framework Consultation 2019**

Research England invites responses to its proposals for the first iteration of the Knowledge Exchange Framework (KEF), which aims to evaluate and benchmark the contribution that higher education institutions make to the exploitation of the knowledge they generate.

Closes: 25 March 2019

**Evaluation of the Feed Additives Regulation** 

Closes: 3 April 2019

**Evaluation of the European Fishery Statistics** 

Closes: 12 April 2019

The Scottish Government has opened a consultation introducing amendments to the Animal Health and Welfare (Scotland) Act 2006

Closes: 26 April 2019

### **Events**

#### Valuing our Life Support Systems 2019 – Book your place now!

21-22 May 2019

The Crystal, London

The programme for this event is now online. Book your place now for the Natural Capital Initiative's 10th anniversary summit at our early bird rates. The summit offers an independent platform for people in science, policy, NGOs, businesses and local communities to discuss and debate innovative natural capital solutions that enhance the environment and strengthen society.

#### Heads of University BioSciences (HUBS) Annual Meeting 2019

30 April - 1 May 2019

Cambridge

We are delighted to invite all members to attend the inaugural HUBS Annual Meeting. Early-bird registration is now open for this two-day conference, which will feature sessions on research, higher education policy, and teaching and learning in the biosciences.

## And finally...

**Quiz: Are your clothes damaging the environment?** 

## **Royal Society of Biology**

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