



Nominate a member

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

#### 15 January 2021

This newsletter provides links to published news articles from a range of sources. Views or opinions presented are those of the original author(s) and do not necessarily represent the views of the Royal Society of Biology.

### News

## **Royal Society of Biology news**

# 150+ RSB members join talk with Katherine Fletcher MP, Science and Technology Select Committee member

More than 150 RSB members joined Katherine Fletcher MP, a member of the House of Commons Science and Technology Select Committee, to discuss how scientists can engage with Parliament and Government policy-making.

#### RSB members recognised in 2021 New Year's honours list

The 2021 New Year's Honours List recognises members and Fellows of the RSB for their biosciences and community work.

#### COVID-19 Bulletin

For further detail on COVID-19 research, news and updates, RSB has developed a monthly bulletin collating some of the bioscience behind the outbreak and response. See <u>our webpages</u> to read previous editions and subscribe to the next.

#### Health and biomedicine

#### Could new COVID variants undermine vaccines? Labs scramble to find out

This Nature news article covers the work of researchers who are trying to understand why COVID-19 variants identified in the United Kingdom and South Africa seem to be spreading so quickly, and whether they might diminish the potency of vaccines or overcome natural immunity and lead to a spate of reinfections.

#### Why resistance is common in antibiotics, but rare in vaccines

The Conversation defines resistance in an immunological context and highlights the differences between drug and vaccine mechanisms.

#### New strategy to accelerate diagnosis and improve treatment of rare diseases

The Government has announced that millions of people with rare diseases, like Huntington's disease or cystic fibrosis, will benefit from a new framework to raise awareness of rare diseases, speed up diagnosis and improve care and treatment.

#### In a picture: The quest to map all the cell types in a human lung

Professor Martijn Nawijn, an immunologist at the University of Groningen in the Netherlands, tells Horizon about his quest to map every cell in a healthy human lung.

### Agriculture, aquaculture and fisheries

#### Environment department scientist calls for biotechnology debate

The Guardian covers how Gideon Henderson, Chief Scientist at the Department for Environment, Food and Rural Affairs, believes the time is ripe for a new public debate on the science of manipulating genes in crops and animals.

#### UK allows emergency use of bee-harming pesticide

A pesticide believed to kill bees has been authorised for use in England despite an EU-wide ban on its use outdoors, reports The BBC.

#### Farmers in UK devolved nations face big drops in income post-Brexit

The Guardian describes how Fergus Ewing, Scotland's Cabinet Secretary for the rural economy has warned that farmers in the UK's devolved administrations are facing substantial cuts to their income due to Brexit, which could imperil their ability to protect the countryside.

### **Environment and ecology**

#### Insect populations suffering death by 1,000 cuts, say scientists

The Guardian describes how twelve new studies published in the journal Proceedings of the National Academy of Sciences examined the decline of insect populations worldwide and the threats causing the population collapses.

#### Prime Minister commits £3bn UK climate finance to supporting nature

Government press release describing how the UK will spend at least £3bn of international climate finance on nature and biodiversity over five years.

#### We have no choice - this has to be the year we reverse the decline of nature

This opinion piece written for The Independent considers how the UK can emerge as a global leader in conserving and improving the natural world.

### Water and air

#### State of the ocean will 'ultimately determine the survival of our species': UN Special Envoy

The United Nations' News describes how Peter Thomson, the United Nations' Special Envoy for the Ocean has called for continued action to improve our oceans' health by conserving and sustainably using its resources.

# **Climate and energy**

#### Global climate action needs trusted finance data

This Nature Editorial gives an opinion on how an agreed system for measuring the funding of green projects in poorer nations may be vital to achieving action on climate change in 2021.

#### UN chief calls for 'urgent transition' from fossil fuels to renewable energy

The United Nations' News describes how the United Nations' Secretary-General António Guterres has stated that building a global coalition for carbon neutrality by mid-century will be one of the United Nations' main priorities.

#### Atmospheric carbon dioxide to pass iconic threshold

In 2021, carbon dioxide in the atmosphere will reach levels 50% higher than before the industrial revolution, due to human-caused emissions, says a Met Office forecast.

#### **Waste**

### Health crisis: up to a billion tonnes of waste potentially burned in the open every year

Writing in the Conversation, University of Leeds researchers highlighted the detrimental impacts of burning waste on human health and the environment.

#### **Animal research**

# Combatting chronological and accelerated vascular ageing: A new perspective on exercise as medicine

A blog written for The Physiological Society summarises a study examining whether exercise performed throughout a lifespan can protect arteries from the combined stressors of ageing and chronic consumption of a Western-style diet in male mice.

# **Exiting the EU**

#### Brexit deal: how new EU-UK relations will affect you

This article from the European Parliament News summarises vital issues that will impact EU citizens in the UK and UK citizens living in other parts of the EU.

# Research funding and higher education policy

#### £213 million UK Government funding to help UK scientists

The Government has stated that the investment will equip the UK's leading scientists, universities and research institutes with new state of the art equipment to drive forward research.

#### English higher education 'in reasonable financial shape' despite impact of pandemic

The Office for Students has found that the finances at England's universities and other higher education providers largely remain sound despite the early impact of the pandemic. However, there is significant variation in the position of different providers.

# Schools education policy

#### A-level and GCSE cancellation: a missed opportunity to rethink assessment

Writing for the Conversation, Mary Richardson, Associate Professor in Educational Assessment, UCL, explores the difficulties in standardising and assessing educational achievement in our schools during the pandemic.

# **Business and industry**

#### Carrot cement: How root vegetables and ash could make concrete more sustainable

An article featured in Horizon examines how researchers are experimenting with root vegetables and recycled plastic in concrete to see whether this can make it stronger and more sustainable.

# **Diversity and inclusion**

#### Leaving no one behind - Introducing the Inclusive Data Taskforce

Writing for National Statistical, Dame Moira Gibb, the Chair of the new taskforce, explains the mechanisms of the taskforce and the importance of ensuring that statistics reflect everyone's experiences in society.

#### International news

### Coronavirus disease (COVID-19) Situation Dashboard

The World Health Organisation summarises the reported number of confirmed COVID-19 cases and deaths.

#### The plan to map every coral reef on Earth – from space

This article summarises how a plan to use satellite imaging to build up a global picture of coral reefs, to better understand how to protect them from warming seas brought on by climate change, is being supported by the United Nations Environment Programme.

#### Platypuses are increasingly threatened, scientists say

An article written for National Geographic covers how scientists are urging the Australian Government and several Australian states to list the platypus as vulnerable to extinction, so that they can benefit from additional protection and conservation efforts.

# People

#### Wellcome appoints new research programmes director

Cheryl Moore, who is currently the President and Chief Operating Officer of the New York Genome Center, is to become Wellcome's new Director, Research Programmes. In this role, Cheryl will lead Wellcome's broad programme of discovery research and research related to their three health challenge areas: mental health, infectious diseases, and the health effects of global heating.

## Committee vacancies

#### RSB seeking applications for a new Chair of Education & Science Policy (ESP) Committee

Our ESP Committee is one of the two main advisory committees to RSB Council. Full details, including the role description, selection criteria, and the online application form are available via <a href="maysociety">mySociety</a>.

Closes: 31 January 2021

#### **RSB President**

The RSB is seeking nominations for a new President of Council. You may nominate yourself, or someone else without involving them. At this stage we are seeking only the full name of the nominee, and a link to their professional web page. Nominations should be received by RSB by midnight on 31st January 2021 for shortlisting by the RSB Nominations Committee in February, and discussion at the Council Meeting in March. Following agreement the President-elect will be announced at the Annual General Meeting in May 2021, and will take a non-active shadowing role, prior to taking office in May 2022. Further details and the brief nomination form are available online, with nominations to be submitted via SurveyMonkey.

# **Opportunities**

#### RSB Gopher Science Lab free online training for primary teachers

The Royal Society of Biology is offering 40 state-funded primary schools in the UK the opportunity for four teachers to have free access to RSB's Gopher Science Lab <u>online training course</u>. With thanks to generous support from <u>The Worshipful Company of Horners</u> enabling RSB to offer this opportunity. Primary school teachers working in UK based, state-funded, primary schools can email <u>Amanda Hardy</u> to apply on behalf of their school to access the paid-for online training places on a first come first served basis.

#### **RSB's Science at Home festival resources online**

RSB and some of our science friends have worked together to run our first ever virtual science festival - RSB's Science at Home - with activities and resources available online, so you can now take part in the festival any time that suits you. With a range of videos, activities, games and more straight to your computer screen to entertain and engage you and your family. Take part today and tell your friends via #RSBScienceAtHome.

#### **RSB School Biology Teacher of the Year Award**

Do you know an amazing biology teacher? Students, parents and carers can now <u>suggest a teacher</u> who they think is outstanding for the Royal Society of Biology's School Biology Teacher of the Year Award. Visit the Society's <u>website</u> for further information.

Closes: 29 January 2021

### Consultations

#### Reducing ammonia emissions from urea fertilisers

As ammonia emissions are predominantly from agriculture (87%) and around 8% are from the use of solid urea fertilisers, the Department for Environment, Food and Rural Affairs seeks your views on three policy options that give us the greatest ammonia emission reductions from regulating the use or sale of sold urea fertilisers

Closes: 26 January 2021

#### Live animal exports: improvements to animal welfare in transport

The Department for Environment, Food and Rural Affairs is seeking views on ending live animal exports for slaughter and fattening, starting in or transported through England or Wales, and on further improvements to animal welfare in transport.

Closes: 28 January 2021

#### **Equity in the STEM workforce**

The All-Party Parliamentary Group (APPG) on Diversity and Inclusion in Science, Technology, Engineering and Maths (STEM) has launched its inquiry into equity in the UK STEM workforce and is currently inviting submissions of evidence. Full details of the inquiry and call for evidence can be found on the <a href="mailto:APPG">APPG</a> website. The RSB response to this inquiry is currently in draft. Please contact <a href="mailto:consultation@rsb.org.uk">consultation@rsb.org.uk</a> for more information and if you would like to contribute.

Closes: 29 January 2021

#### Farm Animal Welfare Committee's opinion on the welfare of animals during transport

The Scottish Government's consultation considers how the recommendations made by the Farm Animal Welfare Committee might be implemented in Scotland and the potential impact of implementation on stakeholders.

Closes: 26 February 2021

#### Sustainable use of pesticides

The Department for Environment, Food and Rural Affairs and the Devolved Administrations have produced a revised draft National Action Plan for the Sustainable Use of Pesticides. This consultation allows you to give your views on the plan that covers the next five years and aims to minimise the risks and impacts of pesticides to human health and the environment while ensuring pests and pesticide resistance are managed effectively.

Closes: 26 February 2021

#### **Greenhouse gas removals**

The Department for Business, Energy & Industrial Strategy and HM Treasury are seeking evidence on greenhouse gas removal methods, and views on policy mechanisms that could incentivise and facilitate their development and deployment.

Closes: 26 February 2021

#### <u>Defra consultation on the regulation of genetic technologies</u>

The Department for Environment, Food and Rural Affairs is consulting on the regulation of gene edited (GE) organisms and gathering views on the wider regulatory framework governing genetically modified organisms (GMOs). The RSB response to this consultation is currently in draft. Please contact <a href="mailto:consultation@rsb.org.uk">consultation@rsb.org.uk</a> for more information and if you would like to contribute.

Closes 17 March 2021

#### **RSB Policy Resource Library online**

The RSB has created a searchable, digital library of more than 800 statements, responses, briefings and other policy resources produced by the RSB and our Member Organisations across the biosciences. This collection is freely and openly accessible to everyone, including members and non-members, through the <a href="mySociety portal">mySociety portal</a> (no registration necessary).

### **Events**

#### Translating UK knowledge and research into impact: Physiology and KE

25 January 2021 14:00 - 15:00 GMT

The Physiological Society are excited to launch 'Translating UK knowledge and research into impact: Physiology and knowledge exchange', a report from The Physiological Society and National Centre for Universities and Business (NCUB) exploring the impact of physiology to knowledge exchange (KE). The event will showcase how physiology knowledge and research is translated into impact, revealing the findings of the survey of physiologists and higher education institutions.

#### **RSB Policy Lates series**

Our Policy Lates series continued through 2020, with four online events bringing panels of interdisciplinary experts together to discuss pressing challenges, including antimicrobial resistance, discovery research in the era of COVID-19, healthy ageing, and the climate emergency. Hundreds of people from all over the UK, and all over the world, tuned in to join the debate. Recordings of each event are free to watch on our YouTube channel, visit our Policy Lates page for details. The series resumes later in 2021. Thank you to our series supporters the Biochemical Society, the British Pharmacological Society, the Society for Applied Microbiology, the Society for Experimental Biology, and The Physiological Society.

#### **Sanger Seminar Series**

The Wellcome Sanger Institute is pleased to launch a series of virtual seminars, showcasing the diversity of genomic research at the Institute aimed at tackling some of the biggest challenges in human health and disease. The virtual seminar series will take place monthly and is freely available and open to all who wish to attend.

# And finally...

#### Ireland has corals, and they survive in extreme conditions at the edge of a submarine canyon

Writing for the Conversation Aaron Lim, Post-doctoral Researcher, Marine Geoscience, University College Cork, explores the cold-water coral habitats off the coast of Ireland and methods used to monitor changes of coral species.

#### The Biologist

In 2021 *The Biologist* will return to a quarterly print magazine, with more content published online between editions. This shift in focus reflects a growing appetite for digital content, and allows us to respond to fast-moving or breaking issues in bioscience, such as the COVID-19 pandemic – while also helping reduce the environmental impact of the magazine. Check out *The Biologist's* first online article of the year on how Google's AlphaFold protein-structure prediction technology might change bioscience.

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