

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

27 November 2020

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

Top stories

[Flagship Fisheries Bill becomes law](#)

The Government has recently announced the UK's first major domestic fisheries legislation in nearly 40 years has passed into law. The Fisheries Act 2020 gives the UK full control of its fishing waters for the first time since 1973.

[Government takes historic step towards net-zero with end of sale of new petrol and diesel cars by 2030](#)

The UK has taken another historic step on the road to ending its contribution to climate change while boosting jobs in the process, as the Prime Minister, Transport Secretary and Business Secretary recently announced the end of the sale of new petrol and diesel cars in the UK by 2030.

[CaSE responds to 2020 Spending Review](#)

The Chancellor has published the [Government's 2020 Spending Review](#), including £14.6 billion in R&D in 2021-22. This follows on from March's Spring Budget, in which the Government announced plans to increase public R&D investment to £22 billion per year by 2024-25.

[BBC reports: Spending review 'undermines UK green vision'](#)

The BBC reports on how the UK chancellor's Spending Review has been accused of undermining the prime minister's "green" vision by pushing ahead with a £27bn roads programme.

Royal Society of Biology news

[Over 100 participants join Policy Lates event on global warming](#)

The latest virtual 'Policy Lates' event held by the RSB explored the vital role of the biosciences in mitigating the effects of global warming.

[CaSE announces the appointment of new Chair of Trustees](#)

As well as the new Chair, The Campaign for Science and Engineering also welcomes the appointment of new trustees to the Board, including Dr Mark Downs, Chief Executive, Royal Society of Biology.

[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. The latest edition, published on the 23rd of November 2020, includes updates on vaccine development and immunological memory, lessons learned from coronavirus vaccines in veterinary medicine, SARS-CoV-2 infection in mink, EU Recovery and Resilience, data visualisation, at risk groups, switching research funding, researching long-term COVID-19 effects, business investment for recovery, digital environmental solutions, and wellbeing. See [our webpages](#) to read previous editions and subscribe to the next.

[Education during COVID-19](#)

An RSB webpage listing advice, resources and announcements for schools, students and parents during the COVID-19 pandemic.

[Main RSB webpage on COVID-19](#)

The RSB is working to adapt and ensure our services are delivered to the greatest extent possible whilst also taking into account Public Health England and Government advice during the pandemic. We regularly update [this webpage](#) with relevant information about our activities, initiatives and community support.

Health and biomedicine

[These Algorithms Could Bring an End to the World's Deadliest Killer](#)

The New York Times describes how in less than a minute, a new app on a phone or a computer can scan an X-ray for signs of tuberculosis, COVID-19 and 27 other conditions.

[New antibiotic-resistant infections rise to 178 per day in England](#)

The Government covers how antimicrobial resistance (AMR) remains a serious threat to the health of people in England, with 178 AMR infections diagnosed each day, according to a recently published report from Public Health England.

[Four reasons why we need multiple vaccines for COVID-19](#)

Charlie Weller, Head of Vaccines Programme, Wellcome, explains why having a range of COVID-19 vaccines available for people to use around the world will be essential to bringing the pandemic under control.

Agriculture, aquaculture and fisheries

[Transforming Food Production: our journey so far](#)

Katrina Hayter, UK Research and Innovation Challenge Director for the Transforming Food Production Challenge, provides an overview of key ambitions, outputs and the range of projects that are funded.

Forestry

[134,000 trees to be planted through the Urban Tree Challenge Fund](#)

The Forestry Commission's Urban Tree Challenge Fund has awarded a share of a £10 million pot to more than 50 projects led by community and volunteer groups, councils and individuals aiming to increase the number of trees in urban areas through small-scale planting projects.

Environment and ecology

[Global map of bees created in conservation first](#)

Scientists have mapped the distribution of all 20,000 bee species on earth, reports the BBC.

[Aberystwyth elephant grass research could help unlock greener energy](#)

The BBC covers how researchers in Wales have helped to unlock the DNA of a plant that could have a crucial role in fighting climate change.

[Opportunities for Implementing Biodiversity Net Gain in Scotland](#)

In this opinion article, an attendee provides an overview of topics that were covered during an event on biodiversity in Scotland held by the British Ecological Society's Scottish Policy Group and the Chartered Institute of Ecology and Environmental Management.

[ZSL joins new initiative 'Wildlife Conservation 20' to issue joint declaration to G20 Leaders](#)

A new initiative involving 20 of the world's leading conservation organisations have recently issued an unprecedented joint declaration to the G20 calling for urgent action to invest in nature to protect biodiversity and reduce the risk of future pandemics.

[Why a COVID-19 vaccine could further imperil deep-sea sharks](#)

As the world's pharmaceutical companies scramble to create a vaccine for COVID-19, at least five of the COVID-19 vaccine candidates rely on squalene sourced from wild-caught sharks, reports National Geographic.

Water and air

[Pet flea treatments poisoning rivers across England, scientists find](#)

Damian Carrington, Environment Editor for the Guardian, examines how a study has revealed highly toxic insecticides used on cats and dogs to kill fleas are detectable in rivers across England.

[Ocean mapping satellite to help UK scientists tackle climate change](#)

A Government-backed satellite is set to launch on a SpaceX rocket from Vandenberg, California that will allow UK scientists to analyse the most accurate data on global sea levels.

Climate and energy

[Climate change: Covid pandemic has little impact on the rise in CO2](#)

The BBC covers how the World Meteorological Organisation has said the global response to the COVID-19 crisis has had little impact on the continued rise in atmospheric concentrations of CO2.

[1% of people cause half of the global aviation emissions – study](#)

Global aviation's contribution to the climate crisis was growing fast before the COVID-19 pandemic, with emissions jumping by 32% from 2013-18. Flight numbers in 2020 have fallen by half, but the industry expects to return to previous levels by 2024, writes the Guardian's Environment Editor.

[£61 million boost for Europe's largest 'flying lab' to tackle climate change from the skies](#)

The Government has announced the UK's leading scientists will take to the skies on the largest flying laboratory in Europe to carry out crucial research into some of the world's most pressing environmental challenges such as climate change and severe weather events.

Waste

[Invention that makes renewable energy from rotting veg wins James Dyson prize](#)

The Guardian covers how a novel material made from rotting fruit and vegetables that absorbs stray UV light from the sun and converts it into renewable energy has landed its designer the first sustainability gong in this year's James Dyson awards.

[Space agency backs Scottish marine plastics study](#)

A team of Highlands-based scientists are helping to develop a new way of spotting marine plastic pollution from space, reports the BBC.

[UKRI awards £8m for new sustainable plastics research projects](#)

UK Research and Innovation have announced that ten university-led research projects aiming to help tackle plastic waste in the UK, will receive £8 million in funding from the Industrial Strategy Challenge Fund.

Animal research

[Can dogs smell COVID? Here's what the science says](#)

Canines seem to detect coronavirus infections with remarkable accuracy, but researchers say large-scale studies are needed before the approach is scaled up, according to Nature News.

Research funding and higher education policy

[Grade inflation 'remains a significant and pressing issue' – new OfS analysis](#)

New data from the Office for Students has shown the rapid increase in students receiving first-class honours degrees (which cannot be explained by factors that may affect attainment) has slowed.

[UKRI is the wrong target for anger at lack of funding support for PGRs](#)

In this opinion article for Wonkhe, Stephanie Smith, Head of Policy (Research and International) at the Russell Group, argues even though many in the sector are justifiably angry at the lack of financial support for postgraduate researchers during COVID-19, UKRI needs a different kind of funding settlement if it is to be able to respond to the crisis.

Open access and publication policy

[The market in academic ebooks needs to change](#)

In this opinion article for Wonkhe, Anthony Sinnott, Access and Procurement Development Manager at the University of York, provides an overview of why urgent regulation of the ebook market is necessary.

Business and industry

[3-D printed corals, new bioreactors to boost microalgae production for biofuels](#)

Horizon covers how photosynthetic microalgae can be used to produce products like biofuels and cosmetics by using light as an energy source. But algae grown in a reactor block out the light on which they feed. New reactor designs could solve this problem and help the industry move forward.

[New EU industrial strategy: the challenges to tackle](#)

This article from European Parliament News summarises how Members of the European Parliament (MEPs) want the European Union's future industrial strategy to help businesses survive the COVID-19 crisis and face the digital and environmental transitions.

Diversity and inclusion

[Universities may face sanctions if they fail most disadvantaged](#)

The Guardian covers how the plans by the Office for Students are designed to raise the bar of standards and ensure more students – particularly those from groups underrepresented in higher education – get to the end of courses and find better-paid work.

[New forum for tackling bullying and harassment](#)

UK Research and Innovation have announced the establishment of a new forum dedicated to addressing bullying and harassment.

[Universities UK calls for urgent action on racial harassment in higher education](#)

Universities UK has published a new set of recommendations designed to decisively tackle racial harassment as part of efforts to address racial inequality in UK higher education.

Outreach and engagement

[Five rules for evidence communication](#)

An opinion article written for Nature provides advice on and insights into: how to communicate uncertainty, provides how audiences decide what evidence to trust, and how narratives affect people's decision-making.

International news

[Coronavirus disease \(COVID-19\) Situation Dashboard](#)

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

[Platypus habitat 'has shrunk by 22%' since 1990](#)

The BBC reports how the habitat of the platypus has shrunk by almost a quarter in just three decades according to the team from the University of New South Wales.

Opportunities

[BioArtAttack 2020](#)

Get creative and submit an entry for our BioArtAttack 2020 competition! Your entry could be a drawing, collage or even a sculpture, taking inspiration from the smallest or the largest parts of the living world. Submit a photograph of your BioArtAttack online and visit [our website](#) for further information.

Closes: 30 November 2020

[Understanding researcher views on the UK's national assessment programme, REF2021](#)

UKRI has commissioned RAND Europe to conduct a real-time evaluation of REF 2021 on behalf of the four UK funding bodies. The study aims to assess attitudes, perspectives and behaviours towards the REF 2021 across the sector, and explore how REF policies and changes are embedded in the way submissions are prepared and delivered. As part of this study, RAND Europe is conducting a survey of research staff across UK higher education institutions.

Closes: 30 November 2020

[Royal Society pairing scheme](#)

Each year 30 research scientists are paired with UK parliamentarians and civil servants. They gain an insight into each other's work as well as a better understanding of how their research findings can help inform policy making. Through the scheme scientists will make lasting relationships with parliamentarians and civil servants as well as colleagues working across a wide range of scientific disciplines.

Closes: 1 December 2020

[RSB School Biology Teacher of the Year Award](#)

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

Closes: 29 January 2021

[Emerging Topics in Life Sciences](#)

Emerging Topics in Life Sciences is planning a special themed issue exploring emerging technologies, approaches and products in the life sciences industry space, and we would be delighted if you would consider contributing. The journal is published by Portland Press on behalf of the Biochemical Society and the Royal Society of Biology, with all profits returned in service of the community. Open Access publication is available but is not required, with open access articles deposited to PubMed Central. All submissions will be independently peer reviewed.

If you are interested, you can choose to submit either a short, 3000-word mini-review of the latest findings, challenges and future implications, or a 1000-word opinion-based perspective piece. Our aim with the issue is not to provide an in-depth review of everything currently ongoing in industry, but to inform our academic audience of some of the most recent developments and encourage them to explore. Ideally, we are looking for submissions in early 2021, however we are able to be flexible and work with you if this is something you are interested in. Contact editorial@portlandpress.com (FAO Emma Pettengale) to discuss further details.

Consultations

Consultation on RSB's 11-19 Biology Curriculum Framework

This month, the Royal Society of Biology's [Biology Curriculum Committee](#) are pleased to be opening a closed consultation on our 11-19 biology curriculum framework. The committee would like to seek clarity on the overall organisation, presentation and message of the framework document. We are keen to receive feedback from a wide range of committee members and member organisations. Please do check our [webpage](#) for further details on when the consultation will open. If you have any direct questions, please contact helen.mitchell@rsb.org.uk.

Draft Strategy for Environment, Natural Resources and Agriculture Research 2022-2027

The Scottish government funds a multi-million-pound portfolio of research on the environment, natural resources and agriculture. This consultation allows you to give your views on the priorities for future research, and to ensure that the strategy is setting the right direction and approach for the future research portfolio.

Closes: 14 December 2020

Future PM2.5 concentrations in England

The Air Quality Expert Group (AQEG), together with the Committee on the Medical Effects of Air Pollutants (COMEAP), are providing independent technical advice to Defra throughout the development of the air quality targets. At the request of Defra, AQEG are seeking input from the wider research community on future PM2.5 concentrations in England.

Closes: 17 December 2020

Total restriction of online advertising for products high in fat, sugar and salt (HFSS)

In 2019 the Government consulted on restricting advertising of HFSS for TV and online. It asked for views on whether to extend current advertising restrictions on broadcast TV and online media, including consulting on watershed restrictions. This new consultation goes further and looks at how a total HFSS advertising restriction could be implemented online.

Closes: 22 December 2020

Consultation on regulating quality and standards in higher education

The Office for Students is consulting on its approach to regulating quality and standards in higher education. Since 2018, the focus has been on assessing providers seeking registration and they are considering whether and how it should develop its approach now that most providers are registered.

Closes: 12 January 2021

SMEs transforming food production: series A investor partnership

UK registered small and medium-sized enterprises (SMEs) that are transforming food production towards net zero can apply for a share of up to £5 million in grant support. The grant funding is from the Industrial Strategy Challenge Fund.

Closes: 13 January 2021

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 solid urea fertilisers.

Closes: 26 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.

Closes: 29 January 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 [mySociety portal](#) (no registration necessary).

Events

[The sociology of the anti-vaccine movement](#)

2 December 2020

17:00 – 18:00 GMT

A Biochemistry Focus webinar, organised by the Biochemical Society and Portland Press. A recent Gallup poll noted that public support for vaccines today is significantly lower than it was in 2001. Social scientists have presented the problem of the anti-vaccine movement; but mechanisms for addressing it are far from clear.

[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.

Due to the COVID-19 pandemic, all in person RSB events due to take place in 2020 have been cancelled, postponed or moved to an online format. Updated information will be made available on the [RSB events pages](#). Postponed events will hopefully run in late 2021. We recommend also checking other external event webpages for updates and continuing to monitor and follow official advice.

And finally...

[This Rat Covers Itself With Poison That Can Take Out an Elephant](#)

African crested rats when cornered, fluff up the fur along their backs into a tip-frosted mohawk, at their centre, are a thicket of specialised brown hairs with a honeycomb-like texture containing a poison powerful enough to bring an elephant to its knees, reports the New York Times.

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