



Nominate a member

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

8 October 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

Top stories

Plans to unlock power of gene editing unveiled

New plans to unlock the power of gene editing to help our farmers grow more resistant, more nutritious and more productive crops have been published as part of the Government response to the gene editing consultation.

Royal Society of Biology welcomes Government announcement on the regulation of genetic technologies

The RSB has issued a statement welcoming the outcome of the consultation on genetic technologies regulation, published on 29th September 2021.

Among other RSB Consultation responses, you can read the RSB response to Defra's consultation on the regulation of genetic technologies <u>here</u>.

Royal Society of Biology news

Species big and small feature in this year's Nancy Rothwell Award winning entries

The winning and highly commended entries for this year's Nancy Rothwell Award have been announced, including specimen drawings of an African elephant, Javan rhinoceros, and blue poison dart frog.

Ants feasting on honeydew and cells destroying tuberculosis: the shortlist and winners of the RSB's Photography competition

The Royal Society of Biology's annual photography competition attracts entries from amateur photographers around the world, with more than 1600 submissions received this year for the theme "interconnected".

Big numbers aplenty as Policy Lates tackles the complexities of food

Attendees of the latest RSB Policy Lates discussion heard a variety of staggering and sobering statistics on the need to reform the way we grow and consume food.

Winners of the RSB's Outreach and Engagement Award 2021 announced

Two outstanding bioscience researchers have been recognised with this year's RSB Outreach and Engagement Awards.

Health and biomedicine

Medicine Nobel goes to scientists who discovered biology of senses

David Julius and Ardem Patapoutian share the award for identifying receptors that allow the body's cells to sense temperature and touch, reports Nature News.

Advances in vaccine technologies

This POSTnote provides an overview of vaccine development and technologies. It also covers opportunities and challenges to vaccine discovery and manufacture, as well as policy approaches to stimulate vaccine research and development in the UK.

Opinion: Does biobanking hold the key to achieving universal health?

SciDev.Net covers how increasing the availability of high-quality biological samples through biobanks has the potential to advance global health research and speed up progress towards Sustainable Development Goals such as achieving universal health coverage.

Food and drink

Millions with food allergies to benefit as new allergen labelling law comes into force

Millions of people living with food allergies, intolerances and coeliac disease will be able to make safer choices about the food they buy as a new allergen labelling law comes into effect, reports the Food Standards Agency.

Project launched to tackle greenwashing in food and drink sectors

The Environment Agency has launched a project to standardise metrics for the environmental performance of the food and drink sector.

Opinion: How do we put pastoralists at the centre of food and climate debates?

The STEPS Centre discusses a new report co-published by the Pastoralism, Uncertainty and Resilience (PASTRES) programme, 'Are livestock always bad for the planet?' In addition to how can pastoralists' views and insights be made more central in the conversation?

Agriculture, aquaculture and fisheries

Experts have 'hope' for plague-hit Gloucestershire crayfish

Wildlife experts have said 'it is not the end' for indigenous crayfish that have been hit by a crayfish plague, reports BBC News.

Building an Agri-tech investment community

Chris Danks, innovation lead of Transforming Food Production (TFP), updates on the series A investor partnership programme winners, lessons learnt and next steps.

Opinion: Agroforestry can deliver, but needs backing

Writing for Farmers weekly, Vicki Hird, Head of sustainable farming at food and farming alliance Sustain, highlights why agroforestry has gained greater attention of late.

Environment and ecology

Wildlife Trusts raise £25m for projects to help UK nature recover

Penchwc Mawr Wood is among areas being restored as the trusts embark on 35 schemes to create and secure wild places across the country, according to the Guardian.

Extinction of primates threatens greater diversity loss than first thought

New research by scientists from Duke University suggests that hundreds of specialist parasites, from viruses to worms, may be lost forever as their mammalian hosts die out, writes the Natural History Museum.

UK's only research station in the Arctic celebrates 30 years

UK Research and Innovation has announced the Arctic Station in Ny-Ålesund, Svalbard in Norway, the UK's permanent Arctic research facility, has recently celebrated its 30 years anniversary.

Water and air

Quenching the world's thirst with off-grid water desalination

Desalination is the answer to long-term water security, but it's also expensive and energy-intensive. The good news is that scientists are developing some viable solutions, reports Horizon.

Review of regulatory controls to strengthen protections for water environment

The Government has unveiled proposals to improve water quality and regulate activities that affect our water supplies.

Heatwaves, sewage, pesticides: why England's rivers need a 'new deal' to avert crisis

The Guardian covers how a water industry group is calling for legislation and planning controls to protect waterways from climate change and pollution.

Climate and energy

Climate change: call to action

A blog post was written by Professor Ros Gleadow, President of the Global Plant Council (GPC), addressing the recent IPCC report, the coming COP26 meeting, and the recently released GPC climate change statement highlighting the need for urgent action and call on all countries to put in place programs to reduce emissions and limit biodiversity loss.

Climate change: Is the UK on track to meet its targets?

The UK has committed to reduce its greenhouse-gas emissions to net zero by 2050. However, a group of experts that advises the Government says Boris Johnson's Government has credible policies in place to deliver only about a fifth of this cut, reports BBC News.

Cutting methane should be a key Cop26 aim, research suggests

The Guardian covers how a thinktank has suggested oil and gas producers could reduce emissions at low cost or even at a profit by staunching leaks.

Climate change brought to life at COP26 with over 200 events in Glasgow

The Government has stated COP26 will open its doors to the British public throughout the international climate summit, with more than 200 events being hosted in the UK-run Green Zone in Glasgow between Monday 1st November and Friday 12th November.

Waste

What's holding up Scotland's bottle deposit scheme?

BBC News covers how Scotland's deposit return scheme has already been delayed by more than a year, and there are now fears it may not be introduced until March 2023.

Opinion: Transform food systems to avert \$400 billion annually in loss and waste

That half-eaten apple tossed in the trash bin after lunch is contributing to the staggering mountain of food wasted globally, at a time when more than 800 million people still go to bed hungry, United Nations agencies said, marking the International Day to increase awareness of this issue.

Animal research

Documenting one of the most abundant vertebrates in the world before it's too late

Lanternfish are one of the most abundant vertebrates on Earth. Yet despite their huge numbers, almost nothing is known about them, reports the Natural History Museum.

Natural bacteria could wipe out dengue-carrying mosquitoes, Australian research suggests

Populations of mosquitoes, which spread dengue fever, zika and other viruses, dropped by 80% after being infected with Wolbachia bacteria, reports the Guardian.

Government and Parliament

UK commits additional £7.2 million to tackling illegal wildlife trade

A Government press release describing how endangered species including tigers, orangutans, pangolins and rosewood trees will be better protected under a range of projects funded by the Government this year aimed at tackling the damaging illegal wildlife trade.

Research funding and higher education policy

Delaying R&D target would cost UK billions in private investment

Ahead of the Spending Review, the Campaign for Science and Engineering (CaSE) analysis shows that the UK risks missing out on billions in private R&D investment if the Government delays its timetable for investing in science.

£2.5 billion investment to support Government's R&D ambitions

Research England has published overall recurrent budgets for the higher education sector for research and knowledge exchange funding for the 2021-22 academic year.

Rosalind Franklin Institute opens

The opening of the Rosalind Franklin Institute marks a milestone in the UK's ability to develop new technologies to address major health research challenges, writes UK Research and Innovation.

Schools education policy

DfE considering return of Sats at 14 and axing teaching hours limits

Radical proposals to bring back national testing for 14-year-olds and scrap limits on teaching hours are under consideration by ministers, the Guardian has learned.

Adaptations in 2022 summer exams to ensure fairness for students

The Government has stated students will sit GCSE, A and AS level exams next year with adaptations to recognise the disruption to their education.

Open access and publication policy

Publishers unite to tackle doctored images in research papers

Eight major publishers have issued joint guidelines for how journal editors can spot and deal with suspicious images or data, reports Nature News.

Business and industry

Opinion: Concrete needs to lose its colossal carbon footprint

Concrete will be crucial for much-needed climate-resilient construction. Yet the cement industry must set out its plan for decarbonization, according to the Nature Editorial.

Diversity and inclusion

Wonkhe community survey 2021: equality, diversity, and inclusion

What should the higher education sector prioritise to make real change on equality, diversity and inclusion in 2021-22? Debbie McVitty, Editor, Wonkhe, reports findings from the Wonkhe community survey.

Opinion: How to support academic parents to succeed

Parenting during the pandemic was tough for everyone. Eva Lantsoght, Full Professor in Civil Engineering in Ecuador and tenured Assistant Professor in the Netherlands, identifies lessons from it on enabling academic parents to succeed.

Ensuring everyone is counted in UK data and evidence

Sir Ian Diamond, the National Statistician, talks about the publication of the Report of the Inclusive Data Taskforce that he commissioned in October 2020, with the aim of making sure everyone is counted and nobody is forgotten in UK data and evidence, and some of the key work already underway.

Ethics

Opinion: What might Brexit mean for UK and international bioethics?

Writing for the Nuffield Council on Bioethics, Sue Tansey asks Dr Mark Flear, Reader in the School of Law, Queen's University Belfast, and Professor Siobhán O'Sullivan, Royal College of Surgeons in Ireland, to reflect on three key questions on bioethics post-Brexit.

Outreach and engagement

Diverse views on healthy environment research outlined in report

UK Research and Innovation covers how a diverse group of members of the public, including those from under-represented communities, are helping to shape the Natural Environment Research Council's healthy environment research priorities.

Immersive science-art exhibition opens in Glasgow ahead of COP26

The Arts and Humanities Research Council-funded Polar Zero exhibition will bring cutting-edge climate science to life through inspirational art installations throughout the COP26 conference.

Getting kids to love not-so-cute critters

Teaching respect for insects, fish, and other non-mammals can have positive impacts on children's development and their love for the planet, writes National Geographic.

Digital technologies

Al can predict if it will rain in two hours' time

BBC News describes how scientists at Google-owned London AI lab DeepMind and the University of Exeter partnered with the Met Office to build the so-called nowcasting system.

Bangor Uni uses virtual reality to train radiographers

Virtual reality is being used to help aspiring radiographers learn how to use X-ray machines, reports BBC News.

International news

Coronavirus disease (COVID-19) Situation Dashboard

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

Australia's 'black summer' bushfires pushed 11 bee species closer to extinction

Eleven species are now eligible to be listed on the International Union for Conservation of Nature's red list of threatened species, according to the Guardian.

US to declare ivory-billed woodpecker and 22 more species extinct

Fish and Wildlife Service proposes removing species from the endangered list because they have not been spotted in the wild, reports the Guardian.

New global meningitis strategy aims to save 200,000 lives a year

According to the United Nations News, more than 200,000 lives could be saved annually if the goals of a new global strategy to defeat meningitis are achieved, the World Health Organization said.

People

Q&A: From tiny island farm to public health professor

SciDev.Net covers how after becoming the first university graduate from her "very small" village on Uganda's Ssese Islands, Dr Diana Nambatya Nsubuga went on to complete a doctorate in public health in the United States.

Opinion: From homeless to Harvard: Taking the scenic route to a PhD in biological sciences in public health

We rarely grow and make progress when we are comfortable, but it's when we're uncomfortable that we achieve the highest version of ourselves, writes Dr Joe Beyene sharing recollections of a personal journey into STEM with Cell Mentor - an online resource from Cell Press and Cell Signaling Technology.

Opportunities

Get involved in developing expert events:

We are seeking two RSB members to volunteer their expertise and represent us (one each) on the <u>JPAG</u> meeting committees developing seminars for 2022. The meetings to be developed by the group will cover the topics:

- Antibody-drug conjugates to be run in May 2022
- Orthogonality of methods for biological analysis to be held later in 2022

If you have expertise and interest in these areas and would like to get involved in the current development of these meeting programmes please:

- 1. Apply via mySociety https://my.rsb.org.uk/services.php?section=jobs&jobid=69
- 2. Complete the expertise and interest section of mySociety (in the Your Profile section)

This opportunity is for MRSB and FRSB. The RSB is committed to ensuring equal opportunities in the life sciences, and supports diversity throughout learning and in careers. Applications as soon as possible please.

Closes: 22 October 2021

Higher Education Bioscience Teacher of the Year Award

Now open for nominations, the award aims to identify the UK's leading bioscience higher education (HE) teachers, recognising the invaluable role they play in educating and inspiring the next generation of biologists. If you know a bioscience lecturer who deserves recognition for their passion and ideas, encourage them to submit an application this year.

Closes: 30 November 2021

BioArtAttack 2021

Get creative and submit an entry for our <u>BioArtAttack 2021</u> 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. <u>Submit a photograph</u> of your BioArtAttack online and <u>visit our website</u> for further information.

Closes: 30 November 2021

STEM for BRITAIN 2022

STEM for BRITAIN is a poster competition for early-stage researchers which is held in the Houses of Parliament. Applications are invited in five subject categories: Biological and Biomedical Sciences, Physics, Engineering, Mathematical Sciences and Chemistry. Finalists will be invited to an event in the Houses of Parliament where they will present their poster to Parliamentarians and the subject judges.

Closes: 6 December 2021

Consultations

Local Nature Recovery Strategies: how to prepare and what to include

The Department for Environment, Food & Rural Affairs (Defra) wants to know what you think about preparing the Local Nature Recovery Strategies and what to include. The strategies are a new system of maps and proposed actions for nature's recovery. The Environment Bill will create a legal requirement for these to be created across England.

Closes: 2 November 2021

Beaver reintroduction and management in England

The Department for Environment, Food & Rural Affairs (Defra) wants to know what you think about their proposed approach to beaver reintroduction and management in England.

Closes: 17 November 2021

The future regulation of medical devices in the United Kingdom

The Medicines and Healthcare products Regulatory Agency (MHRA) is inviting members of the public to provide their views on possible changes to the regulatory framework for medical devices in the United Kingdom.

Closes: 25 November 2021

Plant biosecurity strategy for Great Britain

Defra wants to know your views on how the Government, the plant industry, and the public can help improve plant biosecurity in Great Britain.

Closes: 30 November 2021

Labelling for animal welfare

Defra wants to know what you think about possible reforms to food labelling for animal welfare. The aim is to give Defra an understanding of how this might impact business, farmers, and consumers.

Closes: 6 December 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

RSB Connect 2021: bringing outreach and engagement into the future

23 - 25 November 2021

RSB Connect 2021 is a three-day online bioscience outreach and engagement symposium. The event will include talks, presentations, Q&A sessions and networking opportunities to provide training, information and discussion of contemporary issues relating to outreach and engagement. This event is for any academics, early career researchers, bioscientists, outreach and engagement professionals and anyone doing any kind of outreach and engagement within or alongside their work or studies. RSB and event partner Member Organisation's members receive a discounted rate on tickets, please see more details and apply online.

Due to the COVID-19 pandemic all RSB events will continue to take place online and updated information will be made available on the RSB events pages. We recommend also checking other external event webpages for updates and continuing to monitor and follow official advice.

And finally...

From dragonflies to kingfishers: the science behind nature's brilliant blues

Writing for The Conversation, Dr Rox Middleton EPSRC Doctoral Prize Fellow, School of Biological Sciences, University of Bristol, explains how a true blue pigment is actually relatively rare in nature, so plants and animals instead perform tricks with the light to generate this dazzling effect.

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