

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

23 October 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

Royal Society of Biology news

[COVID bioscientists recognised in latest honours list](#)

A range of bioscientists involved in the response to the COVID-19 pandemic have been honoured in the Queen's Birthday Honours 2020, including members of the SAGE advisory group.

[Education during COVID-19](#)

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

[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 28th of September 2020, covers updates including on how COVID-19 can damage the brain; dealing with the emerging 'second wave'; anthropozoonotic and zoonotic transmission; launch of the NHS COVID-19 app; the PM's speech to the UN General Assembly; the challenges faced by postdoctoral researchers; the UK's 'largest ever health programme'; reducing health inequalities; and looking ahead long-term. See [our webpages](#) to read previous editions and subscribe to the next.

[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

[Coronavirus vaccine: what we know so far – a comprehensive guide by academic experts](#)

Writing for The Conversation, Rob Reddick, Commissioning Editor, summarises the opinions of authors from across The Conversation, drawing upon their expertise, to explain how a COVID-19 vaccine will work, the progress a leading vaccine is making, and the challenges that may occur with manufacturing and distribution.

[Once we have effective Covid-19 treatments, it shouldn't only be the rich who benefit](#)

In an opinion article, Jeremy Farrar, Director, Wellcome, describes recent progress made by COVID-19 research and why more investment is needed.

[Covid: Remdesivir 'has little or no effect' on survival, says WHO](#)

The BBC reports how a study from the World Health Organization (WHO) has found anti-viral drug remdesivir has little to no effect on Covid patients' chances of survival.

[Space company takes to the skies alongside the NHS](#)

The government has announced the UK Space Agency has backed a healthcare drone start-up founded by NHS staff, to help in the response to COVID-19.

Food and drink

[£5 million investment to transform the UK's food systems](#)

UK Research and Innovation, has announced investment of over £5 million to train the next generation of UK food system leaders who will re-shape how we make, transport and consume our food.

[United Nations blog marking World Food Day](#)

Hunger is rising, due to factors including conflict, climate change and the COVID-19 pandemic, which is putting a strain on food systems that are already failing in many countries. This blog addresses some of the many issues and possible solutions.

Agriculture and fisheries

[Agriculture bill: Bid to protect post-Brexit food standards rejected](#)

MPs have rejected the latest attempt to require imported food to meet domestic legal standards from 1st January 2021, reports the BBC.

[Free-range egg expansion 'unsustainable and unnecessary'](#)

Concerns are growing that further expansion of the free-range egg sector in the UK will create a significant oversupply, driving down prices paid to farmers and reducing profitability, says Poultry World.

[How regenerative farming can improve livestock health](#)

Claire Whittle, veterinary surgeon at LLM Farm Vets, explains some of the key ways livestock farmers can work regenerative farming practices into grassland management to improve livestock health.

Environment and ecology

[Vast majority of Europe's key habitats in poor or bad condition – report](#)

Fiona Harvey, Environment Correspondent for the Guardian reports the State of Nature in the European Union survey finds only a quarter of species have a good conservation status.

[UK Biodiversity Indicators 2020 published](#)

The thirteenth update of the UK Biodiversity indicators has recently been published. The UK Biodiversity Indicators were produced to provide a measure for reporting on international goals and targets.

[Rewild to mitigate the climate crisis, urge leading scientists](#)

Fiona Harvey, Environment Correspondent for the Guardian covers how researchers have identified restoring natural landscapes damaged by human exploitation can be one of the most effective and cheapest ways to combat the climate crisis.

[Invasive species: why Britain can't eat its way out of its crayfish problem](#)

Writing for The Conversation, Eleri G. Pritchard, PhD Candidate in Freshwater Ecology, UCL, describes the invasive nature of signal crayfish, *Pacifastacus leniusculus*, and attempts made to control the population within the UK.

Water and air

[Temperatures of deepest ocean rising quicker than previously thought](#)

The Guardian covers how a study indicates ocean temperatures are rising quicker than previously thought.

Climate and energy

[Superconductors: Material raises hope of energy revolution](#)

Scientists have found the first material that displays a much sought-after property at room temperature, reports the BBC.

[Dried, pressed plants predict climate future](#)

SciDev.Net covers how the mass digitisation of herbaria (collections of preserved plant specimens) can boost the field of phenology, creating a new approach to the analysis of plant species to assist in the creation of climate models.

[Creating fuel from thin air with artificial leaves](#)

The BBC covers the work of Erwin Reisner, energy and sustainability Professor at Cambridge University, who is artificially replicating principles from nature such as photosynthesis to capture energy.

[Unmanned boats and drones could repair offshore winds farms and clean up the sea](#)

Autonomous drones and unmanned boats could be used to maintain the UK's offshore wind farms in the next five years, experts have told Sky News.

Waste

[Microwaving plastic waste can generate clean hydrogen](#)

Chemists have used microwaves to convert plastic bags, milk bottles and other supermarket packaging into a clean source of hydrogen, reports NewScientist.

[URKI funding puts UK at the forefront of next generation plastic recycling](#)

UK Research and Innovation Industrial Strategy Challenge Fund is investing £20m in four cutting edge recycling plants. These plants will increase the available recycling capacity in the UK and expand the range of plastics being recycled.

[Glitter litter 'could be damaging rivers'](#)

Scientists have found evidence that glitter used in cosmetics and body paint may harm rivers and lakes, reports the BBC.

Animal Research

[Scientists Synthesize Jawbones From Pig Fat](#)

The bones are among the hardest to replace in the body. A trial of the new technique in humans is about to begin, reports the New York Times.

Government and Parliament

[UK's most promising scientists backed by over £100 million government investment to bring pioneering ideas to market](#)

The government has announced over 100 of the UK's up-and-coming science and research leaders will benefit from a £109 million cash boost to convert their innovative ideas to transformational products and services.

[Bringing academic insight into Parliament](#)

This opinion article from WONKHE addresses how an increased demand for expert evidence requires new ways of bringing academic research into Parliament.

Research funding and higher education policy

[Lockdown led to 'more polarised' working hours for UK researchers](#)

This article for Times Higher Education covers how a Vitae study has observed many early career researchers saw their working hours fall, but one in nine scientists worked 60 hours a week.

[What it's really like to do science amid COVID-19](#)

In an opinion article featured in Nature News, researchers from four countries share their views on how they are coping with the return to campus amid the pandemic.

Open access and publication policy

[Quarter of citations in top journals 'wrong or misleading'](#)

Forensic analysis of citations within leading scientific periodicals reveals alarming lack of rigour in academic referencing, says Times Higher Education.

[UK universities sign deal to waive Plos publication fees](#)

A three-year deal will allow researchers to publish papers without paying additional article-processing charges, reports Times Higher Education.

[Initiative pushes to make journal abstracts free to read in one place](#)

In a bid to boost the reach and reuse of scientific results, Nature News reports, a group of scholarly publishers has pledged to make abstracts of research papers free to read in a cross-disciplinary repository.

Business and industry

[How COVID-19 is affecting industry innovation in the UK](#)

This blog on the work of Innovate UK summarises the impact of COVID-19 on UK industry and innovation.

Outreach and engagement

[Getting to grips with wildlife research by citizen scientists: What role for regulation?](#)

The Animal Research Nexus covers a perspective study that explores current regulations and questions around how best to regulate citizen science projects in order to ensure that the work is undertaken in an ethical manner.

Digital technologies

[Google reveals Mineral crop-inspecting robots](#)

Google's parent company, Alphabet, has unveiled prototype robots that can inspect individual plants in a field, to help farmers improve crop yields, reports the BBC.

International news

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

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

[The Great Barrier Reef Has Lost Half Its Corals](#)

Researchers in Australia blamed climate change for the loss, which they said could diminish critical habitats for fish and other marine life, reports the New York Times.

[Only two northern white rhinos remain, and they're both female – here's how we could make more](#)

This article in The Conversation addresses conservation efforts focussing on the development of methods to cultivate ovarian follicles in a lab to assist with increasing the northern white rhino population.

[LiDAR maps carbon emissions from Amazon deforestation](#)

Remote light sensing technology has revealed that the fragmentation of the Amazon rainforest contributed one-third of deforestation carbon emissions in the region between 2001 and 2015, according to SciDev.Net.

Opportunities

RSB outreach activities at online science festivals

Families will now be able to take part in some RSB simple hands-on science activities after watching short films of our activities as part of the [GSF 2020: Science on the Sofa](#), online from 9th September - 9th November 2020. The online science festival has a digital programme of hands-on activities, talks, shows and more, to entertain and inspire.

Our hands-on science videos will also be available at [Swansea Science Festival](#) online over the weekend of 24th - 25th October 2020. The online science festival has a digital programme of presentations, talks, interactive workshops and demonstrations, there will be something for everybody to enjoy.

On 21st - 22nd November 2020 RSB will host its own inaugural Online Science Festival with a digital programme of hands-on activities and more. The latest festival updates and details will be posted [online](#) soon.

The Office for Product Safety and Standards Register of Specialists

The Office for Product Safety and Standards (OPSS) is launching a new Register of Specialists to advise on chemical matters across several product safety areas. The Register is a list of pre-approved experts from whom OPSS can commission short pieces of ad hoc scientific work. OPSS is seeking to appoint members to its Register. They continue to need a strong body of experts to provide advice, peer review and appraisal of research questions, proposals, and outputs, and other short pieces of research, across their remit and across the natural analytical sciences. As a member of the Register, your work will contribute directly towards ensuring the safety of consumer products, benefitting UK consumers and the effective, evidence-based regulation of these products.

Closes: 29 October 2020

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

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

[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...

[Conservation: Bridge of hope for world's rarest primate](#)

The BBC reports conservation scientists have recorded the rarest primate in the world using a rope bridge reconnecting trees, with the aim to boost conservation efforts.

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