

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

08 January 2020

This newsletter provides links to published news articles, preserving the original title and summary line. 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

['Silent death': Australia's bushfires push countless species to extinction](#)

Millions of animals have been killed in the fires but the impact on flora and fauna is more grim even than individual deaths

Health and biomedicine

[Tuberculosis vaccine finds an improved route](#)

A widely used vaccine against tuberculosis has now been shown to provide almost complete protection when injected intravenously. This is a striking improvement over vaccination through the typical intradermal route.

[Broadest ever therapeutic HPV vaccine to be tested in clinical trial](#)

Treatment could clear up persistent infections and reduce risk of cervical cancer

['Revolutionary' DNA test can detect thousands of rare diseases in children](#)

Patients in England become the first to be routinely offered the cutting edge treatment.

[Ecotherapy aims to tap into nature to improve your wellbeing](#)

[AI shows promise for breast cancer screening](#)

Could artificial intelligence improve the accuracy of screening for breast cancer? A comparison of the diagnostic performance of expert physicians and computers suggests so, but the clinical implications are as yet uncertain.

['Man on the Moon' moment - the year's big breakthroughs](#)

Food and drink

['Veganuary' could save a million animals in one month, charity says](#)

A University of Oxford researcher has said 350,000 people are expected to take part in the seventh year of the challenge in 2020.

Agriculture and fisheries

[Farmers' £3 billion support confirmed in time for 2020](#)

The Chancellor has today confirmed nearly £3 billion of funding for 2020 to support farmers once the UK leaves the EU.

[Belching in a good way: How livestock could learn from Orkney sheep](#)

[Supporting innovation in farming](#)

Investment towards low-carbon future.

[NI agriculture review 2019: A year dominated by Brexit](#)

Environment and ecology

[The five: missed UK environmental targets](#)

Politicians may flaunt their green credentials but a number of key targets – on air quality, tree planting, waste – are being missed

[Climate change: Wales' salmon population 'at risk'](#)

[A warm welcome? The wildlife visitors warning of climate disaster](#)

Britain's milder weather is attracting exotic guests. While we may celebrate their arrival now it should also alert us to what's ahead

[Record sightings of whales, dolphins and seals in UK, says Wildlife Trusts](#)

Climate and energy

[UK satellites to help lead the fight against climate change](#)

A new satellite data centre will use cutting-edge satellite technology to help combat climate change.

[UK weather: Climate crisis to blame for record-breaking temperatures in 2019](#)

The Met Office warns the warming trend will continue through the 21st century - and predicts more records to be broken.

Waste

[Britons reach Africans' annual carbon emissions in just two weeks](#)

Research for Oxfam shows inequality between footprints of people in UK and in countries including Rwanda, Ethiopia and Malawi

[The plastic polluters won 2019 – and we're running out of time to stop them](#)

Further steps have been taken to clean up beaches and seas in 2019 – but much more needs to be done

[Recycle or replant your tree for a greener Christmas](#)

Millions of Christmas trees will be disposed of as the festive period comes to an end.

Animal Research

[Could relatives of measles virus jump from animals to us?](#)

Research funding and higher education policy

[Ministers urged to back, not bash, English northern universities](#)

'MIT of the North' idea seen as ignoring imbalances in research funding that undermine regions

Open access and publication policy

['TripAdvisor for peer review' targets publishing bias](#)

Text scans by artificial intelligence will flag inconsistent or unusual patterns in reviewer behaviour, says Wolverhampton professor

[A toast to the error detectors](#)

Let 2020 be the year in which we value those who ensure that science is self-correcting.

Digital technologies

[Slashing energy could make Nobel prize-winning cryoEM microscopes more affordable](#)

International news

[What is Australia doing to tackle climate change?](#)

[Lethal algae blooms – an ecosystem out of balance](#)

Toxic formations across the US and the Baltic are part of a worrying trend linked to the climate crisis and farming methods

[From red seaweed to climate-smart cows: New Zealand leads the fight against methane](#)

The nation's scientists are racing to find ways to reduce the release of methane from cows and sheep, which accounts for one third of all emissions

[Three tropical diseases targeted in push for new drugs](#)

[Dengue fever: Technique pioneered to tackle disease threatening half the world](#)

Scientists are trying to infect the mosquitoes that spread the virus by injecting them with a bacteria that blocks its dispersal.

Opinion

[Convert half of UK farmland to nature, urges top scientist](#)

New woodlands and wild places are needed to fight climate crisis and improve people's health

[Drink more recycled wastewater](#)

There is no room for squeamishness in the face of the world's growing water shortage — three steps could vastly improve the image of reused water for drinking.

[What's the most urgent action we need to take in 2020?](#)

Declaring a global planetary emergency, improving sub-volcanic imaging to predict eruptions and developing artificial intelligence that works for humans are some of the urgent actions and research that experts in different fields want to see in 2020.

[We are seeing the very worst of our scientific predictions come to pass in these bushfires](#)

As a climate scientist I am wondering if the Earth system has now breached a tipping point

[Our Top 10 Stories of the Decade: Solutions, Surprises, and Rising Stakes](#)

[V-c fears hopes of UK joining Horizon Europe 'drifting away'](#)

Others suggest government position on joining research programme is unchanged, while Cummings' view may balance criticism of EU on research with openness to association

People

[Leslie Baruch Brent obituary](#)

Immunologist whose groundbreaking work helped provide the basis for organ transplantation

Opportunities

[Anniversary Gala Dinner](#)

Join us for the Royal Society of Biology's pinnacle 10 year anniversary event on 3 March 2020 at the Science Museum, London with special guest of honour Sir David Attenborough FRS Hon FRSB. Due to high demand, a limited number of extra tickets for RSB members and non-members will be released at 12:30pm on Wednesday 8 January 2020. A limited number of corporate tables are also available.

[2019 call for expressions of interest to join core membership of BBSRC Strategy Advisory Panels](#)

Closes: 14 January 2020

British Biology Olympiad 2020

The [British Biology Olympiad 2020](#) (31 January - 7 February) for post-16 students is now open for registration. The competition challenges and motivates students with an interest in biology, providing them with an opportunity to demonstrate their knowledge. High scoring students will receive certificates and be invited to an awards ceremony in London. Please contact [Raghav Selvam](#) with any enquiries.

Closes: 24 January 2020

Speak Up for Food Security 2020: Apply now!

Closes: 26 January 2020

Call for nominations for the Queen's New Year Honours 2021

Closes: 6 February 2020

Biology Challenge 2020

The [Biology Challenge 2020](#) (10 - 31 March) for students aged 13 - 15 is now open for registration. The competition stimulates students' curiosity for 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: 28 February 2020

RSB Big Biology Day grant scheme 2020

The Royal Society of Biology's Big Biology Day grant scheme 2020 is now open for applications. The grant is an opportunity to share your passion for biology and the natural world, regardless of scientific background. Engage the general public with an array of hands-on activities, crafts and displays. During our anniversary year, and on through to the end of 2020, we are offering grants of up to £500 each for you to run your own Big Biology Day in your local area.

Closes: 28 February 2020

£500 student & early-career member 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 in connection with biological study, teaching or research.

Closes: 1 March 2020

Events

Celebrating sport and exercise science education to promote lifelong health and the Welsh economy

28 January 2020

National Assembly for Wales, Cardiff

Athena Forum Prizes and Awards workshop

31 March 2020

Newcastle University, Newcastle upon Tyne

And finally...

[Among 412 new species finds this year – the Greta Thunberg beetle](#)

Discoveries by Natural History Museum in 2019 include lichen, snakes and extinct dinosaurs

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