



Nominate a member

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

31 July 2020

Dear readers, the newsletter team will be taking a break for summer, and we will return with the next edition on the 28th of August 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

Extinction: Quarter of UK mammals 'under threat'

The BBC reports that a quarter of native mammals are now at risk of extinction in the UK.

<u>New obesity strategy unveiled as country urged to lose weight to beat coronavirus (COVID-19) and protect the NHS</u>

The Government has announced a new package of measures and 'Better Health' campaign to help people lose weight.

Royal Society of Biology news

Parliamentary Links Day 2020

Parliamentary Links Day brings together politicians and representatives from a range of STEM disciplines. The event could not run in-person and technical issues prevented live broadcast so we are pleased now to present session and presentation recordings of all the discussion on Public Trust in Science, including responses to a number of the pre-submitted and on-the-day questions from the public. A full playlist is now available on the <u>Royal Society of Biology YouTube channel</u>. You can also read our <u>news story</u> for a summary of the event.

COVID-19 Bulletin

For further detail on COVID-19 research, news and updates, RSB has developed a fortnightly 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.

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

Cost of preventing next pandemic "equal to just 2% of Covid-19 economic damage"

The Guardian covers how the cost of preventing further pandemics over the next decade by protecting wildlife and forests would equate to just 2% of the estimated financial damage caused by Covid-19.

Why do asymptomatic COVID-19 cases even happen?

National Geographic examines how health officials are concerned about why some people who test positive for the coronavirus never feel sick.

Lab grown and do-it-yourself: two emerging routes to an artificial pancreas

A 'bio-artificial' pancreas grown in a lab with the aid of placental stem cells, and a DIY insulin-monitoring and release system are being developed to give people with insulin-dependent diabetes an alternative to waiting for a pancreas transplant, reports Horizon.

Agriculture and fisheries

Green light for ground-breaking bovine TB vaccine field trials

A Government press release highlighting that World-leading bovine tuberculosis (bTB) TB cattle vaccination trials are to start in England and Wales.

Among other <u>RSB Consultation responses</u>, you can read <u>the RSB response in 2013</u> to the Environment, Food and Rural Affairs (EFRA) Committee <u>inquiry examining the vaccination of badgers and cattle in relation</u> <u>to Bovine TB</u>. We emphasised that the UK must learn from other outbreaks in cattle (such as foot and mouth disease and bluetongue) and prioritise the development of allowable vaccination as part of the tool box of control measures for bovine tuberculosis, without contravening EU regulations. We are pleased to see aspects of our advice moving forward.

Migratory river fish populations plunge 76% in past 50 years

The Guardian covers a study highlighting how a decline in species such as salmon can harm entire ecosystems and livelihoods.

Forestry

Understanding why trees are dying may be key to locking up carbon

Rising tree deaths may be reducing the ability of many forests worldwide to lock up carbon by pulling in greenhouse gases from the air. To properly grasp what this means for carbon budgets, scientists need to solve the puzzle of why trees are dying – and how they respond to change, says Horizon.

Environment and ecology

Researchers build first AI tool capable of identifying individual birds

The British Ecological Society examines new research demonstrating for the first time that artificial intelligence (AI) can be used to train computers to recognise individual birds, a task humans are unable to do.

Debate needed on the potential culling of generalist predators such as crows and foxes to protect Europe's declining ground-nesting birds

Further studies and debate are needed on the potential culling of generalist predators such as crows and foxes as a means of protecting Europe's ever declining number of ground-nesting birds, suggests new Policy Direction published in the Journal of Applied Ecology.

British birds' long-distance feats and longevity are revealed

The Guardian covers how records, collected by the British Trust for Ornithology, provide insights into the remarkable migrations of birds but also the human and climatic pressures they face.

Water and air

£3 million awarded to help tackle air pollution

UK Research and Innovation has awarded £3 million to support six research networks that will investigate solutions to air pollution.

Size matters in air pollution - but it's not enough

Current regulations on air pollution mainly focus on the mass of particles of a particular size range in a sample, and this has been used as a marker for their threat to human health. But these air quality standards do not address the medical implications of the very smallest particles – nor other attributes that may be damaging, such as their chemical makeup, says Horizon.

Climate and energy

New ECOSOC President outlines focus on pandemic, SDGs and climate action

Now is the time to implement policies and commitments to recover from the COVID-19 pandemic, achieve the Sustainable Development Goals (SDGs), and implement the Paris Agreement on Climate Change, the new President of one of the UN's main bodies has said.

Energy isn't just electricity - the common mistake obscuring the mammoth task of decarbonisation

Writing in the Conversation, George Loumakis, Lecturer in Energy, Glasgow Caledonian University, explores different sources of energy demand and recognises that electricity is only part of the necessary transformation for a cleaner, better tomorrow.

Waste

Plastic rubbish flowing into the seas will nearly triple by 2040 without drastic action

National Geographic explores the Pew report that suggests the amount of plastic rubbish that flows into the oceans every year is expected to nearly triple by 2040 to 29 million metric tons.

River Thames 'severely polluted with plastic'

The River Thames has some of the highest recorded levels of microplastics for any river in the world, reports the BBC.

Animal Research

Hearing restored in rats by modifying ear cells to respond to light

Cochlear implants that restore hearing could be improved by genetically modifying the nerve cells in people's ears so that they respond to light instead of electricity, a study in rats has shown, observes NewScientist.

Night lights cause severe loss of sleep for pigeons and magpies

NewScientist explores how city lights could have a serious impact on the sleep patterns of birds, according to the first study to look at neurological activity in animals thought to be affected by light pollution.

Coronavirus: Cracking the secrets of how bats survive viruses

The BBC describes how scientists have deciphered the genetic blueprints of six of the world's bat species.

Government and Parliament

Principles for science and technology moon-shots

This Government correspondence publishes advice to the Prime Minister on creating an ambitious, goaloriented research and development programme as part of a UK research and innovation strategy.

Exiting the EU

Working towards an immigration system that's serious about science

As the end of the Brexit process approaches, the UK is moving towards having a newly reformed immigration system. With the Government's renewed focus on science and research, the British Society for Immunology Policy and Public Affairs Manager, Matthew Gibbard, discusses what this could mean for immunologists.

Research funding and higher education policy

Science money slashed in EU's €1.8-trillion budget deal

European Union's flagship research programme allocated €81 billion in latest negotiations — substantially less than previously proposed, says Nature News.

Securing a strong outcome for research in the EU-UK future relationship

The Campaign for Science and Engineering (CaSE) has co-signed a statement setting out how the UK and EU can secure an agreement for the UK to participate in Horizon Europe. The RSB CEO Mark Downs was also one of the signatories to the statement.

Lower A-level grades from unconditional offers lead to higher dropout rates, warns regulator

Updated analysis from the Office for Students shows that unconditional offers risk pushing students into decisions that are not in their best interests.

Universities get some SAGE advice on reopening campuses

Higher education features heavily in the latest documents from the government's Scientific Advisory Group for Emergencies. Jim Dickinson, an Associate Editor at Wonkhe, registers the risks.

Open access and publication policy

Publishers: let transgender scholars correct their names

A Nature World View article examining how prohibiting changes to author names on published works can harm vulnerable people.

Interested in publication policy news?

Sign-up via <u>mySociety</u> to our Research Communication Newsletter for monthly policy news with a focus on research communication and dissemination; <u>view the latest issue as a PDF</u>.

Business and industry

PM commits £350 million to fuel green recovery

Prime Minister Boris Johnson announces £350 million is being made available to cut emissions in heavy industry and drive economic recovery from coronavirus.

Diversity and inclusion

Disclosing Disability in the Workplace

Disclosing a disability in the workplace is fraught with difficulty. In this the Scholarly Kitchen post, Bruce Rosenblum Vice President of Content and Workflow Solutions at Atypon Systems, and formerly CEO at Inera, shares his experience.

Female academics 'feel less prepared for professorships'

Study attributes women's feelings of unpreparedness at time of appointment to lack of confidence, says Times Higher Education.

Report highlights inclusivity and diversity challenges in business innovation

A new report, published by Innovate UK, outlines barriers, challenges, opportunities and support needs for minority ethnic groups and disabled people to participate in business innovation.

Ethics

How ethically challenging are challenge trials?

Writing for the Nuffield Council on Bioethics, Katharine Wright explores ethical guidance associated with human challenge studies that could be involved in the development of a COVID-19 vaccine.

Digital technologies

A Possible Weapon Against the Pandemic: Printing Human Tissue

Bioprinting could be used for testing potential treatments for Covid-19, cancer and other diseases, reports the New York Times.

International news

Coronavirus disease (COVID-19) Situation Dashboard

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

Reef sharks are in major decline worldwide

National Geographic describes in the biggest study of its kind, scientists found an absence of sharks that live near coral reefs in 58 countries.

Climate change: Polar bears could be lost by 2100

The BBC describes a study that predicts polar bears will be wiped out by the end of the century unless more is done to tackle climate change.

Scientists disappointed by plan to boost France's research prowess

National strategy will add €26 billion to the public research budget over 10 years — but many say it isn't enough for the country to regain its place as a scientific leader, reports Nature News.

Opinion

Can big countries realistically eliminate COVID-19 without a vaccine? Four experts discuss

Writing in the Conversation, a group of scientists share their views on how the UK should change its COVID-19 strategy to try to eliminate COVID-19.

Our response to COVID-19 will help define the 21st century

Jeremy Farrar, Director at Wellcome, explains the importance of the choices leaders make now and why the true impact of the COVID-19 pandemic will be felt beyond its immediate effects.

Attention to accreditation will drive lifelong learning

Writing for Wonkhe, Jisc's Ruth Drysdale, describes how changes in accreditation and digital delivery could drive a new wave of lifelong learning.

People

Lessons from my first year as a PI

Writing for CrossTalk, Assistant Professor Yejing Ge reflects upon the experience of creating a lab for the first time and becoming a principle investigator.

Rosalind Franklin centenary: 'She would have been totally amazed'

The BBC reports on the commemoration of Scientist Rosalind Franklin 100 years after her birth.

Opportunities

Vacancy: Accreditation Officer

Organisation: Royal Society of Biology Salary: £25,000-£28,000 (dependent on experience) Location: London Hours: Full time (35 hours per week)

The Accreditation Officer will join a small dedicated team, managed by the Associate Director responsible for Accreditation, Training and Professional Registers. The successful candidate will help to ensure that the objectives in the RSB three-year business plan are met, with an emphasis on facilitating accreditation applications, including attending site visits as a Society representative. In addition, there will be a requirement to assist with the administration of Professional Registers and our Training offerings. This role will require a reasonable amount of UK travel, some international travel, and nights away from home. **Closes: 24 August 2020**

RSB Policy Internships

The RSB has one internship position available for current PhD students who are funded by <u>AHRC</u>, <u>BBSRC</u>, <u>EPSRC</u>, <u>ESRC</u>, <u>MRC</u>, and <u>NERC</u>. The successful applicant will spend three months working at the RSB in 2021. Start and end dates can be negotiated as appropriate.

Closes: 10 September 2020

Consultations

Plastic Packaging Tax: policy design

This consultation seeks views on areas of the Plastic Packaging Tax which have been further refined as we move closer to the implementation date of April 2022.

Closes: 20 August 2020

New in-depth inquiry: the future of ageing

Nuffield Council on Bioethics has announced that a new in-depth inquiry on the future of ageing will soon begin. The inquiry will explore the ethical implications of the emerging role of science and technology in helping people live well in old age. Currently, there is an invitation for expressions of interest for this project. **Closes: 1 September 2020**

England Tree Strategy

This consultation will inform a new England Tree Strategy. It will focus on expanding, protecting and improving our woodlands, and how trees and woodlands can connect people to nature, support the economy, combat climate change and recover biodiversity. **Closes: 11 September 2020**

River basin planning: Challenges and Choices

The Environment Agency is holding a consultation to gather views on the challenges our waters face and the choices we all need to make to help tackle those challenges. **Closes: 24 September 2020**

RSB Policy Resource Library now 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 <u>mySociety portal</u> (no registration necessary).

Events

Policy Lates Online: Discovery research in the era of COVID-19

12 August 2020 18:30 - 20:30 BST

This free online event, chaired by Professor Jackie Hunter CBE FBPharmacolS FRSB, will bring together a panel of specialists involved in the funding, infrastructure, delivery and outcomes of discovery research. The

panel will use examples from the pharmaceutical research sector to discuss how discovery research strategies and infrastructure have changed as a result of the COVID-19 pandemic, and what opportunities and challenges this brings for the future in this important area of research. Visit www.rsb.org.uk/DiscoveryResearch for full details and to book your place on this free online event. Direct queries to Harriet McAra at wents@rsb.org.uk or on 020 3295 3445.

Science Policy: Improving the Uptake of Research into UK Policy (Virtual)

24 August - 26 August 2020

Wellcome Genome Campus, UK

The third event in this series will bring policy makers and academic researchers together to help break down these barriers, encourage mutual understanding, and ultimately enable improved evidence-based policy making. It will provide early career researchers (PhD students, post-doctoral fellows and early career faculty) with an introduction to policymaking, show them how to engage with policy makers, either by their research being used to influence policy or by moving into a career in science policy. Registrations will close on 17 August 2020.

BIA-MHRA Regulatory Innovation Conference 2020

17 September 2020

The BioIndustry Association and the Medicines and Healthcare products Regulatory Agency will once again deliver a joint conference in 2020 focusing on innovation in life sciences. Due to the current restrictions with the COVID-19 outbreak in the UK, this will be a virtual event, covering a wide range of crucial topics, as the UK comes to terms with a new 'normal' and the exit from the EU approaches. Listen to MHRA and industry expert speakers, join discussion groups and connect with the wider regulatory community at this pivotal time for medicines regulation in the UK and beyond.

Sanger Seminar Series

The Wellcome Sanger Institute is pleased to launch a new 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 <u>RSB events</u> pages. Postponed events will hopefully run in 2021.

We are aware that a number of events previously advertised in the Science Policy Newsletter have been cancelled owing to the novel coronavirus Covid-19. We recommend also checking other external event webpages for updates and continuing to monitor and follow official advice.

And finally...

Know sweat: scientists solve mystery behind body odour

The Guardian covers how University of York researchers traced the source of underarm aromas to a particular enzyme.

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