

# **COVID-19 Bulletin**

# An RSB communication on the bioscience behind the outbreak and response 4 May 2020

The fourth edition of the RSB COVID-19 bulletin highlights a selection of the bioscience research and news of the last fortnight. It cannot be comprehensive and gives just a glimpse of the huge worldwide effort to understand SARS-CoV-2 and its effects.

We can all contribute to the response to COVID-19 by engaging with sound science, countering misinformation and increasing awareness. We hope this bulletin is helpful in this.

Views or opinions presented are those of the original author(s) and do not necessarily represent the views of the Royal Society of Biology; medical and government advice should be consulted regarding personal wellbeing decisions.

For further information and to get in touch, contact our policy team via: policy@rsb.org.uk.

To read previous editions and directly sign-up to future editions of this bulletin, please visit this page.

#### This bulletin is divided into six main sections:

- 1. RSB news: including key current updates from the RSB.
- **2. Research updates and expert opinion**: relevant research news and outputs under topic headings.
- 3. How else can the bioscience community help? Resource and expertise calls.
- **4. Positive community news**: community impact aiding the pandemic response.
- **5. Other regularly updated information sources**: useful online information hubs.
- **6. A note on personal and community wellbeing**: articles on mental health and wellbeing during self-isolation and social distancing.

## **RSB** news

#### 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.

#### **Education during COVID-19**

Our education policy team is working with government, awarding bodies and policy partners to provide advice and support to teachers, parents and students. These pages will be updated regularly over the coming weeks.

See the latest updates in *The Biologist*'s COVID Q&A series looking at how the bioscience community has sprung into action to help understand, track, and treat COVID-19.

Most recent post: Why an oral vaccine could be key to fighting COVID-19

Dr Elliot Bland is developing a potential vaccine stable enough to post out to millions of citizens as a capsule, rather than one requiring healthcare professionals and needles.

Also see interviews with Sir Paul Nurse, Professor Paul Freemont and others here and contact tom.ireland@rsb.org.uk if you would like to be featured or have any information to contribute to this series.

For more current news, commentary and updates, visit the RSB on Twitter, LinkedIn, The Biologist, and read our latest edition of the weekly Science Policy Newsletter.

# Research updates and expert opinion

SARS-CoV-2 is a virus in the zoonotic coronavirus family. This novel virus, discovered in 2019, was previously unidentified in humans and causes the disease COVID-19, which has reached pandemic levels in the global human population.

#### Scientific Advisory Group for Emergencies (SAGE): Coronavirus (COVID-19) response

The Scientific Advisory Group for Emergencies (SAGE) provides scientific and technical advice to support government decision makers during emergencies. Here you can find a range of its statements and supporting evidence. The page is updated on a regular basis with the latest available evidence provided to SAGE.

#### **UK Parliament POST: Covid-19**

The Parliamentary Office of Science and Technology (POST) has produced a series of 'rapid response' articles on topics including potential COVID-19 vaccines and school closures.

Pick of the coronavirus papers: Young children are not immune to COVID-19 *Nature* wades through the literature on COVID-19 so you don't have to.

#### SARS-CoV-2 virus characteristics

How Coronavirus Mutates and Spreads What the SARS-CoV-2 genome can tell us.

# **COVID-19 pathophysiology**

## Study of more than 16,700 COVID-19 patients identifies characteristics of severe disease

To answer many urgent questions about the characteristics of people who are most severely affected by the virus and what happens to them in hospital, a study – called 'ISARIC4C' – has analysed data obtained from 16,749 COVID-19 hospital patients in the UK. The study is led by researchers from the University of Edinburgh, University of Liverpool, and Imperial College London, and was funded by UKRI as part of the UKRI/DHSC/NIHR COVID-19 rapid research response.

One in five people globally could be at increased risk of severe COVID-19 disease through underlying health conditions

Researchers call for urgent further work to quantify and analyse the associated risks.

#### COVID-19 immunology review: What we know and priorities for research

The British Society for Immunology and The Academy of Medical Sciences have joined forces to publish a new expert summary, which rapidly reviews current COVID-19 immunology research and identifies urgent research priorities.

# Epidemiology and public health response

#### Two new waves of deaths are about to break over the NHS, new analysis warns

Radical solutions will need to be found if the health service is to avoid formal rationing.

#### UK's COVID-19 death toll is far higher than daily figure, data suggests

LONDON (Reuters) - The true extent of Britain's COVID-19 death toll was more than 40% higher than the government's daily figures indicated as of April 10, according to data that put the country on track to become among the worst-hit in Europe.

#### Coronavirus: State surveillance 'a price worth paying'

A major increase in state surveillance is a "price worth paying" to beat Covid-19, a UK think tank says.

#### Statement: COVID-19 and the basics of democratic governance

The UK Government's communication with the public has been admirably clear and simple: stay home. But it has been one-dimensional and one directional, whilst the challenges presented by COVID-19 are multiple, and they are far from simple.

#### Patterns of common coronavirus infections could aid understanding of COVID-19

Coronavirus infections are a common cause of mild colds, infecting thousands of people every year in the UK. They mostly circulate in the winter in temperate regions where they are often referred to as 'seasonal coronaviruses'. However, in contrast to many other infectious diseases, not much is known about how often, and in whom, these viruses cause illnesses requiring medical attention. Data describing their patterns of infection are lacking because they are often not tested for.

#### A population-based study of the early spread of the new coronavirus in Iceland

Scientists at deCODE genetics and Iceland's Directorate of Health and the National University Hospital has published a population-based study of the early spread of the SARS-Cov-2 virus, causing COVID-19 disease, in Iceland.

#### To make better COVID-19 decisions we need better COVID-19 statistics

By: Neil Pearce, Professor of Epidemiology and Biostatistics at LSHTM, and Jan Vandenbroucke, Honorary Professor of Clinical Epidemiology at LSHTM.

#### Peak in COVID-19 deaths occurring in English hospitals passed on 8 April

Focusing on more meaningful trends could encourage public and support future response strategies.

#### Whose coronavirus strategy worked best? Scientists hunt most effective policies

Researchers sift through data to compare nations' vastly different containment measures.

#### Germany's Covid-19 expert: 'For many, I'm the evil guy crippling the economy'

Germany's leading coronavirus expert Christian Drosten on Merkel's leadership, the UK response and the 'prevention paradox'.

# Strategies combining self-isolation, moderate physical distancing and shielding likely most effective COVID-19 response for African countries

'Green Zones' developed and led by community leaders could be key.

Coronavirus: There's a better way of judging countries on their COVID-19 response, says expert Comparing overall deaths with past years is a better way of judging how well a country managed its COVID-19 crisis, it's been claimed. Professor David Leon said assessing nations on daily COVID-19 hospital fatalities did not take into account deaths from the disease in the community, such as retirement homes.

#### Lockdown rollback checklist

As countries begin to roll back 'lockdown' measures, how and when do we know it is safe to do so? The Oxford COVID-19 Government Response Tracker (OxCGRT) provides a cross-national overview of which countries meet four of the World Health Organisation's (WHO) six recommendations for relaxing physical distancing measures. While the OxCGRT data cannot fully say how ready countries are to leave lockdown, it does provide for a rough comparison across nations. Even this 'high level' view reveals that few countries are close to meeting the WHO criteria for rolling back lockdown measures. At the time of writing, only a handful of countries are doing well at the four 'checklist' criteria OxCGRT is able to track. This research note provides supplementary information and analysis to the Oxford COVID-19 Government Response Tracker and its related working paper.

# Testing and ongoing surveillance

#### Coronapod: The race to expand antibody testing

The role of antibody tests in controlling the pandemic, how public-health spending could curtail an economic crisis, and the efforts of the open hardware community.

#### Australian researchers trace sewage for early warning COVID-19 spread

Australian researchers have achieved the first step in developing an early warning surveillance system to track COVID-19 prevalence in the community through tracing the presence of the novel coronavirus gene in raw sewage.

# **Prophylaxis and treatment**

#### Special Report: As virus advances, doctors rethink rush to ventilate

Mechanical ventilators are crucial for saving the lives of some people with COVID-19 - but physicians are increasingly becoming more hesitant to use them too often.

#### Preliminary results of Covid-19 drug treatment trial found to improve recovery

An international clinical trial, co-led by UKRI's Medical Research Council and UCL, which is testing the effectiveness of the drug remdesivir on patients hospitalised with Covid-19, has shown "very promising" preliminary results.

#### Hopes rise for coronavirus drug remdesivir

Despite conflicting studies, results from largest trial yet show the antiviral speeds up recovery, putting it on track to become a standard of care in the United States.

#### COVID-19 vaccine begins human trial stage

Researchers at the University of Oxford have begun testing a COVID-19 vaccine in human volunteers this week. The phase I trial was funded by UKRI and NIHR as part of the rapid research response.

# Construction of the UK's New Vaccines Centre Starts Well Ahead of Schedule as Timelines are Fast Tracked Due to Covid-19

Vaccines Manufacturing and Innovation Centre Fast Tracked as Works Progress at Harwell Campus.

#### Developing a vaccine for COVID-19: what can we learn from past outbreaks?

Vaccines are one of our most powerful health tools. Not just for ending the current COVID-19 outbreak, but also for preventing the return of other deadly diseases. Here's some of the lessons we've learned about the development and use of vaccines from past outbreaks.

#### The race for coronavirus vaccines: a graphical guide

Eight ways in which scientists hope to provide immunity to SARS-CoV-2.

#### COVID-19: reminder of risk of serious side effects with chloroquine and hydroxychloroquine

Recent studies have reported serious, in some cases fatal, heart rhythm problems with chloroquine or hydroxychloroquine, particularly when taken at high doses or in combination with the antibiotic azithromycin.

#### Hydroxychloroquine and coronavirus: a guide to the scientific studies so far

The drug – now a partisan wedge issue – has fueled hype and hope, but evidence of its effectiveness remains limited.

#### Brazilian chloroquine study halted after high dose proved lethal for some patients

Concerns grow as the journal Nature raises alarm on serious heart risks associated with Covid-19 patients taking the drugs.

#### Chloroquine hype is derailing the search for coronavirus treatments

With politicians touting the potential benefits of malaria drugs to fight COVID-19, some people are turning away from clinical trials of other therapies.

#### Survivors' burden

What awaits the sickest COVID-19 patients after they leave the hospital?

# How else can the bioscience community help?

## How you can help with COVID-19

An RSB webpage collating routes through which individuals can offer their help to support the national effort to respond to the spread of COVID-19.

#### COVID-19 resources from the community

An RSB webpage with links to the COVID-19 initiatives of our partner bioscience organisations. This page is being updated regularly and if you would like to suggest additional content please send us an email.

#### BIA action and guidance on COVID-19

This site provides key information on the COVID-19 situation for BIA member companies and the life sciences sector. [BIA's] aim is to help businesses during this difficult time and also highlight important work across our sector that is helping to tackle the outbreak.

#### It's OK...Not to be Okay – Let's talk series

The Institute of Animal Technology (IAT) have produced leaflets offering guidance for animal care

staff on technician welfare through the pandemic, and on dealing with the emotional impact of research animal euthanasia.

#### UKRI Guidance for the research and innovation communities

The ongoing situation regarding coronavirus has significantly impacted the research and innovation community. The nature of these impacts is evolving. Wherever we can we are taking quick decisions, identifying new issues as they emerge and providing answers and support wherever possible.

This page contains the latest information for our supported researchers and innovators and is updated on a regular basis.

#### Coronavirus (COVID-19): information for grant applicants and grantholders

This page has information for anyone applying for one of our research grants, or who holds a Wellcome grant.

#### Coronavirus (COVID-19): getting tested

Guidance on coronavirus testing, including who is eligible for a test, how to get tested and the different types of test available.

#### WHO launches Access to COVID-19 Tools Accelerator

The World Health Organization (WHO) has launched its Access to COVID-19 Tools Accelerator, a collaboration to progress the development of coronavirus vaccines and therapeutics.

#### Access to COVID-19 Tools (act) Accelerator

A Global Collaboration to Accelerate the Development, Production and Equitable Access to New COVID-19 diagnostics, therapeutics and vaccines

#### World Economic Forum launches COVID-19 Action Platform to fight coronavirus

The platform is intended to catalyse private-sector support for the global public health response to COVID-19, and to do so at the scale and speed required to protect lives and livelihoods, aiming to find ways to help end the global emergency as soon as possible.

#### NIHR and UKRI launch call for research on COVID-19 and ethnicity

The NIHR and UK Research and Innovation (UKRI) are jointly calling for research proposals to investigate emerging evidence of an association between ethnicity and COVID-19 incidence and adverse health outcomes. The two organisations are seeking to fund research to further our understanding of potential differences in risk for ethnic groups, which groups are at greatest risk of a range of adverse outcomes, and, based on that understanding, how to reduce morbidity and mortality from COVID-19 in groups identified at greater risk.

#### Impact of Covid-19 disruptions on schools and higher education institutions

An inquiry by the education select committee is open until end of May, considering the implementation of the critical workers policy, fairness of qualification arrangements and progression to next stages of education, and financial implications of closures for Higher Education Institutions. If you plan to submit evidence, please let us know by emailing consultation@rsb.org.uk.

Closes: 31 May 2020

#### UK Science, Research and Technology Capability and Influence in Global Disease Outbreaks

The Science and Technology Committee will inquire formally into the place of UK research, science and technology in the national and global response to the COVID-19 pandemic, and what lessons should be learned for the future. If you plan to submit evidence, please let us know by

emailing consultation@rsb.org.uk.

**Closes: 31 July 2020** 

#### The COVID-19 host genetics initiative

This initiative brings together the human genetics community to generate, share and analyze data to learn the genetic determinants of COVID-19 susceptibility, severity and outcomes. Such discoveries could help to generate hypotheses for drug repurposing, identify individuals at unusually high or low risk, and contribute to global knowledge of the biology of SARS-CoV-2 infection and disease.

#### SARS-CoV-2 diagnostic pipeline

FIND (the Foundation for Innovative New Diagnostics) are collating an overview of all SARS-CoV-2 tests commercially available or in development for the diagnosis of COVID-19.

#### Urgent funding gaps in the global response to coronavirus (COVID-19)

At least \$8 billion of new funding is needed for the global response to coronavirus (COVID-19), according to the Wellcome Trust.

#### COVID-19 Rapid Response Rolling Call

Building on the initial calls of their Initiative, DHSC, through the NIHR, and UKRI are jointly launching a rolling call for proposals for rapid research into COVID-19. As this is a rolling call there is currently no fixed end date to the call, we are open to applications and will aim to review complete proposals within 4 weeks of submission.

#### UN Governance Lab Call for Action: COVID-19 data collaboratives

This website provides a space for the global statistical community to share guidance, actions, tools and best practices during the global COVID-19 crisis.

#### Use of Open Government Data to address COVID-19 Outbreak

Call for evidence: The OECD Secretariat, through the Digital Government and Data Unit, is calling for evidence on the release and use of Open Government Data (OGD) in response to the COVID-19 outbreak. We would like to hear from you about what data are being released and how different actors (such as entrepreneurs, media, researchers, CSOs, and the public sector) are innovating with them to support countries' policies and actions.

#### Global MediXchange for Combating COVID-19 (GMCC)

#### AMRC | Data can save lives in this pandemic, but it must be used responsibly

The vast potential of patient data - There seems no greater reminder of the value of health data than a global pandemic. The rapid spread of Covid-19 worldwide has brought the importance of collecting and linking up data centre-stage.

#### NERC COVID-19 public engagement grant

The Natural Environment Research Council (NERC) is inviting proposals for public engagement with environmental science which understand, address or mitigate the impacts of the COVID-19 outbreak. NERC intends to fund projects costing up to £10,000 each with a total budget of £50,000. Successful projects must be completed by 31 March 2021.

Closes: 13 May 2020 16:00 Hours (BST)

Ask the experts: Coronavirus fake news & medical terminology

#### The Open University STEM

Join OU STEM experts in fake news, infectious diseases, and immunology to ask questions about the coronavirus. We will cover how to spot and report fake news, explain some of the medical jargon being used and answer your questions. You can ask live, or submit a question ahead of time.

#### COVID-19: Emergency funds available to environmental groups

By Jane Cabutti, Environmental Funders Network, 20th April 2020: We know COVID-19 has resulted in many environmental organisations struggling with a significant drop in income due to the closure of visitor centres, pause on events, halting of face-to-face fundraising and the downturn in the economy. Given the magnitude of the social crisis unfolding, it's not surprising that the vast bulk of the emergency funds being made available are focused on social and health issues. We've done our best here to track down those funds that are open to environment-orientated organisations. We will be updating this list regularly.

#### Against pandemic research exceptionalism

The global outbreak of coronavirus disease 2019 (COVID-19) has seen a deluge of clinical studies, with hundreds registered on clinicaltrials.gov. But a palpable sense of urgency and a lingering concern that "in critical situations, large randomized controlled trials are not always feasible or ethical" perpetuate the perception that, when it comes to the rigors of science, crisis situations demand exceptions to high standards for quality.

Contact RSB to discuss bioscience community issues or actions via policy@rsb.org.uk

# Positive community news

# Francis Crick Institute, The British Library and UCLH open drive-through coronavirus testing service

A new drive-through coronavirus swabbing facility for NHS staff has opened in central London at the British Library.

#### National, collaborative platform launched to fast-track potential COVID-19 treatments

COVID-19 treatments could be fast-tracked through a new national clinical trial initiative involving the NIHR and its partners in industry and the government. This platform will accelerate the development of new drugs for patients hospitalised with COVID-19, reducing the time taken to set up clinical studies for new therapies from months to just weeks and helping to ease pressure on the NHS and ultimately save lives. This collaborative platform, known as ACCORD (Accelerating, COVID-19 Research & Development), aims to get an early indication of potential drug treatments' effectiveness in treating coronavirus.

#### These cancer scientists turned their lab into a coronavirus-testing facility

Researchers at London's Francis Crick Institute have repurposed equipment, reagents and software in response to the pandemic.

#### University to support NHS by testing Covid-19 samples

Scientists, laboratory space and equipment from the University of Edinburgh are being used to support NHS Lothian's testing efforts to combat the Covid-19 pandemic.

#### The future of vaccines: three innovations from around the world

World Immunisation Week is an opportunity to celebrate some of the most cutting-edge

vaccination projects and technologies from around the world, which have the potential to improve health for millions of people.

#### LSHTM's COVID-19 modelling research receives Government funding boost

The London School of Hygiene & Tropical Medicine has been awarded £500,000 by the UK government to support its vital work in furthering our understanding of the spread of COVID-19 how it can be controlled.

## Combating the coronavirus with computational modelling

Professors Paolo Carloni and Giulia Rossetti are molecular modelling specialists in Human Brain Project's research areas covering Simulation and Drug Design.

#### Open science takes on the coronavirus pandemic

Data sharing, open-source designs for medical equipment, and hobbyists are all being harnessed to combat COVID-19.

#### ONS looking internationally during COVID-19

The COVID-19 pandemic is a truly global crisis. Emily Poskett and Nikki Shearman explain how the ONS international teams have been working with national statistical offices around the world in order to share lessons in how we are using the power of data to respond to the virus.

# The London School of Hygiene & Tropical Medicine and Stanford University team up on new Fellowship in Planetary Health

New Post-doctoral Fellowship in Planetary Health to support early-career researchers tackling pressing questions in this emerging field.

# Other regularly updated information sources

#### 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 mySociety portal (no login or registration necessary).

#### [NHS] Overview - Coronavirus (COVID-19)

Get the latest NHS information and advice about coronavirus (COVID-19).

#### [GOV.UK] Coronavirus (COVID-19): What you need to do

UK Government advice on the pandemic.

#### [Public Health England, PHE] Coronavirus (COVID-19) resource centre

PHE campaigns related to COVID-19.

[BBC] Coronavirus pandemic: Tracking the global outbreak

#### [WHO] Coronavirus information page

Overview, prevention and symptoms of COVID-19.

#### [WHO] Coronavirus disease (COVID-2019) situation reports

WHO reports on the COVID-19 situation.

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

#### [WHO] Coronavirus disease (COVID-19) advice for the public: Myth busters

A collection of advice for the public.

#### Coronavirus COVID-19 Global Cases by Johns Hopkins CSSE

COVID-19 case dashboard.

#### Science Media Centre Covid -19 output page

Expert commentary on COVID-19 related issues.

# [World Organisation for Animal Health, OIE] questions and answers on the 2019 Coronavirus Disease (COVID-19)

Questions and answers on COVID-19.

#### **OECD** Country policy tracker

What are countries doing to contain the spread of the coronavirus? How are countries helping people, small businesses and the economy to weather the crisis and beyond? This Country Policy Tracker helps you to navigate the global response.

#### United Nations Coronavirus global health emergency information page

A collection of UN news stories and information related to COVID-19.

#### United Nations Department of Economic and Social Affairs Statistics • COVID-19 response

This website provides a space for the global statistical community to share guidance, actions, tools and best practices to ensure the operational continuity of data programmes by National Statistical Offices, and to address issues of open and timely access to critical data needed by governments and all sectors of society to respond to the global COVID-19 crisis.

# European Centre for Disease Prevention and Control (ECDC) Q & A on COVID-19

Questions and answers on COVID-19.

#### **UKRI** Coronavirus Hub

The UKRI Coronavirus Hub gives you the latest information on the vital work of UKRI and our community in response to the crisis, what grants and awards we have made, and our continuing call to fund your ideas to limit the outbreak and protect life.

#### UKRI Coronavirus: the science explained

Coronavirus: the science explained lays out the evidence and the facts about the virus, the disease, the epidemic, and its control.

#### LitCovid

LitCovid is a curated literature hub for tracking up-to-date scientific information about the 2019 novel Coronavirus.

#### Oxford COVID-19 Government Response Tracker

Governments are taking a wide range of measures in response to the COVID-19 outbreak. The Oxford COVID-19 Government Response Tracker (OxCGRT) aims to track and compare government responses to the coronavirus outbreak worldwide rigorously and consistently.

#### Office for National Statistics - Coronavirus (COVID-19) roundup

Catch up on the latest data and analysis related to the coronavirus (COVID-19) pandemic and its

impact on our economy and society.

# US Institute for Health Metrics and Evaluation COVID-19 projections

COVID-19 dashboard.

## COVID-19 #CoronaVirus Infographic Datapack

Infographics describing different aspects of the pandemic.

#### Full Fact: Get the facts on the new coronavirus

#### MRC Centre for Global Infectious Disease Analysis

Since the emergence of the new coronavirus (COVID-19) in December 2019, the Centre have adopted a policy of immediately sharing research findings on the developing pandemic. These pages provide all output from the Imperial College COVID-19 Response Team, including publicly published online reports, planning tools, scientific resources, publications and video updates.

#### The Lancet COVID-19 resource centre

To assist health workers and researchers working under challenging conditions to bring this outbreak to a close, The Lancet has created a Coronavirus Resource Centre. This resource brings together new 2019 novel coronavirus disease (COVID-19) content from across The Lancet journals as it is published. All of our COVID-19 content is free to access.

#### London School of Hygiene and Tropical Medicine COVID-19 information page

There cannot be any complacency in the global response to the coronavirus pandemic (COVID-19). LSHTM experts are involved in many different aspects of research as well as providing guidance to those responding around the globe every day.

#### **LSHTM Viral Podcast**

A global health podcast focusing on the science behind outbreaks and how we respond to them. Brought to you from the London School of Hygiene & Tropical Medicine.

#### Roger Highfield's Blog on COVID-19

Roger Highfield is the Science Director at the Science Museum Group, a member of the UK's Medical Research Council and a visiting professor at the Dunn School, University of Oxford, and Department of Chemistry, UCL. He studied Chemistry at the University of Oxford and was the first person to bounce a neutron off a soap bubble. Roger was the Science Editor of The Daily Telegraph for two decades, and the Editor of New Scientist between 2008 and 2011. He has written or co-authored eight popular science books, and had thousands of articles published in newspapers and magazines.

#### CSaP Science, Policy and Pandemics Podcast

Science, Policy & Pandemics - is produced in partnership with Cambridge Infectious Diseases and the Cambridge Immunology Network and focuses on sharing the evidence and expertise policymakers need to know as they respond to covid-19.

#### COVID-19 activity across Edinburgh Infectious Diseases group

News stories and other information about the efforts in Edinburgh to tackle the COVID-19 pandemic.

#### Usher Institute COVID-19 webinars

In these unprecedented times we need to rapidly learn about the emerging evidence on COVID-19. This evidence includes not only what is being gathered, analysed and reported by researchers but also evidence relating to the approaches different countries and inter-governmental organisations have taken to respond to the pandemic.

#### University of Glasgow CVR Research Response to COVID-19

As a national centre of virology research, with world-leading expertise and state-of-the-art facilities, the MRC-University of Glasgow Centre for Virus Research (CVR) has a crucial role to play in combatting the coronavirus outbreak.

#### COVID-19 research at UCL

UCL experts are taking a prominent role in advancing public knowledge about COVID-19 by advising world leaders, providing expert comment in the media and urgently researching new ways of tackling the virus.

#### KCL Policy Institute Coronavirus analysis series

A series of analyses focusing on COVID-19 issues.

#### Medical research charities and COVID-19: AMRC's response and key guidance

This is a live blog which will continue to be updated as further information and guidance becomes available. The impact of the COVID-19 pandemic is being felt across the breadth of our health system and beyond. We know that this is a deeply challenging time for our members, patients and the public. It's a fast-changing situation and the intention of this blog is to keep AMRC members up to date on what's happening across the health and medical research sector, including how we're working to provide support and signposts to key guidance as it's issued.

#### The UK Clinical Virology Network: Journal Watch

A selection of published research papers featuring outputs related to COVID-19.

#### Infection Prevention Society COVID-19 Advice and Guidance

A selection of key sources of advice and guidance relevant to COVID-19.

#### The Microbiology Society collection of free to access research on Coronaviruses

To allow the widest possible distribution of relevant research, the Microbiology Society has brought together articles from across our portfolio and made this content freely available.

#### British Society for Haematology COVID-19 updates

To provide members with both general and haematology specific up-to-date COVID-19 information.

#### [FEMS] Preventing COVID-19 Misinformation: A Guide for Scientists

While facing down the COVID-19 pandemic, we are also facing a pandemic of misinformation surrounding COVID-19. This misinformation could be about the SARS-CoV-2 coronavirus, the COVID-19 disease it causes, or the public health advice given by international organizations and local governments to limit the impact and spread of this disease.

#### British Infection Association COVID-19 updates

A selection of key sources of advice and guidance relevant to COVID-19.

#### The Academy of Medical Sciences Coronavirus information hub

As AMS responds and adapts to the evolving coronavirus pandemic, it continues to support the UK's best medical and health researchers and ensure their voices are included in the important discussions and decision-making ahead.

# [Royal Society] Making all research findings and data relevant to the covid-19 pandemic immediately open access

The Royal Society has signed a Wellcome statement on the subject of research findings and data relevant to the coronavirus (covid-19) outbreak. The Royal Society is one of several signatories to this statement and its collective aim is to ensure that the relevant research and data are shared rapidly and openly in order to inform the worldwide public health response and to help save lives. This special collection comprises some papers likely to be relevant to the outbreak.

#### [NEJM] Coronavirus (Covid-19)

A collection of articles and other resources on the Coronavirus (Covid-19) outbreak, including clinical reports, management guidelines, and commentary.

#### [JAMA] Coronavirus Disease 2019 (COVID-19)

Browse the JAMA Network COVID-19 collection, including Q&A's with NIAID's Anthony Fauci, an interactive map of the outbreak courtesy of The Johns Hopkins Center for Systems Science and Engineering, and past publications on vaccine development, infection control, and public health preparedness.

#### IDSA COVID-19 resource centre

A selection of key sources of research, advice and guidance relevant to COVID-19.

#### [Nature] Coronavirus and COVID-19 updates

The latest news and opinion from Nature on the novel coronavirus and COVID-19.

#### [AAAS Science Magazine] Coronavirus: Research, Commentary, and News

The *Science* journals are striving to provide the best and most timely research, analysis, and news coverage of COVID-19 and the coronavirus that causes it. All content is free to access.

#### **COLife**

This is the official website of COLife, an alliance between six research institutes in life sciences located in the region of Lisbon and Oeiras. In the context of the COVID-19 pandemic, a group of scientists and science communicators, most of which associated with these institutes, came together to build a repository that centralizes scientific content as well as presents a selection of efforts from the scientific community, in which COLife members participate, and shares national and international resources related to COVID-19.

#### Science Council Useful resources

Whether you're a Member, Registrant or applicant of the Science Council – we're here to support you.

#### RCVS Knowledge COVID-19 Resources

This page provides clinical evidence, advice for veterinary professionals and employers, and infection control resources related to COVID-19, from a range of sources.

# A note on personal and community wellbeing

#### We Don't Just Need to Connect - We Need to Reconnect

Rekindling dormant ties can bring unexpected benefits to our lives.

#### Managing mental health remotely: COVID-19 and beyond

Simon Blake, Chief Executive of Mental Health First Aid (MHFA) England, highlights how we can

adapt to managing mental health remotely during the COVID-19 pandemic.



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