

Concerned Scientists' Weekly News Bulletin [July 27, 2020]

NEWS ITEMS AND ARTICLES

The Atlantic: A new solution to climate science's biggest mystery

A new landmark study published in Reviews of Geophysics zeroes out any chance that Earth isn't sensitive to carbon emissions and that we can avoid fewer than 2.3 degrees Celsius (4 degrees Fahrenheit) of warming. But the authors, a team of 25 scientists, have also reduced their estimate of the chance of a major overshoot, with a doubling of CO2 leading to 6 degrees Celsius (about 10 degrees Fahrenheit) or more of global warming.

Thomson Reuters Foundation: <u>Earth's atmosphere more sensitive to CO2 emissions than thought, study</u> <u>finds</u>

Hopes that the rise in average global temperatures by 2100 might be capped below 2.5C can be all but ruled out if greenhouse gas emissions continue at the current rate, new research reassessing the atmosphere's sensitivity to CO2 suggests. The study, under the Geneva-based World Climate Research Program, offers the first clear progress in decades toward narrowing the range of temperature rise caused by doubling of carbon dioxide levels since pre-industrial times.

The New York Times: A climate plan in Texas focuses on minorities. Not everyone likes it

Previous Houston flood control focused on protecting the most valuable property, but new plans intended to prioritize previously neglected disadvantaged neighborhoods that would have the hardest time recovering from hurricanes and flooding. The plan is designed to combat the overlapping effects of racial inequity and climate change.

Science: Critics blast U.S. study finding huge Alaskan mine poses little environmental risk

The U.S. Army Corps of Engineers released a report stating that a planned mine in the Alaskan wilderness would not hurt local ecosystems, allowing the mining company to pursue federal permits to begin construction. The mine could become one of the largest gold and copper mines, but is largely opposed by environmental scientists and organizations. This reverses a 2014 decision in which the EPA blocked the required federal permits.

The New York Times: Covid-19 patients no longer need tests to end isolation

New CDC guidelines allow previously infected citizens to come out of isolation if it has been 10 days since they first became sick and they no longer have symptoms. Previously, two diagnostic tests with negative results were recommended for leaving isolation, but the CDC hopes the new guidelines will ease testing backlogs. Public health experts generally support the guideline, as most mild cases are no longer infectious 10 days after the onset of symptoms.

The Hill: Trump administration establishes \$75 million quantum computing centers

The White House Office of Science and Technology Policy and the National Science Foundation (NSF) announced Tuesday the establishment of three quantum computing centers across the nation (at the University of California Berkeley, the University of Illinois, and the University of Colorado, involving an investment of \$75 million.

The Guardian: Congress approves billions for US national parks in rare bipartisan push

The Great American Outdoors Act is a \$9.5 billion bill designed to boost national, state, and local park maintenance and repairs, as well as acquire new land for conservation. The bill passed with bipartisan support in June, and now requires the president's signature. In March, Trump agreed to back the plan.

The New York Times: E.P.A. proposes airplane emission standards that airlines already meet

A new EPA regulation models legislation from the United Nations that required the International Civil Aviation Organization to have a 4% reduction in fuel consumption in new aircrafts by 2028 compared to 2015 values. An analysis by the International Council for Clean Transportation showed that new aircrafts had met this standard by 2016. Critics of the proposed regulation argue it does not incentivize any development of fuel-efficient technology or emission reductions.

AIP (FYI): Kratsios steps in after Griffin resigns as Pentagon R&D head

The Department of Defense announced that U.S. Chief Technology Officer Michael Kratsios had been appointed acting undersecretary of defense for research and engineering. Kratsios, who has no defense-sector experience, remains a senior official at the White House Office of Science and Technology Policy.

USA Today: Sierra Club confronts its racist, white-supremacist past

The Sierra Club – the nation's oldest conservation organization – is confronting its racist, white supremacist history, which was embodied in the group's famous founder John Muir.

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

In early summit agreements, The European Union allocated \in 81 billion of a \in 1.8 trillion 7-year budget to its upcoming research program called Horizon Europe, which is significantly less than suggested in initial proposals. Only \in 5 billion of a \in 750-billion recovery fund for the pandemic is dedicated to research and innovation, and the European Research Council's budget is likely to be cut.

Reuters: Green energy ratchets up power during coronavirus pandemic

The past three months have shown that renewable energy has become more dependable, sector experts say, accounting for well over half of output in some European countries, while grid operators proved they could successfully manage larger doses of fluctuating energy flows.

Reuters: <u>EU makes world's biggest "green recovery" pledge—but will it hit the mark?</u>

After 90 hours of intense negotiations, European Union leaders reached a recovery deal on Tuesday that included devoting nearly 550 billion euros to green projects over the next seven years, the largest single climate pledge ever made.

REGIONAL NEWS

The Conversation: <u>Random testing in Indiana shows COVID-19 is 6 times deadlier than flu, and 2.8% of the state has been infected</u>

Efforts to slow the virus in Indiana contained it to only 2.8% of the population. By slowing the spread of the virus in the community, Indiana bought some time to determine the best way forward. However, if only 2.8% of the population have been infected with SARS-CoV-2, 97.2% of the population could still get the virus. The risk for a large outbreak that could dwarf the initial wave is still real.

InduStar: As Indiana sees rise in coronavirus cases, governor requires Hoosiers to wear face masks

Gov. Eric Holcomb announced during his weekly coronavirus press briefing that starting Monday everyone over the age of 8 will be required to wear a mask both indoors and outside wherever social distancing is not possible.

OPINION AND ANALYSIS

Science: Ecology and economics of pandemic prevention

We invest relatively little toward preventing deforestation and regulating wildlife trade, despite well-researched plans that demonstrate a high return on their investment in limiting zoonoses. As public funding in response to COVID-19 continues to rise, a data-driven approach suggests that the associated costs of these preventive efforts would be substantially less than the economic and mortality costs of responding to these pathogens once they have emerged.

Inside Higher Ed: The crucial need for public service scientists

It's never been a more important time for colleges to encourage STEM experts to participate in the policy-making arena. As a nation, we don't sufficiently prioritize careers that are at the interface between science and public policy. In the U.S. House of Representatives where, out of 435 members, only three have a Ph.D. in science or mathematics. Of the 100 senators, none do. By contrast, 53 senators and 161 representatives hold law degrees.

The Globe and Mail: This is the most important science lesson of our lives

If our children come out of this pandemic knowing in their bones that science is as much about what we currently don't know, as what we do, it will be the most important science lesson of their lives.

The Conversation: <u>Science elicits hope in Americans–its positive brand doesn't need to be partisan</u> Effective science communication depends on understanding the factors that influence public perceptions of science so that those doing the communicating–such as the research community, health professionals or governmental agencies–can advance greater public understanding of the science or motivate the actions of individuals, groups or society.

UCS: EPA's chance to get science advice right

The Center for Science and Democracy at the Union of Concerned Scientists and several other public interest organizations have formally asked EPA Administrator Wheeler to reopen the nominations process for its advisory committees to solicit nominations of individuals EPA previously deemed ineligible to serve because of their receipt of EPA grant funding, and to reinstate individuals to committees from which they were unjustifiably removed.

Science: Systemic racism persists in the sciences

What is badly needed is a wider range of perspectives. This suggestion may not sit well with scientists who are committed to the belief that theirs is a completely meritocratic field.

Nature: The career cost of COVID-19 to female researchers, and how science should respond

Early data on the effects of the coronavirus pandemic on scientific-publishing output suggest that female researchers, particularly those at early-career stages, are the hardest hit. Submissions to preprint servers rose more quickly for male authors than for female authors as nations adopted social-isolation measures. And female authors have accounted for only one-third of all authors on published COVID-19 papers since January 2020.

The Independent: <u>"Everybody's entitled to their opinion—but not their own facts"</u>: <u>The spread of climate denial on Facebook</u>

While tech giants have taken steps to remove, or label as false, potentially harmful misinformation on the Covid-19 pandemic, there has been a seeming acceptance of those who spread false theories on the climate crisis.

TAKE ACTION

Change.org: Let initial status SEVIS students into the US for online, hybrid, or in-person instruction After an outburst of student activism and the opposition of hundreds of higher education institutions through letters and lawsuits, the policy was rescinded on July 14th during the hearing of a federal lawsuit issued by Harvard University and the Massachusetts Institute of Technology. The day after such victory, ICE released an updated version of the March SEVP FAQs, stating that initial students who have not yet arrived in the U.S. should remain in their home country. This means that international freshmen or transfer students will not be able to begin their studies in the US this upcoming fall.

Our CSIU news bulletin is intended to provide a brief update on recent news, editorials, as well as action items related to science integrity and science policy. Note that editorial pieces and action items are assembled from a variety of sources and organizations; they do not necessarily reflect the opinions or policy priorities of Concerned Scientists @ IU. This week's news bulletin was compiled by ASIU and IU biology major Emma Hand and CSIU member Christoph Irmscher of IU's Department of English. We're looking for volunteers! If you'd like to volunteer—or if you have additional links you'd like to share for future bulletins, send them to Christoph at <u>cirmsche@indiana.edu</u>.

The CSIU Weekly News Bulletin is now available on the web. To view this page online go to <u>https://csiub.org/weekly-news-bulletins</u>. To view archives of past bulletins, see <u>https://csiub.org/bulletin-archives</u>.

To join our listserv, send an email to <u>csiu-l-suscbribe@list.indiana.edu</u>, with the following message in the email body: SUBscribe csiu. To unsubscribe from this list, send an email to <u>csiu-l-</u><u>unsubscribe@indiana.edu</u>. You can leave the subject line and message blank.