

# They have to get the shots. The vaccinations are so important. 77

**U.S. President Donald Trump,** urging that children be immunized against measles. Before he took office, he suggested repeatedly and falsely that vaccines cause autism.

IN BRIEF

Edited by Jeffrey Brainard

**NATIONAL SECURITY** 

## Jason defense advisers get reprieve

he U.S. National Nuclear Security Administration (NNSA) in Washington, D.C., is offering Jason an 8-month lifeline to carry out a dozen planned studies this summer and look for a new government sponsor. The independent scientific advisory group was facing a 30 April expiration of its contract with the Department of Defense, which has supported it to study nuclear weapons and strategy, among other topics, for nearly 60 years. But on 25 April, NNSA, part of the Department of Energy, announced it hopes to award a sole-source contract for Jason to the MITRE Corporation of McLean, Virginia, which manages the current contract. "NNSA and other [federal] agencies have critical national security support studies that Jason is performing or scheduled to perform this year," NNSA explained, "and a gap in coverage ... could be harmful." NNSA said it hoped to use the extension, to run through January 2020, "for market research to determine a long-term strategy for obtaining Jason scientific support services."

### **Brexit prompts grant transfer**

FUNDING | The prospect of Brexit, the United Kingdom's departure from the European Union, has loomed long and large over researchers, but the effects on funding have been speculative-until now. The European Cooperation in Science and Technology Association (COST) in Brussels announced in April that by this week, it would require the 20 grant holders in the United Kingdom to shift financial administration of COST grants, which are designed to stimulate and expand international research networks, to a partner elsewhere in Europe. COST says the change will not affect participation by U.K. scientists but will forestall administrative headaches if Brexit occurs without a deal to smooth the transition. But U.K. grant holders say the policy change is premature, disruptive to research, and in at least one case it has led to a staff

layoff. Other European programs that fund multination collaborations, such as the European Union's Horizon 2020, have not required U.K. leaders to hand over the reins in advance of Brexit.

### **Academy elects many women**

HONORS | The U.S. National Academy of Sciences in Washington, D.C., an elite organization that advises the federal government, elected a record number of women to its ranks on 30 April. The new class of 100 U.S. members includes 40 women. In all, 18%, or 428, of the 2347 U.S. members are women, up from 17% last year. Members are elected by existing members, and membership is a lifetime honor. However, in a separate vote this week, members approved a bylaw amendment allowing the ejection of members for egregious violations of the academy's code of conduct, including sexual harassment. All

academy members will be asked to vote online or by mail on final approval; a simple majority is required.

#### Atlas shows remote coral reefs

MARINE CONSERVATION | Scientists have produced a global atlas of coral reefs with unprecedented breadth and detail, providing a new baseline to track the health of these living structures threatened by climate change. The atlas (https://maps.lof. org/lof) focuses on remote, understudied reefs and maps more than 65,000 square kilometers of them, about 25% of the estimated total area of all reefs worldwide. More than 200 scientists helped collect field data over 10 years, in expeditions to more than 1000 reefs on a research ship owned by the Khaled bin Sultan Living Oceans Foundation in Annapolis. Researchers matched their detailed observations-including types and amounts of coral in square-meter survey plots, supplemented with underwater video-to information from satellite images and fed the data into a computer model. The model, described in the April issue of Coral Reefs, was used to create maps for nearby areas not sampled during the expeditions.

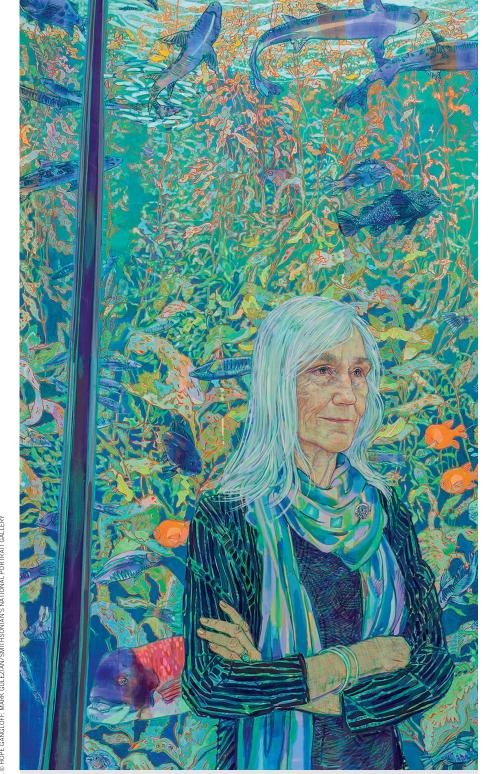
### Interplanetary hygiene rethought

PLANETARY SCIENCE | NASA said last week it will review rules intended to prevent the contamination of Mars and other bodies by terrestrial microbes and the return of potentially harmful ones to Earth. Expert panels have recommended such a review as NASA plans probes to return rock samples from Mars and land on Jupiter's potentially habitable moon Europa. Current rules attempt to balance the risks of contamination with the benefits of exploration and the costs of constructing spacecraft that control microbes. NASA's independent review committee will be led by Alan Stern of the Southwest Research Institute in Boulder, Colorado.

### State to tighten measles rules

PUBLIC HEALTH | Washington's state legislature last month approved a bill ending parents' option to refuse measles

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**GENDER** 

### National gallery honors marine conservationist

n 23 April, the U.S. National Portrait Gallery in Washington, D.C., unveiled a commissioned portrait (above) of Julie Packard, a leading figure in ocean conservation science and the executive director of the Monterey Bay Aquarium in California. Packard joins an exclusive group of 17 female scientists and environmentalists already in the gallery's collection; she is the second female marine conservationist honored there, joining Rachel Carson. The gallery's collection also contains dozens of portraits of male scientists. The gallery will display Packard's portrait through November 2020; three of the other 17 portraits are also on display.

vaccinations for their children for personal or philosophical reasons. Governor Jay Inslee, a contender for the 2020 Democratic presidential nomination, is expected to sign the measure. Washington would become the first state since 2015 to revoke a personal belief exemption; 16 others allow it for vaccines including the measles, mumps, and rubella (MMR) vaccine. Washington will continue to allow medical and religious exemptions to MMR vaccinations. The state requires the vaccinations for children attending schools and day care centers. This week, officials in the state's Clark county declared the end of a measles outbreak there that sickened 73 people, most of them unimmunized children.

#### **Ghost-written reviews abound**

PUBLISHING | Graduate students and postdocs frequently contribute to peer reviews that their principal investigators agreed to complete, which can raise ethical concerns if not reported, according to a first-of-itskind survey described last week on the bioRxiv preprint server. Most of the nearly 500 respondents agreed that contributing when one is not the invited reviewer-which the authors call co-reviewing-can serve as beneficial training; about three-quarters of survey respondents reported having co-reviewed. But ghostwriting reviewsco-reviewing without acknowledgement to journal staff—is a different story: About 80% of survey respondents viewed the practice as unethical, even though half reported having done it. Many journals' policies about the practice are murky. The survey respondents work mostly in the life sciences in North America.

### NIH muzzles sepsis trial critics

CLINICAL TRIALS | The U.S. National Institutes of Health (NIH) has barred two of its researchers from speaking with investigators about the quality of a multicenter clinical trial of sepsis treatments it is funding, The Wall Street Journal (WSJ) reported this week. Charles Natanson and Peter Eichacker had offered expert advice to the Washington, D.C.-based advocacy group Public Citizen. The group in turn criticized the trial, saying it was not testing established medical care alongside its two experimental treatment approaches. The federal Office for Human Research Protections (OHRP) began a review and asked to talk to the pair, but senior NIH officials declined, saying it was the agency's prerogative to choose who could speak for it about the trial, WSJ reported. Both the OHRP investigation and the clinical trial continue.

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#### **GENETICS**

### **Giant tree genomes sequenced, aiding conservation**

cientists have sequenced the gargantuan genomes of the tallest and most massive trees—California's coast redwood (above) and giant sequoia—the researchers announced last week in a news release. The coast redwood genome is the second largest of any species ever sequenced, with 27 billion base pairs of DNA on six sets of chromosomes, making the job especially complex. Researchers hope their feats will help conserve these endangered species. Logging during the past 150 years has slashed 95% of the coast redwood's historic range and about one-third of the sequoia's; conservationists worry the resulting loss of genetic diversity could hamper the trees' ability to adapt to threats from climate change, such as more frequent fires and droughts. Researchers will now work to identify forests with high genetic diversity, which would be candidates for protection.

### **Publishers ink open-access deals**

PUBLISHING | Elsevier, the publishing giant based in Amsterdam, last week cut an open-access package deal with a Norwegian consortium. It allows researchers to publish articles immediately free to read in Elsevier journals and read most of the publisher's paywalled content. The deal includes no price hike over the journal subscriptions previously purchased by the consortium, the Norwegian Directorate for ICT and Joint Services in Higher Education and Research, which represents 46 research institutions. The University of California system and consortia in Germany and Sweden canceled all Elsevier subscriptions because it refused to negotiate similar deals. But the Norwegian deal excludes the highly selective journals Cell and *The Lancet* as well as 400 journals owned by academic associations. In a

similar move, publisher Springer Nature last week announced a deal with Jisc, a consortium of U.K. universities, that allows open-access publishing in the Springer family of journals but not the highly selective Nature journals.

### **China awards quantum prizes**

QUANTUM SCIENCE | The private Micius Quantum Foundation in China last week awarded its inaugural 2 years' worth of Micius Quantum Prizes. The 2018 prizes recognize six leaders in the field of quantum computation, and this year's prizes honor six pioneers in quantum communications. The sole awardee from China, Jian-Wei Pan of the University of Science and Technology of China in Hefei, led the development of an experimental quantum communications satellite. Each winner receives 1 million Chinese yuan, about \$150,000.

#### THREE QS

### Jailed in Sudan, now free

On 11 April, Sudanese geneticist Muntaser Ibrahim was released from prison in his country's capital, Khartoum, following a military coup that day against the country's repressive regime. He had spent 50 days behind bars after he and other academics criticized that regime and called for change. Ibrahim spoke with Science about his experience and Sudan's future. (A longer version of this interview is available at https://scim.ag/lbrahimQA.)

#### Q: Were you always politically active?

A: I was active as a student, but since starting a research job I didn't have the time! But in the last year or so, I decided to take action. Things were dire. But no, I never thought I'd be a prisoner.

#### Q: During your 6 weeks in prison, were you ever given a charge?

A: No, never. I was only interrogated once. I believe my detention was directly related to the fact that more than 700 faculty members of the University of Khartoum signed a proposition for a peaceful transfer of power. ... I was really moved by the extent of international solidary from the scientific community [which called for my release. When I was released,] outside the prison, people were waiting for us. They carried us on their shoulders. It was an amazing experience.

#### Q: What's happening now?

A: The country is still in a standstill. We still don't have a civilian government. The military that took over are dragging their feet a bit. There is no lab work. We, the university staff, are still active in trying to reach a settlement to the political crisis. I'm also busy finishing a book that I've written with Charles Rotimi [of the U.S. National Institutes of Health in Bethesda, Maryland,] about the genetics of African populations. Since my release, I have been longing for my cell and the relaxation! [Laughs] ... I'm very optimistic about this revolution. We are smelling change. It will be good for science. Science needs independent universities, it needs freedom of thought. And scientists, like anybody else, need to take part in these turning points in history. It's our duty.





#### News at a glance

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