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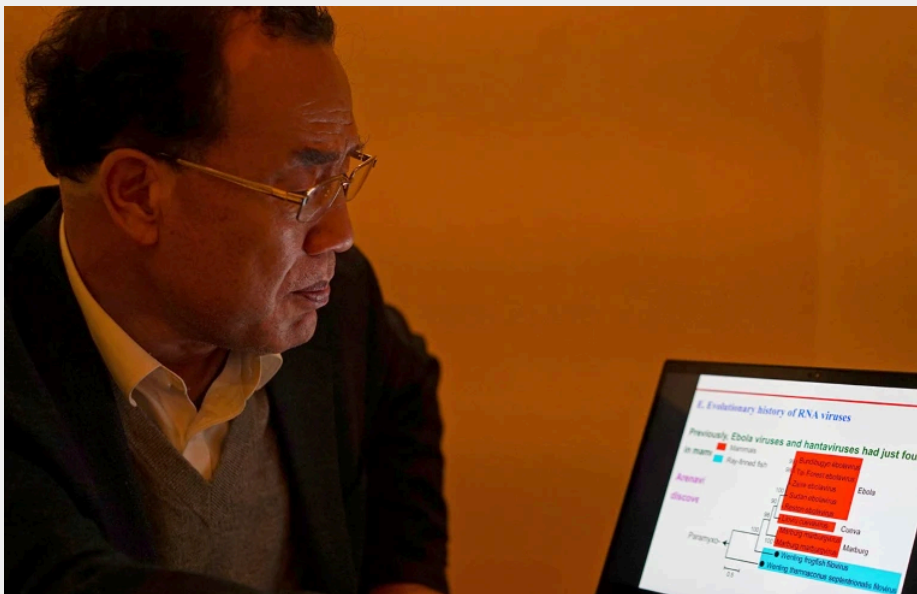
## Daily briefing: What scientists think of Netflix's 3 Body Problem

The scientific adviser of 3 Body Problem, a planetary scientist and a nanotechnology expert review the hit sci-fi show. Plus, why a trailblazing Chinese virologist was sleeping in the street outside his own lab.

By [Flora Graham](#)

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Zhang Yongzhen, the first person to publicly release the genome sequence of the virus that causes COVID-19, was camping outside his laboratory. Credit: Dake Kang/AP via Alamy

### [COVID trailblazer sleeping on the street](#)

Noted Chinese virologist Zhang Yongzhen appears to be back at work following [a dispute that saw him sleeping in the street outside his own lab](#). According to social media posts on Zhang's Weibo account, his group was given two days to relocate to a new lab that lacked sufficient biosafety controls. In 2020, Zhang and long-time collaborator Edward Holmes, a virologist in Australia, were first to publicly release the genome of SARS-CoV-2 – a choice credited as key to the swift development of COVID-19 vaccines. But Zhang's research output has since dwindled, which Holmes blames on an effort to sideline Zhang for unauthorized sharing of data. "It is heartbreaking to watch," he says. "It is unfathomable to me to have a scientist of that calibre sleeping outside his lab."

[Nature | 5 min read](#)

Read more: In 2020, [Zhang featured in Nature's 10 – an annual list of people behind key developments in science](#), when he discussed why he shared the SARS-CoV-2 genome despite a Chinese government order forbidding it.

### [COVID immunity thwarts challenge trials](#)

A 'challenge trial' early in the COVID-19 pandemic that aimed to infect 35 volunteers on purpose to study treatments [ended after none of them got sick](#), a paper detailing the results has revealed. Fourteen of the participants then caught the Omicron strain after being released from quarantine. The strains used in challenge trials are produced under stringent conditions – a process that can take months. This can put them well out-of-date compared to emerging variants that can overcome widespread immunity. "We need a challenge strain that's more representative of what's circulating in the community," says vaccine scientist Anna Durbin.

[Nature](#) | 5 min read

Reference: [Lancet Microbe paper](#)

## **[Top Indian research institute in crisis](#)**

India's leading social-science research institute, [the Centre for Policy Research \(CPR\)](#), [is reeling](#) after a January decision by the government – currently being challenged in court – banned it from taking money from international funders, including the Bill & Melinda Gates Foundation and the UK Foreign, Commonwealth & Development Office. The tax authorities also levied the institution with a 10 crore rupees (US\$1.2 million) bill.

[In an opinion article, former CPR chief executive Yamini Aiyar, who stepped down in March](#), says this is part of a pattern of attacks on institutions conducting independent research. “The documented drop in academic freedom is part of a broader decline in India’s vibrant culture of public debate,” she writes. “At a juncture when critical feedback and effective consultation are required to secure the country’s long-term growth and prosperity... it has now become increasingly common for technocrats in government to seek to discredit researchers and suppress research.”

[Nature news article](#) | 6 min read & [opinion article](#) | 5 min read

## **Features & opinion**

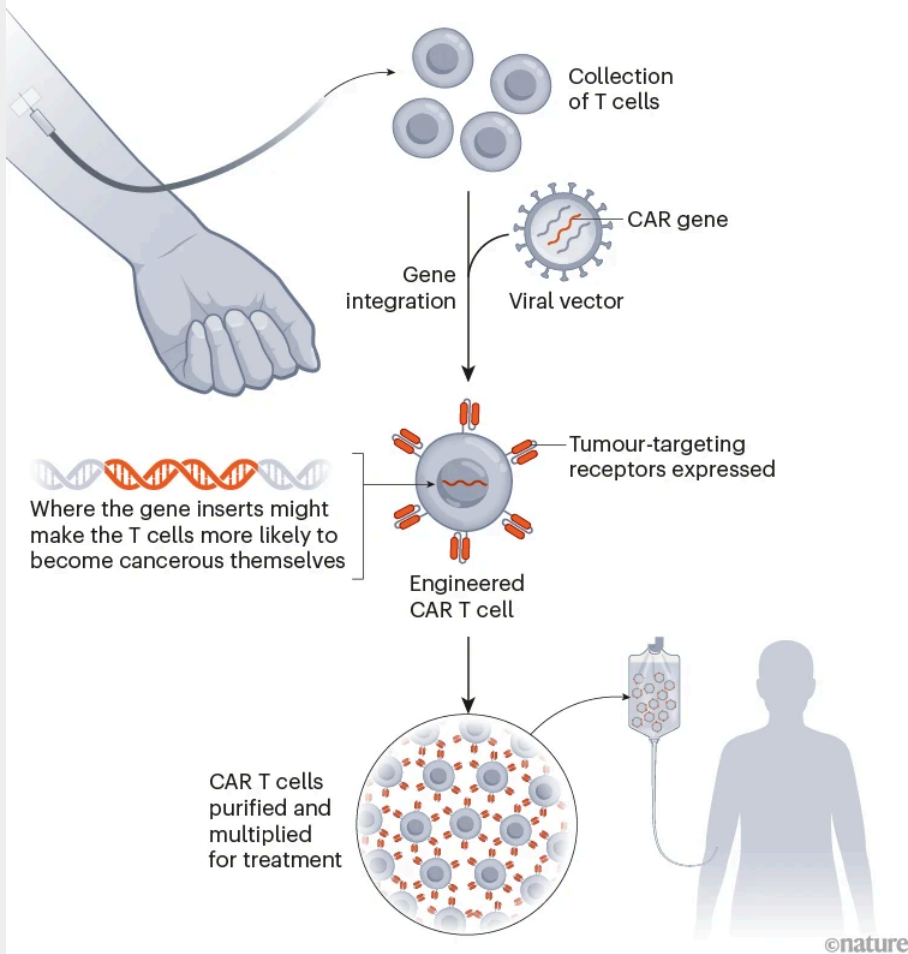
### **[Could CAR-T cancer therapy cause cancer?](#)**

Scientists are racing to find out whether chimeric antigen receptor (CAR) T-cell therapies, one of the most celebrated new cancer treatments in decades, [could be causing new malignancies](#). The US Food and Drug Administration received 33 reports of lymphomas among some 30,000 people who had been treated. It remains unclear how many, if any, of the new cancers came from the CAR T cells or from other therapies the patients had received. “Most cancer therapies can cause cancer. This is one of the paradoxes of our business,” says paediatric oncologist Crystal Mackall.

[Nature](#) | 11 min read

## CAR-T CONCERNS

To prepare a chimeric antigen receptor (CAR) T-cell therapy for an individual, physicians collect and enrich a person's T cells. The cells are taken to a laboratory, where the gene that encodes the CAR is introduced into the genome using a viral vector. This step arms the T cells so they can kill cancer, but has the potential to increase the risk of secondary cancer.



### **The science of 3 Body Problem**

The Netflix series *3 Body Problem* is a hit – but [is the mind-bending tale of a group of alien-battling Oxford physicists good science?](#) *Nature* asked Xavier Dumusque, a planetary scientist who has studied the three-star system Alpha Centauri, Younan Xia, a materials scientist who has worked with cutting-edge nanotechnologies and Matt Kenzie, a particle physicist and the scientific adviser for the show.

[Nature | 7 min read](#)

### **Meet African challenges with African know-how**

Like many regions, Africa faces challenges to infrastructure, institutions and ecosystems. “But the current circumstances also offer an opportunity for African nations,” argues agricultural economist Alfred Bizozo. “Despite – or perhaps because of – its challenges, Africa is already a hub for sustainable innovation.” [He calls for ‘supported independence’ of science and innovation](#) in the continent, with the aim of designing innovations that work for African researchers and African people.

[Nature | 5 min read](#)

### **QUOTE OF THE DAY**

**“The striking paradox is that science tells us both that we’re peripheral in the cosmic scheme of things and that we’re central to the reality we uncover.”**

The mystery of consciousness and the quirks of quantum physics are signs of a blind spot at the heart of science, write astronomer Adam Frank, theoretical physicist Marcelo Gleiser and philosopher Evan Thompson in their new book of the same name. ([Big Think | 6 min read](#) – or read [a review of the book in Science, 5 min read](#))

doi: <https://doi.org/10.1038/d41586-024-01317-9>

A couple of weeks ago, we told you (in a story about [left- and right-handed molecules](#)) that the drug thalidomide showed to tragic effect why it's important to separate molecules' mirror-image forms: one version is a sedative, the other causes congenital disabilities when taken during pregnancy.

While technically true – the different versions do have different effects – Editorial Director of the Physics & Chemistry Nature journals (and former editor of Nature Chemistry) Stuart Cantrill alerted us that the real-world implications have become something of a chemistry urban myth. “In the body, the two forms will interconvert,” notes Cantrill. “So even if you give the ‘safe’ mirror image form it will convert into the version that is not safe (well, you’ll get a 50:50 mixture) and biological studies confirm that it leads to embryonic defects just as if you gave the mixed versions in the first place.” [The persistence of the tale was explored in detail in Nature Chemistry in 2010](#) by chemist Michelle Francé (who blew our minds in January with her revelation that [the secret to a great cup of tea is a pinch of salt](#)).

Thanks for reading,

[Flora Graham, senior editor, Nature Briefing](#)

With contributions by Sara Reardon

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