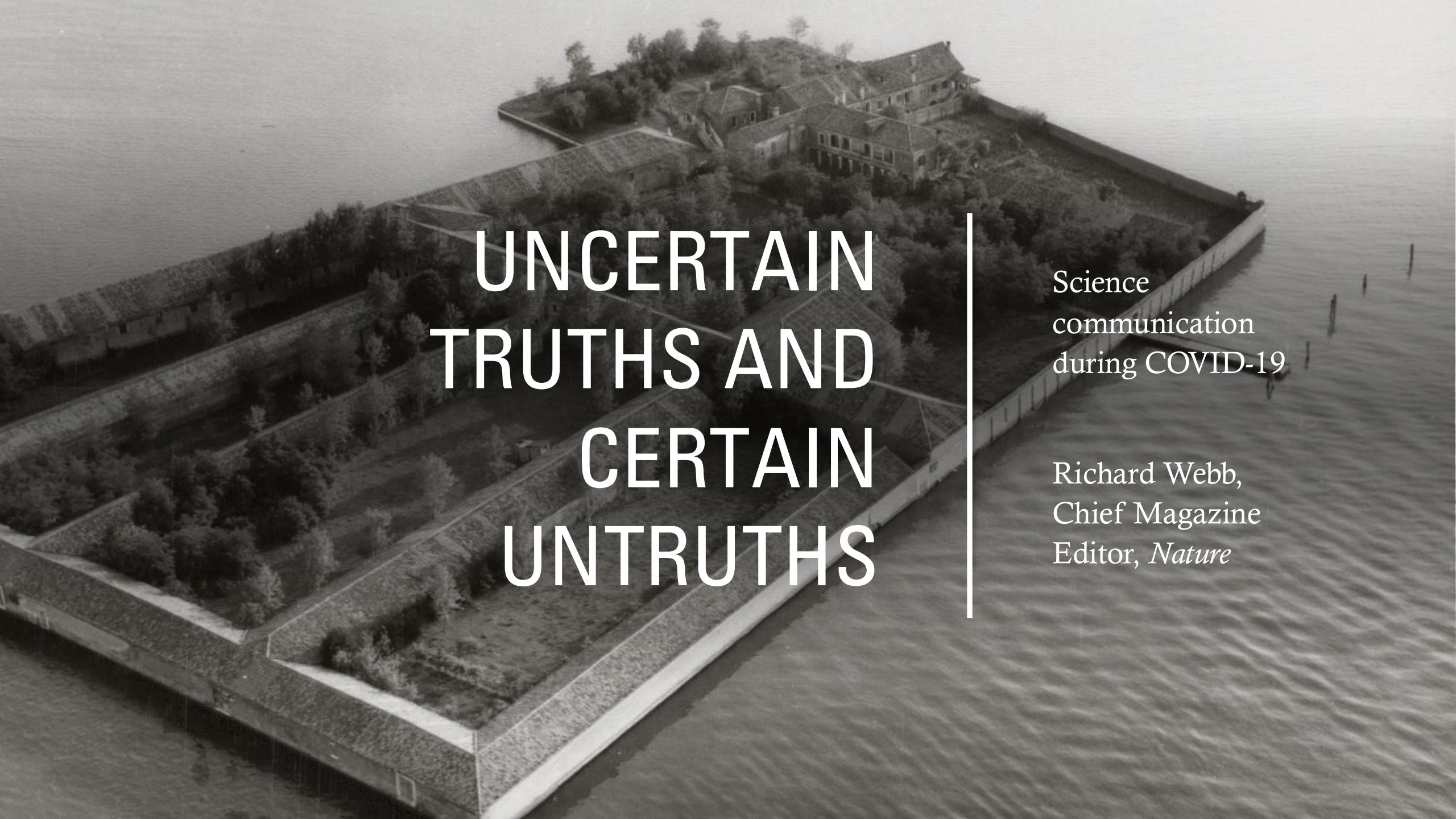


DEMOCRACY AND PANDEMIC



13 — 15.11.25

Fondazione Giorgio Cini, Venezia



UNCERTAIN TRUTHS AND CERTAIN UNTRUTHS

Science
communication
during COVID-19

Richard Webb,
Chief Magazine
Editor, *Nature*

NATURE'S MISSION STATEMENT

“First, to serve scientists through prompt publication of significant advances in any branch of science, and to provide a forum for the reporting and discussion of news and issues concerning science. Second, to ensure that the results of science are rapidly disseminated to the public throughout the world, in a fashion that conveys their significance for knowledge, culture and daily life.”



Nature's magazine division employ around 60 reporters and editors in London, Berlin, Washington DC and Sydney, and operate independently of the journal's research-publishing side.

It is a trusted source of information from research, analysed and interpreted for other researchers, other journalists, policy makers and the general public.

NATURE MAGAZINE AND COVID-19

Act as an honest conduit for trusted information from the research community, for policy makers, communicators and the general public

- Early 2020: full pivot to COVID coverage
- Later in 2020: 50% of coverage, with emphasis on adding value
- Emphasis on communicating results of primary research and the views of researchers
- Depth and authority in reporting hotly contested areas
- Global, data-driven focus

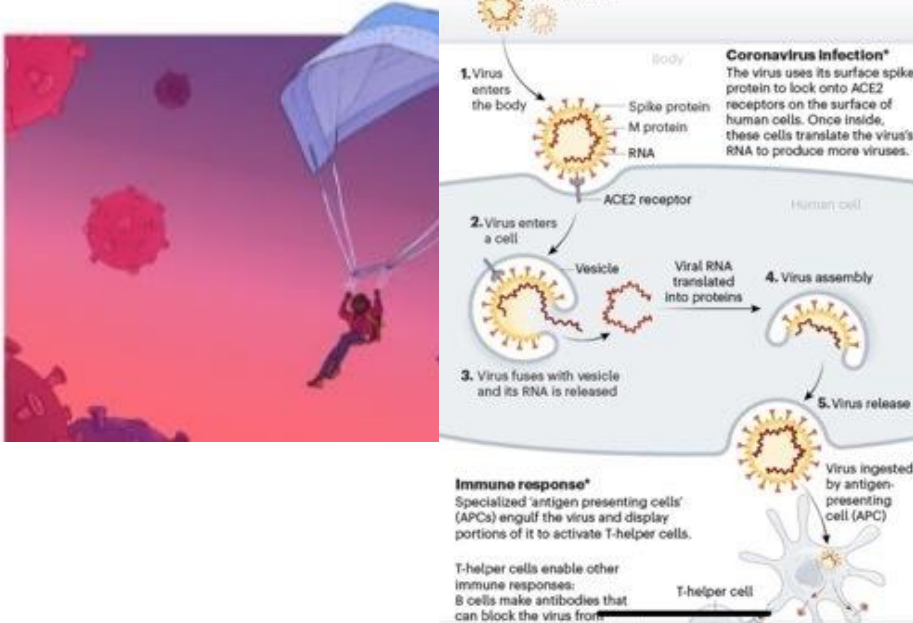
NEWS FEATURE | 24 OCTOBER 2020

Face masks: what the data say

The science supports that face coverings are saving lives during the coronavirus pandemic, and yet the debate trundles on. How much evidence is eno

Spencer Platt

VACCINE BASICS: HOW WE DEVELOP IMMUNITY
The body's adaptive immune system can learn to recognize new, invading pathogens, such as the coronavirus SARS-CoV-2.



Coronavirus Infection*
The virus uses its surface spike protein to lock onto ACE2 receptors on the surface of human cells. Once inside, these cells translate the virus's RNA to produce more viruses.

1. Virus enters the body
2. Virus enters a cell
3. Virus fuses with vesicle and its RNA is released
4. Virus assembly
5. Virus release

Immune response*
Specialized 'antigen presenting cells' (APCs) engulf the virus and display portions of it to activate T-helper cells.

T-helper cells enable other immune responses: B cells make antibodies that can block the virus from

What you need to know about the novel coronavirus

How science can help control the outbreak

By [Dan Fox](#) NEWS FEATURE | 28 April 2020



The race for coronavirus vaccines: a graphical guide

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

By [Ewen Callaway](#)



More content... some beginning... anim...
NATURE BRIEFING | 14 May 2020

Daily briefing: Coronavirus outbreaks in France and Spain show we're nowhere near herd immunity



Coronavirus

Coronavirus infection*

NEWS | 13 May 2021 | Correction [14 May 2021](#)

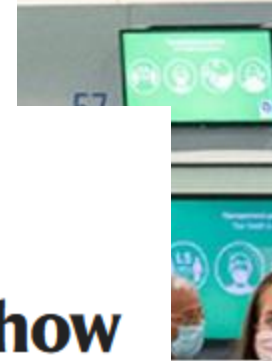
How a worrisome coronavirus variant spread unnoticed

A new variant stealthily took hold on two continents, highlighting the need for global genomic surveillance.

NATURE BRIEFING | 26 June 2020



Daily briefing: Why India's low coronavirus death rate could be misleading



WHERE I WORK | 03 June 2020

Bolstering Africa's coronavirus detection efforts

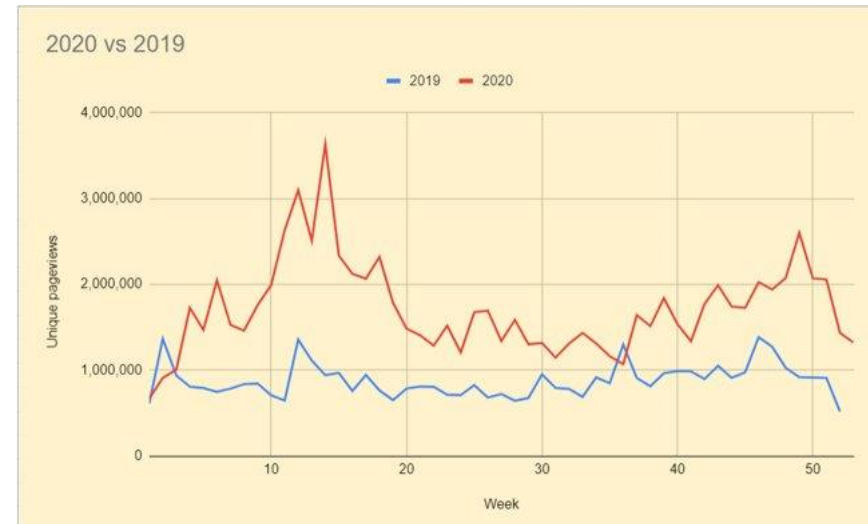
Molecular biologist Christian Happi is working around the clock to get testing available throughout the continent.

By [Abdullahi Tsanni](#)



THE CHALLENGE OF COVID-19 TO SCIENCE COMMUNICATION

- Huge uncertainty
- High stakes
- Fast pace of developments
- Vast quantity of new information
- Competition from misinformation
- A hugely expanded audience for news from research, not all highly scientifically literate
- **Science became politics and politics became science-driven**



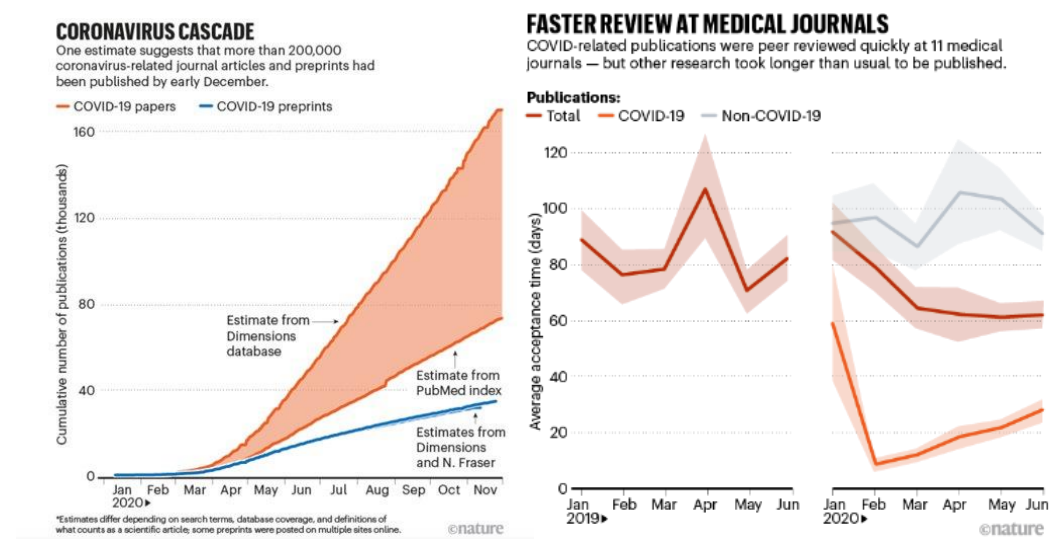
Nature's magazine readership 2020 vs 2019

“[Specialist science journalists] spend as much time telling their news desks what not to cover as they do reporting the science they assess to be worth reporting”

UK Science Media Centre report on COVID-19 coverage

THE CHALLENGE OF COVID-19 TO SCIENCE

- Huge uncertainty, high stakes
- Huge political and public interest
- Loosened guardrails (extensive use of preprints, faster peer review)
- Messy, uncertain science hitting the need for 'clean' political narratives
- Perceived loss of neutrality: blurred lines of scientific and political accountability; science advisers as public faces of governmental decision-making



SOURCE: *Nature* 588, 553 (2020)

UNCERTAIN TRUTHS AND CERTAIN UNTRUTHS

- Answers to key questions – How contagious is this disease? How does it spread? How deadly is it, and to whom? How might it be contained/treated? – were unknown or highly uncertain, and subject to frequent re-interpretation, especially at the beginning of the pandemic
- ‘The science’ was itself of varying quality and in need of careful, objective interpretation
- The boundary between scientific messaging and political messaging was increasingly blurred
- In a noisy situation, misinformation easily became signal, **even without bad actors**

“A lie gets halfway around the world before the truth has a chance to put its pants on”

LOOKING TOWARDS THE NEXT PANDEMIC

The good:

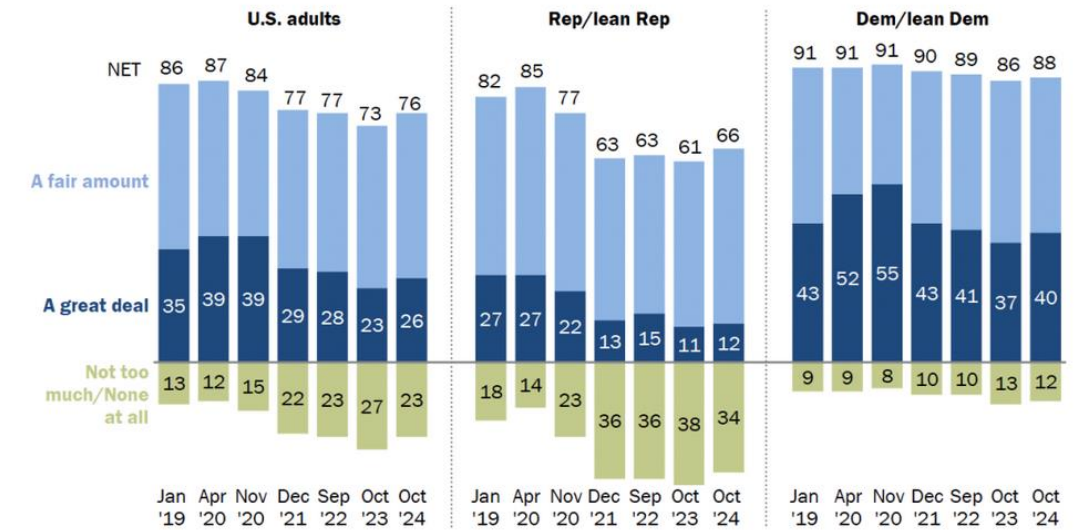
- Broader public interest in science
- Greater awareness of key concepts

The bad:

- Pandemic fatigue
- Political polarization of trust in science
- The misinformation firehose, including in the scientific literature, has got more powerful:
the underappreciated effects of AI

Confidence in scientists remains higher among Democrats than Republicans

% who have ___ of confidence in scientists to act in the best interests of the public



Note: Respondents who did not give an answer are not shown.

Source: Survey of U.S. adults conducted Oct. 21-27, 2024.

"Public Trust in Scientists and Views on Their Role in Policymaking"

SOURCE: PEW RESEARCH CENTER

HOW NEWS OUTLETS CAN RESPOND

- Specialist science and health reporters who can interrogate scientists and the scientific literature are more essential than ever
- As the (social-) media landscape atomizes, outlets must be where their audience is, across platforms and media
- It is not enough to report facts: misinformation must be actively debunked

NEWS EXPLAINER | 22 September 2025 | Update 23 September 2025

Trump links autism and Tylenol: is there any truth to it?

During an announcement on Monday, the US president repeatedly advised people, 'Don't take Tylenol', but scientists say that strong evidence between the medication and autism is lacking.

By [Helen Pearson](#) & [Heidi Ledford](#)

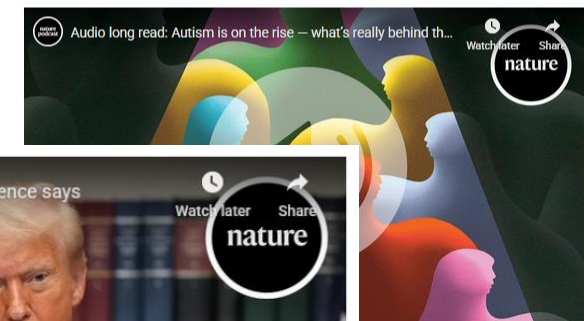


NATURE PODCAST | 26 September 2025

Audio long read: Autism is on the rise – what's really behind the increase?

Claims about what is responsible are ignoring answers from decades of research, scientists say.

By [Helen Pearson](#) & [Benjamin Thompson](#)



WHAT DOES GOOD JOURNALISM DO WHERE SCIENCE BECOMES POLITICS?

- **Show, don't tell.** Stay neutral; don't assume your audience shares your political priors
 - **Challenge as a critical friend.** Provide accountability for why scientists provide the answers (and ask the questions) they do. Don't assume science is politically neutral or free of bias.
 - **Don't ignore broader political and social contexts.** Basic science does not operate in a vacuum. Bring in expertise from public health, economics, social science to attempt to draw broader conclusions.
 - **Avoid false certainty.** Admitting what we don't know is as important as saying what we know. Separate scientific and political narratives.
 - **Remain open to legitimate 'contrarian' voices.** Allow debates to play out in the open rather than pre-selecting narratives
-

HOW THE WIDER ECOSYSTEM CAN RESPOND

(Indebted to the UK Science Media Centre's [post-pandemic recommendations](#))

- Institutions and funders must support outreach, including media training for researchers, and maintain capacity in their communications offices for dealing with media enquiries
 - Scientists should 'stay in their lane' when asked to comment, ruling themselves in and out of particular media interactions based on their expertise
 - The communication of new scientific data should be clearly separated from government communication
 - Public education from school level in identifying misinformation
-



THANK YOU

Richard Webb, Chief
Magazine Editor, *Nature*

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