

Viewpoint: 'Big Ag' caused the coronavirus pandemic? Predatory science journal amplifies baseless COVID-19 conspiracy



With the global pandemic caused by Covid-19, agricultural supply chains around the world have been taxed to ensure consistent and timely deliveries of food. While some producers and product supply chains have struggled to meet the exploding demand, many others have functioned without missing a beat. The ability of the agricultural industry to continue to deliver safe and nutritious foods is a testament to the resilience of those involved all along these supply chain.

Regrettably, there are those who have chosen the height of this global pandemic to spread disinformation about modern agriculture and food production

Consider this recent video, “COVID-19: Global Change, Emerging Viruses”, posted on the website of the open source journal [Frontiers in Public Health](#), making the case that GMOs and modern agriculture are linked, however obscurely, to the Covid-19 public health crisis. The analysis is delivered by Paolo Vineis, an environmental epidemiologist at Imperial College, London. He is the [Field Chief Editor](#) at *Frontiers*, the top scientist on the magazine’s editorial board. He’s also controversial figure, as we will come to understand.

Vineis point? That changes in the way we farm are likely a key cause of the coronavirus pandemic. He claims, without any attribution, that 50% of animal-borne viruses that infect humans are “attribut[able] to modern agricultural practices, perhaps more.”

Vineis’ solution is to control “Big Farming” before we’re overwhelmed by future pandemics. That’s a broad statement, made all the more controversial as he presents no data to support it. He just issues a broadside against “Big Ag”, whatever that means. Two warning bells went off immediately when I came across this video: the professor featured in the post and the journal that carried it.

Frontiers

Frontiers in Public Health was the fifth most-cited publisher among the 20 largest publishers in 2019, so it’s no slouch when it comes to visibility. But visibility and credibility are not the same thing. The journal [claims on its website](#) that it “publishes rigorously peer-reviewed research and is at the forefront of disseminating and communicating scientific knowledge and impactful discoveries to researchers, academics, clinicians, policy makers and the public worldwide”.

While the journal may fashion itself a prominent publisher of rigorous, peer-reviewed scientific evidence, its controversial history suggests otherwise. The reality is that this publication is what is known as a [predatory journal](#). Predatory journals are academic publications with questionable or even fictitious editorial boards; [a peer review process](#) that is spotty or, in some cases, nonexistent; in many cases, there is no copy editing or formatting; and authors pay to publish their research. That description fits *Frontiers* to a T. It has even been labeled a ‘pay to play’ journal, a publication with low standards that fringe academics literally buy their way into.

Consider J. Marvin Henderson, who calls himself an “interdisciplinary scientist,” but dabbles in geophysics. His claim to fame? He believes the government is secretly poisoning everyone by spraying coal fly-ash into the atmosphere—what conspiracy theorists call “chemtrails”. He couldn’t get his crackpot ideas published in mainstream science journals, so in 2016, he turned to a reliable destination publication for fringe academics, the [open access Frontier in Public Health](#).

Within days of publication, the [article came under scrutiny](#) by Jeffrey Beall, a library scientist who has made a career out of exposing “predatory open access publishing”, a term he coined. Who was on Frontier’s ‘distinguished’ peer review panel for this academic gem of a paper? *Frontiers* states that the paper was “edited by Judi Krzyzanowski, Krzyzanowski Consulting, Canada” [Editor’s note: Guest editors are responsible for finding peer reviewers, ensuring articles are submitted in a timely manner and editing the papers for readability and formatting items but do not undertake a rigorous review of an articles methodology, data or results, the way someone peer reviewing the paper would be expected to do.] and “Reviewed by Otto Andersen Stiftinga Vestlandsforskning, Norway [and] Yue-Wern Huang, Missouri University of Science and Technology, USA.”

Beall’s take down of this specific paper palled in comparison to his view of the publishing journal:

I suspect that no honest publisher would have accepted this article. ... Frontiers’ peer review process is flawed. It is stacked in favor of accepting as many papers as possible in order to generate more revenue for the company. Frontiers is included on my list, and I recommend against publishing in its journals, which are rather expensive to publish in anyway.

Embarrassed, Frontiers retracted the paper, but it was too little, too late. As Beall has written about Frontiers, which he listed on his ‘wall of shame’ [website](#), “Beall’s List of Predatory Journals and Publishers (the list has not been updated since 2016):

Frontiers received claims from multiple academics (verified their academic email addresses) about misconduct during the publication process of a substantial amount of Frontiers journals; some of them have not been removed from editorial boards of Frontiers journals despite their requests; authors are receiving emails from Frontiers falsely claiming they accepted a publication request.

Listing Frontiers journals as predatory was [not without controversy](#). However, Frontiers journals have published numerous other notorious articles, [including](#), “a *Frontiers in Psychology* paper suggesting that conspiracy theorists do not believe in climate change and a *Frontiers in Public Health* paper raising questions about the link between HIV and AIDS. Both ignited Internet firestorms on publication.”



Anti-GMO scientist Gilles-Eric S  ralini

Predatory ‘pay-to-play’ journals are magnets for scientists who actively campaign against agricultural biotechnology, most notoriously Gilles-  ric S  ralini. The French scientist is a professor of molecular biology at the University of Caen, focusing on the alleged health risks of GMOs and the herbicide glyphosate. S  ralini’s work has been [thoroughly refuted](#) by independent experts who say he utilizes flawed research methodologies and publishes results that are not supported by his data. His notorious 2012 study was retracted, only to be republished, without peer review, in a pay-for-play journal.

Paolo Vineis

Who is Paolo Vineis? His [website at Imperial College](#), London identifies him as chair of Environmental Epidemiology and a researcher in the “fields of molecular epidemiology and exposomics”. Exposomics is a controversial, largely undefined new discipline that studies the “lifetime sum” of everything a human is exposed to.

A review of his recent publications reveals that he has no established knowledge of agricultural production practices or land use practices—the focus of his alarmist video. Besides his work on the board of *Frontiers*, Vineis was vice-chair of the Ethics Committee at the International Agency for Research on Cancer (IARC) during the time IARC released a monograph listing the weedkiller glyphosate as a probable carcinogen. No, he did not raise any questions about allegations of ethical impropriety when IARC published its glyphosate monograph, now referred to as [‘IARC-gate’](#). Critics have alleged that [IARC excluded](#) evidence from its report that indicated glyphosate wasn’t carcinogenic, and ignored the financial [conflicts of interest](#) of several experts that helped produce the monograph.

What do we make of this?

Simply stated, there are activists (and some activist scientists) who are willing to use the current health crisis to promote ideological agendas and deliberately misinform and scare the public.

There is zero evidence—certainly none provided by *Frontiers* or Vineis—that conventional farming practices and land use are, in any way, correlated to the outbreak of Covid-19. To suggest that human interaction with the wilderness (whatever that means) is somehow responsible for the transmission of viruses between wild species and humans, means that all ‘human interaction’ with nature would need to be globally prohibited to prevent future health crises. No more nature trails, no hiking and no more parks, apparently. To imply that human interactions with nature are responsible for Covid-19 is to engage in the deliberate communication of false and misleading information.

Food safety regulations are in place in many countries to ensure that the food on grocery store shelves is as safe as possible. This is not to say that every food product on grocery shelves is 100% safe, as no food safety system anywhere is capable of this degree of efficacy. One only has to remember the December 2018 recall of romaine lettuce in North American grocery stores to be reminded of this.

As we face the challenges of coping with Covid-19, science has an enhanced responsibility to ensure that information being communicated about this pandemic is as factually accurate as possible. Regrettably, *Frontiers in Public Health* has failed to do so. The insinuation that food production is, in any way, connected to Covid-19 is an abject failure of this responsibility. Conventional agriculture is responsible for ensuring that safe food supplies are reaching highly stressed consumers, which it has been admirably doing during this pandemic.

The story is really about how fringe academics leverage fringe journals to promote crackpot and dangerous ideas—while the public is hoodwinked. Any individual viewing this video would assume that *Frontiers* is a reliable source of factual and peer-reviewed evidence, and therefore this ‘scientist’ is communicating knowledge based on his experience. Neither of these assumptions is true.

Stuart J. Smyth is a professor in the Department of Agricultural and Resource Economics and holds the Industry Funded Research Chair in Agri-Food Innovation at the University of Saskatchewan. Follow him on Twitter [@stuartsmyth66](https://twitter.com/stuartsmyth66)