

Holden Thorp, Editor in Chief, *Science*
cc: Sudip S. Parikh, CEO, *Science*
Valda Vinson, Executive Editor, *Science*
Willie E. May, President of Board, AAAS

On December 1, 2008, a letter addressed to *Science*'s former Editor in Chief Bruce Alberts and AAAS's CEO Alan Leshner presented concerns with "the integrity and veracity" of Drs. Mikula's Popovic and Robert Gallo's paper "Detection, Isolation, and Continuous Production of Cytopathic Retroviruses (HTLV-III) from Patients with AIDS and Pre-AIDS," published in the May 4, 1984 issue of *Science*. In that paper, the authors claim to have isolated a HTLV-III retrovirus as the probable causal agent of AIDS. That letter to *Science*, signed by 37 scientists, physicians, professors and legal experts representing 13 nations, requested the journal to correct the public scientific record and retract the Popovic-Gallo paper due to the National Cancer Institute's flawed research, falsified conclusions and probable misconduct. The letter outlined all the discrepancies in the paper and that the history of later investigations have shown to have been fraudulent. The original December 1, 2008 letter to *Science*'s editor and CEO accompanies this correspondence.

According to our records and knowledge, *Science* executives showed no courtesy of a professional response to the letter's request. For the reason that the Popovic-Gallo paper, as well as the three subsequent *Science* papers that rely upon the lead paper's conclusions, needs to be reevaluated in the context of the later investigations and legal proceedings that put the paper into serious doubt, we want to re-open the prospects to have the Gallo paper withdrawn.

Dr. Gallo's claim that his HTLV-III virus was derived from an American AIDS patient, and not from a virus sample received by Pasteur Institute scientists, was patently false. Later investigations found the French and National Cancer Institute's viral samples to have been identical. Eleven days prior to *Science*'s publication of the Popovic-Gallo paper, Dr. Margaret Heckler, then Secretary of Department of Health and Human Services, announced at an international press conference that a retrovirus had been discovered in Dr. Gallo's Tumor Cell Biology Laboratory that was the "probable" cause of AIDS. However, as the New York Times later reported to the world, Dr. Luc Montagnier's laboratory at Pasteur Institute had found the virus a year before the American team.[1] Today we know with absolute certainty that, based upon the original draft of the paper, its published claim that an HTLV-related virus "might be an etiologic agent of AIDS" is untrue. Nor did Dr. Heckler's premature announcement provide a crucial opportunity for independent researchers to evaluate Dr. Gallo's claims.

It wasn't until 1991, and in the lead up to another French lawsuit, that Dr. Gallo would finally admit publicly in a letter to *Nature* that the virus he claimed to identify was sent to him from the Pasteur Institute. His efforts to stick with the American AIDS patient myth collapsed; in a later letter published in *Nature*, Dr. Gallo conceded

that his laboratory's analytical methods used to identify the HTLV-III virus reported in *Science* were inaccurate.[2]

The legal suit filed by the Pasteur Institute against the American team led by Dr. Gallo in 1985 occurred against the backdrop of heightened medical competition and a public health emergency to identify the cause of AIDS. That first suit accused Dr. Gallo of misappropriation of intellectual property, alleging Dr. Gallo used viral samples provided by Pasteur and failed to give credit to the French researchers. The suit also charged Dr. Gallo with misconduct by suppressing laboratory data and unethical practices by failing to report the research results. He was also accused of misrepresenting the significance of the evidence to support the *Science* paper's conclusion that HTLV-III is the probable causative agent of AIDS. In addition, the lawsuit involved patent disputes over the commercial rights to HIV diagnostic tests treatments, such as the development of antiretroviral therapy and integrase inhibitors with private corporations such as GlaxoSmithKline, AbbVie, ViiV Healthcare among others. Subsequent investigations revealed flaws in Dr. Gallo's laboratory's research methodology and concerns over the validity of the findings. That first lawsuit was settled without trial. The Americans and French agreed to split the credit for the virus's discovery and patent royalties. Nevertheless, the settlement failed to enforce a reevaluation of the original paper and left in its wake crucial questions about the scientific integrity of the four *Science* papers and the role of political and institutional pressures in shaping the scientific discourse.

Investigations conducted by *Chicago Tribune* reporter John Crewdson and published in 1989 instigated a new federal review of Dr. Gallo's research led by the Office of Research Integrity (ORI). The ORI confirmed the paper's shortcomings stating it was "fraught with false and erroneous statements" and that the study "reflects irresponsible laboratory management." However, the ORI failed to pursue legal actions, and the charges were dropped following pressure from the HHS. Following the federal investigation, a second legal dispute raised by the French reignited the controversy of the discovery of HIV and its association with AIDS. The specifics of the second lawsuit varied from the original dispute but generally involved similar allegations: scientific misconduct over data manipulation, suppression of evidence and unethical scientific practices, 2) patent disputes over allocation of royalties and licensing agreements for HIV diagnostic tests, treatments and other medical inventions, and 3) credit attribution because both Pasteur Institute and Dr. Gallo sought recognition for their respective contributions to identify the virus.

Finally, during the 1994 Congressional subcommittee hearing convened by Representative John Dingell, a copy of the original draft with Dr. Gallo's handwritten edits, was submitted as evidence of scientific misconduct. The original paper composed by Dr. Popovic stated, "Despite intensive research efforts, the causative agent of AIDS has not yet been identified." The draft document also deleted all references giving credit to the French who first isolated the virus (LAV), and credit to Dr. Adi Gazdau for the cells used to grow out the virus. Perhaps most disturbing,

Dr. Gallo had refused to share his cell line with other scientists desiring to attempt research efforts to replicate his work.

We contend that despite the courts' resolution in the two legal cases, *Science* has yet to retract Gallo's paper. If *Science's* lead editors had received Dr. Popovic's original draft before Dr. Gallo's extensive rewriting and repurposing of the paper's content and claims, would the journal have still published it? Although the paper may still have found its way into print, it would have contributed nothing noteworthy. It was only because of Dr. Gallo's unsubstantiated edits and erroneous claims that the paper became a sensation in the international scientific community. And yet that sensation was founded on falsehoods

There are no longer any uncertainties about the inaccuracy in the Popovic-Gallo *Science* paper and the lack of Dr. Gallo's ethical integrity raised in the lawsuits and federal investigations. Given all the documented evidence that accompanies the references in the original letter sent to Drs. Alberts and Lechner, it is unconscionable that *Science* did not reply to the original petition to withdraw the paper and the three papers that followed. Aside from the 37 signatories to the letter for the paper's withdrawal, there were an additional 2,897 medical physicians and practitioners, scientific researchers, academics and attorneys, including three Nobel Laureates associated with the Group for the Scientific Reappraisal of HIV/AIDS agree with this evaluation of Dr. Gallo and his laboratory's faulty research and misconduct.[3]

We the signers of this letter exhort your journal to take the moral stance to correct the scientific record and have the four papers retracted. If *Science* refuses to undertake a critical reevaluation of Dr. Gallo's research, it will be necessary to reach out to Congressional legislators with the request to reopen a new investigation to be conducted by independent scientists unaffiliated with the private companies, *Science* and the federal health agencies.

Respectfully,

Gary Null, PhD

[1] <https://www.nytimes.com/1985/12/14/world/french-sue-us-over-aids-virus-discovery.html>

[2] <https://www.chicagotribune.com/1991/05/30/gallo-admits-french-discovered-aids-virus/>

[3] <https://rethinkingaids.com/index.php/signatories>