

Ghostwriting by Monsanto is influencing peer-reviewed scientific journals

 ehn.org/monsanto-science-ghostwriting--2597869694.html

August 22, 2018

Consumers and journalists around the world were stunned earlier this month when Monsanto, after being forced in a court of law for the first time to defend the safety of its popular weed killer Roundup, was found liable for the terminal cancer of California groundskeeper Dewayne Johnson.

The unanimous 12-member jury found that Mr. Johnson's exposure to Monsanto's weedkiller was a "substantial" contributing factor to his disease and that there was "clear and convincing" evidence that Monsanto acted with "malice or oppression" because the risks were evident and Monsanto failed to warn of those known risks.

Aside from dueling expert testimony on both sides, the jury was provided with internal company emails and work plans indicating that Monsanto had been corrupting the scientific record by ghostwriting literature asserting safety.

As the jury's decision sets in, and thousands of additional plaintiffs who have filed similar suits wait for their day in court, it is worth taking time to understand exactly what "ghostwriting" by Monsanto means, how it has influenced, and still is influencing, material found in peer-reviewed scientific journals.

We offer this example:

When the scientific journal *Critical Reviews in Toxicology* (CRT) published a series of papers reviewing the carcinogenic potential of weed-killing agent glyphosate, the main ingredient in Monsanto's Roundup, in September 2016, the findings were so significant that they were widely reported by media outlets around the world.

The papers, published in a special issue of CRT entitled "An Independent Review of the Carcinogenic Potential of Glyphosate," directly contradicted the findings of the World Health Organization's International Agency for Research on Cancer (IARC), which in 2015 found glyphosate to be a probable human carcinogen. The authors of the 2016 review found that the weight of evidence showed the weed killer was unlikely to pose any carcinogenic risk to people.

Related: *Monsanto's ghostwriting and strong-arming threaten sound science—and society*

The findings were critical to Monsanto – the company was facing doubts by European regulators about allowing glyphosate to remain on the market. As well, Monsanto was facing a growing mass of lawsuits claiming its weed killer caused people to develop non-Hodgkin lymphoma.

Sixteen scientists from "four independent panels" signed their names to the published work, declaring to readers that their conclusions were free of Monsanto's intervention. Underscoring the supposed independence of the work, the declaration of interest section stated: "*Neither any Monsanto company employees nor any attorneys reviewed any of the Expert Panel's manuscripts prior to submission to the journal.*"

It has since become evident that these papers were anything but independent. Internal Monsanto documents forced into the public spotlight through litigation show that the papers were conceptualized from the outset as a deceptive strategy for Monsanto. One of Monsanto's top scientists not only reviewed the manuscripts but had a hand in drafting and editing them. The finished papers were aimed directly at discrediting IARC's classification.

In one internal email, Monsanto's chief of regulatory science, William Heydens, told the organizer of the panel: "I have gone through the entire document and indicated what I think should stay, what can go, and in a couple spots I did a little editing."

The internal documents show that Heydens even argued over statements that he wanted included but that author John Acquavella deemed "inflammatory" and "not necessary" criticisms of IARC. Draft documents show Heydens' edits contradicted Acquavella's edits even though Heydens was not supposed to have even reviewed the papers. Heydens went so far as to state: "I would ignore John's comment" and "I don't see a reason for deleting the text that John did below."

Other edits show Heydens attempting to control the tone of the manuscript, stating: "The deleted statement below has nothing to do with IARC criticism and should be put back in, John over-stepped the bounds here" and "I can live with deleting the text below,

assuming that exposure text above ... is added back in." He also argued for putting a deleted phrase back in because it gave "clarity about IARC's approach." "This is not inflammatory, it is descriptive," he wrote.

The importance of the papers to Monsanto as a tool to counter IARC's classification of glyphosate as a probable carcinogen was laid out in a confidential document dated May 11, 2015, naming several of the scientists who could be used as authors to give the papers credibility. The internal documents speak of "ghost-writing" strategies aimed at using non-company scientists as authors to lend credibility to the findings.

When placed under oath in a deposition, Heydens acknowledged that the manuscripts were sent to him and he read "parts of some of them," prior to their submission to the journal. He said he did not "recall" whether or not he made the 28 edits that plaintiffs' attorneys counted in the internal records.

All of this was among the evidence presented to jurors in San Francisco Superior Court as they considered Johnson's claims. But the evidence of ghostwriting and misconduct have far broader implications than one lawsuit.

No action has been taken

How many ghostwritten papers declaring pesticide safety are littering the scientific literature? And given the evidence of misconduct in this instance, why are these papers still in publication? Why has there been no retraction, no clarification, no correction to the obviously deceptive disclosure?

Last August, after the documents gained media attention *CRT* editor Roger McClellan said the "serious accusations" deserved "careful investigation," and he and *CRT* publisher Taylor & Francis would take "appropriate action."

Shortly thereafter the Center for Biological Diversity and three other national environmental-health organizations sent a letter to *CRT* and Taylor & Francis detailing the ethical misconduct and formally asking for a retraction. It's been more than a year since this investigation was begun and, despite multiple follow-up requests by the organizations, no action has been taken.

With Taylor & Francis's own policy being to issue a retraction for misconduct "when there has been an infringement of publishing ethics," the case for retraction couldn't be more clear.

Monsanto's fingerprints are all over this "independent" review, as laid out in Monsanto's own internal documents.

Taylor & Francis must determine the standards to which it is willing to hold scientists who publish in its journals – if not for the reputation of the journals themselves, then for the sake of scientific integrity itself and the public's right to the truth.

Carey Gillam is a journalist and author, and a public interest researcher for US Right to Know, a non-profit food industry research group

Nathan Donley, Ph.D, is a former cancer researcher who now works as senior scientist in the Center for Biological Diversity's environmental health program.