

Georgia's Wayne Parrott: 'Time to end transparency double-standard targeting biotech scientists'

I have long been a firm believer that any public scientist who cannot explain, defend and justify his/her work to the public and to funding agencies has no business receiving those funds or doing that research. This philosophy is underscored by some federal granting agencies that require a commitment to broader impacts by scientists; these can include, among other things, "increased public scientific literacy and public engagement with science and technology"—in other words, science communication and outreach. Yet, when the science encompasses controversial topics, public engagement is more easily said than done.

Scientists communicating about controversial topics have long had to endure numerous personal attacks on their competence, credibility and/or ethics. It is not a job for thin-skinned people. However, the current all-out assault on scientists who seek to explain the science behind GMOs is unprecedented in scope and vitriol. That the anti-GMO sector now attacks scientists personally indicates they have been reduced to attacking the messenger in the absence of evidence that GMOs are unsafe. Attacking the messenger is a time-honored strategy of those who have no evidence and whose arguments to the contrary have failed.

In particular, the US Right to Know (USRTK) organization has elevated harassment of academic scientists to new levels. Its actions and website promote extremes: a person is either anti-GMO or is dishonest. Given its premise that industry is intrinsically evil, USRTK intimates that no academic would defend industry without being on their secret payroll; it is just a matter of finding the smoking gun. USRTK has therefore been using Freedom of Information Act requests to obtain emails released from an ever-expanding network of professors and science communicators.

University of Florida Professor Kevin Folta's emails have been among the first spoils of war recovered by USRTK. It turns out that Kevin received \$25,000 from industry to train others in science communication. To be clear, the funds were accepted by the university on his behalf and covered the expenses of the communications course and the students who attended; they did not go to Folta himself.

Regardless, GMO critics ranging from Tom Philpott of Mother Jones to Nassim Nicholas Taleb of Black Swan fame have been quick to express their holier-than-thou disdain of Folta and accuse him of dishonesty on Twitter for stating that his research was not funded by Monsanto. If Philpott or Taleb understood scientific research, they would know that outreach and research are not the same, and that \$25,000 does not go very far when it comes to research in genomics.

In addition, the attackers have argued that Folta's emails prove that he is 'guilty' of accepting money for his airfare so that he can speak at communications events. It is common practice in academia that a host must cover the travel expenses of an invited speaker. It is not appropriate to use taxpayer dollars to subsidize such expenses, and faculty usually are not provided travel budgets by their own institutions. Unless otherwise stated, it is safe to assume all outreach trips by faculty are covered by the host.

Therefore, first, let there be no mistake: Industry did not and does not give away European vacations. In the case of Folta, industry was covering domestic airfare so that he could communicate about the science behind GMOs. These trips require considerable preparation and consume substantial time and energy to

accomplish. They are exhausting. Academics have very full schedules as is, so taking on the additional task of communicating about issues in their scientific expertise is an added burden to their already exceptionally busy schedules. These trips are tough to justify if not for the good of the cause.

Secondly, the recent *New York Times* [article](#) by Eric Lipton on this controversy implied that scientists will defend any industry if the bid is high enough. I find it insulting, offensive and reprehensible to think that anyone would claim that I, or my colleagues in academia, would sell out for the price of an airfare. A plane ticket to do extra work with no pay is simply not very appealing as a prize. For that matter, I find it equally offensive that anyone would consider we would support any scientific claim, made by industry or anyone else, that was not well-founded in science.

In the final analysis, this NYT article is totally wrong when it says that industry paid scientists to lobby for GMOs. For academics, speaking invitations are a chance to explain and stand up for our life's work, articulate science to the public and to meet outreach commitments. At most, these invitations represent the alignment of similar interests, not selling out to industry.

Thirdly, it is also worth pointing out all academics are not created equal. Besides Folta, the Times reporter discussed Professor Emeritus and former Food Science and Human Nutrition Department Head at the University of Illinois, Bruce Chassy, as well as Washington State University's Charles Benbrook. Like the rest of us, Chassy and Folta became professors the old fashioned way—they earned it by working their way up the ranks by teaching, conducting and publishing scholarly research, and serving the public. In contrast, Benbrook's academic title was only a courtesy that lasted while the monies granted to the university lasted. To treat these individuals as academic equals is misleading.

It is also very clear that this article attempts to create a false equivalency by saying both sides take money from corporations. The NYT should know the difference between a grant and a gift. The former, as the ones awarded to Benbrook, have strings attached; the latter, as awarded to Chassy and Folta, have none.

Fourthly, I assert and confirm my right, and the right of my academic colleagues, to interact with industry. I [work with](#) diverse scientists and collaborators. Anyone who has seen my [publication list](#) (yes, it is public!) will see many industry co-authors. Industry collaborators can be a) awesome scientists and b) wonderful human beings in their own right. Why should they be marginalized simply because their salary does not come directly from taxpayers?

Furthermore, the NYT reporter did not realize that the vast majority of expertise in GMOs comes from industry, not academia. Most of my academic colleagues know the science well enough to know that GMOs are not biological or human health threats. They do not feel it is worth their time to study a problem that does not exist. Studying GMO safety is the academic equivalent of trying to study garden gnomes or sea monsters — it is a good way to destroy a career. Regardless of whether one agrees or disagrees with this prevailing attitude among academicians, it does not change the fact that most of the expertise is in the private sector.

Fifth, having been called 'a serial intervener in academic GMO debates' by an [anti-GMO website](#), I re-affirm the role of academia to counter misinformation and misinterpretations and to generate and deliver correct information. The day the public does not want to hear correct information anymore is the day that they should just shut the universities down. Until then, I assert my duty and that of my colleagues

to correct misinformation in our area of expertise, and to inform policy makers accordingly.

Sixth, it is amazing how Folta's relatively minor "offense" of holding a workshop (abiding by the letter of the law when disclosing funds received, but ignoring public expectations for disclosure) is equated to the lack of disclosure by Benbrook, whose research actually was paid for in its entirety by the organic food industry—and could be transparent about it without having to worry about suffering consequences. It is time to end the double standard! It appears that anyone can accept money from the organic foods industry and yet remain righteous. But, accept funds from a different industry, and one goes from hero to villain. Folks, industry money is industry money.

It is not a level playing field. Academics follow the facts and stick to whatever the data say. They do not have the creative liberties of detractors who play fast and loose with the facts, or of reporters who all too often just have a very superficial understanding of complex issues, and thus distort the facts.

At the end of the day, academics live under a magnifying glass. My university insists on disclosure of potential conflicts of interest every year (and yes, this includes plane trips). Accordingly, I submit a list of all external relationships of any kind each year. The list is reviewed by the Institutional Integrity Officer, who also determines the extent of the conflict, if any — all in conformance with federal regulations.

Nevertheless, recent events make it clear that there is room for even more transparency, and that disclosures need to be made to the public directly, and not just to the university. The caveat for society to ponder is that when things get to the point where virtually all privacy has disappeared in the public sector, jobs in industry will start to look mighty appealing.

To close, I recognize we all have biases. My knowledge—and the bias that goes along with it— comes from almost 30 years of research and education on molecular biology and genetic engineering of plants in my laboratory, not from reading blogs and news articles written by people who have never seen a GM crop or don't know even the most basic facts about agriculture or how genes and DNA function. That does not mean my judgement is infallible by any stretch of the imagination, but it does mean it is much more likely to be correct.

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