Spinning the Science

By Carey Gillam ·

Professor Giles-Eric Séralini, a professor of molecular biology at the University of Caen, Normandy, conducted a 2019 study on rats fed GE corn and Roundup. Many of the rats developed tumors, as seen here.

excerpted by Jack Kittredge from her book:
Whitewash: The Story of a Weed Killer, Cancer, and the Corruption of Science

For every scientist who raise a concern about a product, there seems to be a corporation to contradict him (or her). We've seen this happen again and again. Tobacco industry executives famously hid research done by their own scientists that showed the hazards of cigarettes, and they misled lawmakers and regulators about the addictive properties of nicotine. Many other corporate powers, including those in the agrochemical industry, have long histories of defending themselves against claims that they covered up the dangers of injury from asbestos, polychlorinated biphenyl (PCBs), Agent Orange or other chemicals.

DuPont has spent the past several years in an ongoing battle against more than 3,000 lawsuits alleging the company knew that a chemicals called perfluorooctanoic acid, commonly known as PFOA, could cause disease but hid this knowledge for decades even as its PFOA contaminated West Virginia water supplies. And Dow AgroSciences spent years fighting to stop the U.S. Environmental Protection agency (EPA) from banning an insecticide tied to brain damage in children.

Like any corporation, Monsanto does not shy away from zealously using its money, power, and political sway to promote its products and defend them against criticism. That is to be expected. But with Monsanto and its allies in the agrochemical industry, the propaganda playbook has many different chapters — and some are intentionally hard to read.

A common tactic is to funnel industry messaging through individuals who appear to be independent of industry and who carry a gloss of expertise and acclaim that gives them credibility with consumers, lawmakers, and regulators. These "experts" appear unaffiliated with industry and thus unbiased. What the public doesn't know is that behind the scenes, corporations are often funding and collaborating closely with these very same professors and other professionals who tout propaganda that serves industry interests. It's all part of a strategy of spin that had been used by the tobacco industry, the soft drink industry, pharmaceuticals, and, or course, agriculture.

Consumers have resisted eating GMOs in Europe and America in large numbers.

These closeted collaborations make it difficult for consumers to know whom to trust and what to believe. And the rule appears to be "The less transparent, the better." Several examples have come to light only because of records obtained through Freedom of Information Act (FOIA) requests and investigations by journalists and consumer and environmental groups. What the records clearly show is a roster of U.S. academics – people employed by taxpayer-funded institutions – quietly working with Monsanto, other agrochemical companies, and public relations experts to tout the benefits of company products, to counter anything that points to problems with glyphosate or glyphosate-tolerant crops, and to cripple unfavorable legislation or regulation. The ties to the industry are typically not disclosed as these people sell the story the corporations want told.

One example of the hidden corporate hand at work datres back to 2013, when Monsanto wanted to procure "policy briefs" supportive of the company's interests that appeared to be unaffiliated

with the company. The plan was laid out by Monsanto's chief of global scientific affairs, Eric Sachs, in an e-mail to nine prominent academics, including a professor at the prestigious Harvard Kennedy School, Sachs told the professors he hoped each would help with an initiative to promote the "safety and benefits" of genetically modified organisms (GMOs), and he assigned each a topic and background materials. Harvard professor Calestous Jurna was asked to write an article laying out the "consequences of rejecting GM crops." Each brief "should be about 4–6 pages in length and include key themes and messages related to the specific topic, recommendations, and a call to action" aimed at a broad audience that included policy makers and regulators, Sachs told the professors.

"The key to success is participation by all of you – recognized experts and leaders with the knowledge, reputation and communication experience needed to communicate authoritatively to the target groups. You represent an elite group whose credibility will be strengthened by working together…You are the best possible messengers," Sachs wrote.

Sachs told the group that an organization called the American Council on Science and Health would run the project in partnership with a public relations consulting group. The plan was for the two organizations to coordinate the publishing and promotion of the articles, setting up speaking engagements, webinars, and other events. Sachs said he was aware that the professors' reputations "must be protected" and that "Monsanto wants the authors to communicate freely without ivolvement by Monsanto." By December 2014, the articles Monsanto had asked for were circulating, though without any mention that they came at Monsanto's behest. Juma's article hewed closely to Monsanto's suggestions. The connections came to light only when the e-mail communications were obtained bhrough FOIA requests from the consumer advocacy group U.S. Right to Know and reported by several news outlets. For his part, Junta told the Boston Globe that he may have used "bad judgment" but didn't intend to hide Monsanto's ties. He received no money for the work and was true to his own views, he said.

Another prime example of hidden alliances has come to be known as the "Séralini affair." Giles-Eric Séralini was a professor of molecular biology as the University of Caen Normandy when he published a study in September 2012 in a scientific journal called Food and Chemical toxicology (FCT) about the effects of Roundup herbicide and Roundup Ready corn on 200 rats. Publication in a journal such as FCT requires a lengthy process in which experts unrelated to the study review it and can ask questions and seek revisions before it is published This peer review process is meant to curb publication of flawed research.

Séralini had spent two years and more than $3 million working with seven other scientists to study how the genetically modified corn and the herbicide impacted the animals' health. At the time, Séralini was the president of a scientific advisory board that worked with a group opposed to GMOs. He believed there were potential problems with GMOs and Roundup that had not yet been uncovered by the scientific research that was largely funded by the chemical industry. Séralini and his team had seen troubling results in previous studies, including evidence that Roundup herbicides cotaining POEA along with glyphosate were much more harmful than glyphosate alone, causing cell damage at levels expected to be found in food.

Groups of rats were evaluated by the Séralini team in the 2012 study. The rats were divided into males and females. Some were fed genetically engineered corn; others consumed corn sprayed in the field with Roundup; and others were given Roundup in drinking water in differing doses, with the lowest corresponding to levels found in some tap water. The intermediate dose was set at the maximum level permitted in the United State in animal feed, and the highest dose was correlated to half the strength of Roundup as used in agriculture. Control group rates were fed a diet containing non-genetically engineered corn and plain drinking water.

The Séralini study results were alarming. Treated rats had much higher death rates than the control group animals, and the exposed rats demonstrated an "unexpected increase in tumor incidence," especially mammary tumors in female rats, along with damage to the animals' livers and kidneys. The scientists said both the GMO corn and the Roundup contributed to the health problems that developed in the experimental animals, and they said they found "unexpected low dose toxicity from Roundup" at levels 10,000 times lower than those permitted in drinking water in the United States. The study results "clearly indicate that lower levels of complete agricultural G (glyphosate) herbicide formulations, at concentrations well below official set safety limits, can induce severe hormone-dependent mammary, hepatic, and kidney disturbances," the study authors concluded. Séralini said his research gave credence to fears that Roundup contains ingredients more toxic than glyphosate and that Roundup formulations should be considered endocrine disruptors. News outlets around the world published stories about the study findings and regulators in many countries were understandable rattled. France's prime minister at the time, Jean-Marc Ayrault,

said that the country would consider a ban on GMO corn sprayed with glyphosate, and the European Commission said it would seek a review by the European Food Safety Authority. Russia temporarily suspended importing glyphosate-tolerant corn, and Kenya actually moved to ban all GMO crops, most of which were sprayed directly with glyphosate.

The announcement of the study results came at a particularly bad time for Monsanto, just two months before California residents were slated to vote on whether or not to require labeling of foods made with GMOs, an issue Monsanto adamantly opposed. Glyphosate residue on foods was one of the concerns that drove the labeling efforts not just in California but in several other states as well, so any bad news about glyphosate's impacts on health was a big problem. Just as they had done with other negative research report and not unlike the attack they would later launch against the International Agency for Research on Cancer (IARC), Monsanto and associated industry players railed against the Séralini study, telling journalists it was fatally flawed in many ways. The European Federation of Biotechnology industry association, which counts Monsanto and other agribusiness firms among its members, called for the paper to be retracted, saying it reflected a "dangerous failure of the peer-review system." Other organizations and ultimately regulatory bodies weighed in, mimicking Monsanto's claims that the research was flawed and not to be believed. California voters narrowly rejected the mandatory GMO labeling bill as the attacks on Sérlini continued for well over a year and scientists around the world debated the perceived merits and shortcomings of the Séralini work.

About 130 scientists, scholars, and activists took Séralini's side, weighing in with support in an open letter published in Independent Science News. The group noted the industry pressure on scientists whose findings were unfavorable and said the backlash against Séralini's study raised "the profile of fundamental challenges faced by science in a world "increasingly dominated by corporate influence."

And then Richard Goodman stepped in. Goodman, a trim, bookish-looking man who favored a neatly kept moustache and held a doctorate in dairy science, worked for Monsanto from 1997 to 2004. But by the fall of 2012, when the Séralini study was published, Goodman was working at the University of Nebraska-Lincoln.

Records would reveal that despite his work at the public university, Goodman was still tightly entwined with Monsanto, relying on funding from the company and other agrochemical interests to run a food allergy research program at the University of Nebraska. In that role, he was happily touting the safety of agricultural biotechnology, training scientists from other countries in how to evaluate the safety of GMO crops that are sprayed with glyphosate, and issuing reports about how GMO crops, engineered to be sprayed with glyphosate or to repel pests, were not likely to trigger allergic reactions in people. And though Goodman's job description listed him as a faculty member of the university's Department of Food Science and Technology, it was the funding from Monsanto and other agrochemical and seed companies, such as Bayer, DuPont, and Syngenta, that kept Goodman afloat. A look at the sponsorship agreement for the allergen database for 2013 showed that each of six sponsoring companies was to pay roughly $51,000 for a total budget of $308,154 for that year. Goodman was also collaborating with Monsanto on efforts to turn back mandatory GMO labeling efforts and mitigate GMO safety concerns and was

offered “media training” by the agrobusinesses. Records would reveal that roughly half of Goodman’s income came through industry funding.

When the Séralini study broke, Goodman was quickly in contact with Monsanto officials and eager to help in the response. Documents, again obtained by U.S. Right to Know, show that on the day Séralini’s study was published – September 19, 2012 – Goodman was e-mailing Monsanto toxicologist Bruce Hammond shortly before 10 a.m., asking for “talking points, or bullet analysis” that Goodman could use in discussing the study.

By November, Goodman was doing much more: he was acting as associate editor of the FCT scientific journal — the very one that had just published the Séralini study and from which Monsanto was seeking a retraction. Goodman was placed in a role overseeing GMO-related research reports. It’s not clear if Monsanto had a hand in getting Goodman appointed, but e-mails do show a direct connection between Monsanto’s Hammond, Goodman, and FCT’s editor-in-chief, A. Wallace Hayes. Shorty after Goodman was named associate editor, Hayes told Hammond that he and Goodman were aware of the criticism of the Séralini paper and wanted Hammond and other critics to act as reviewers for the journal. Around the same time Goodman was signing on to FCT, he was also worrying about whether the industry money would keep flowing. In e-mails, he expressed cncern about protecting his income stream as a “soft-money professor.”

In late 2013, after Goodman had been on the journal’s editorial team for roughly a year, FCT abruptly retracted the Séralini study, saying it had decided the data were inconclusive and the conclusions unreliable. Critics were quick to link the retraction to Goodman, but he denied any involvement. Séralini saw a clear connection, however. In a statement defending his work, he declared the retraction the result of “pressure from the GMO and agrochemical industry to force acceptance of GMOs and Roundup.” Goodman’s appointment to the editorial team was a “most flagrant illustration” of agrobusiness’s influence and underscored how industry’s tight hold on what was considred acceptable science “puts public health at risk,” he said.

“This episode illustrated the vulnerable position of dependent ‘science’ and the economic and political forces that move to defend Roundup and Roundup-contaminated crops, “ Séralini said. The Séralini study was republished in another journal, Environmental Sciences Europe in June, 2014. Still, the heavy industry criticism left Séralini’s credibility deeply scarred.

The Center for Food Safety found out just how powerful the [industry’s] social media strategy could be when the organization scheduled a presentation in Honolulu, Hawaii, by author, activist, and Monsanto critic Vani Hari, who markets herself as Food Babe. Event organizers slated the presentation for September 2016 and offered free tickets to the public but asked that people who wanted to attend RSVP so they could be guaranteed a seat. In an effort to sabotage the event, a pro-Monsanto group that refers to itself as March Against Myths About Modification put out a social media call for help. The group asked Facebook followers to make large numbers of fake reservations so the event would appear sold out but would actually leave Hari speaking to a nearly empty hall. Leaders encouraged people to use fame names and created “disposable” e-mail addresses, even providing instructions on how to do so, to reserve the seats. More than 1,500 tickets were reserved this way under names like Harriett Tubman, Fraud Babe, and Susi

Creamcheese. Facebook postings showed scores of people from around the world making fake reservations and joking about the deceit. Organizers uncovered the scheme the day before the event and were able to cancel many of the fake reservations, opening up seats for valid reservations.

Hari said the events were jarring. “I choose to put my focus and energy on the wiling – the people who want to hear about what’s really in their food and how they can make healthy change to their lifestyle. On the other hand, there are some serious detractors that do not want the truth about our food to be heard. They are working as agents for the biotech and chemical industry to prevent information about the risks of using chemicals like glyphosate that are coupled with GMOs to come to light.”

The March Against Myths group is just one of various organizations created, funded, or otherwise backed by agribusiness to tout its messages. In some cases, the links to industry are clear, while in other cases they are harder to see. These front groups act essentially as echo-chambers, citing each other as sources that reinforce industry positions with the veneer of expertise and impartiality. Their names often sound impressive and authoritative. Take, for instance, the American Council on Science and Health (ACSH), the group Monsanto positioned to help it promote the policy briefs by Folta, Juma, and the other academics. The ACSH was founded in 1978 and bills itself as a national non-profit education organization that supports “evidence-based science and medicine.” It does not publically disclose the range of corporate funding it relies on but records obtained by journalists in 2013 reveal a money trail that leads to a number of chemical companies as well as prominent food and tobacco companies. The group has been a vocal supporter of glyphosate, calling questions about its safety “ridiculous fear-mongering.” The ACSH, not coincidentally, uses its website to promote the March Against Myths group, which tried to sabotage Hari’s speech, and to attack people who raise questions about glyphosate’s safety. The group wrote and featured a piece on its website accusing a New York Times reporter of “lying” when he authored an article about glyphosate concerns.

Folta and other industry supporters similarly interfered with a speech planned for early 2016 in Houston by Thierry Vrain, a Canadian molecular biologist who has raised concerns about glyphosate and GMOs. Vrain was to deliver a lecture at the Houston Museum of Natural Science titled “The Poison in Our Food Supply.” A few days beforehand, a storm of e-mails, phone calls, and social media messages, along with a blog piece written by Folta, assailed the museum for hosting the event, claiming Vrain lacked credibility. Many accused Vrain of practicing “junk science” and threatened to cancel their museum membership if it didn’t ax the lecture. The museum president succumbed to the pressure and canceled the event. Organizers were able to find an alternative venue nearby and the evening lecture was held anyway, but the power of the industry cheerleaders was clear.

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