

BIOTECHNOLOGY

Anti-GM group expands probe into industry ties

Activists seek release of records from 40 researchers at US public universities.

BY KEITH KLOOR

Michelle McGuire, a nutrition scientist at Washington State University in Pullman, was stunned last month when activists who oppose the use of genetically modified (GM) organisms asked to read her e-mail.

US Right to Know of Oakland, California, filed a request under Washington's freedom-of-information law to see her correspondence with, or about, 36 organizations and companies. McGuire is one of 40 US researchers who have now been targeted by the group, which is probing what it sees as collusion between the agricultural biotechnology industry and academics who study science, economics and communication.

That investigation, which began in February, has just started to yield documents. These include roughly 4,600 pages of e-mails and other records from Kevin Folta, a plant scientist at the University of Florida in Gainesville and a well-known advocate of GM organisms. The records, which the university gave to US Right to Know last month, do not suggest scientific misconduct or wrongdoing by Folta. But they do reveal his close ties to the agriculture giant Monsanto, of St Louis, Missouri, and other biotechnology-industry interests.

The documents show that Monsanto reimbursed Folta for trips he took to speak to US students, farmers, politicians and the media. Other industry contacts occasionally sent him suggested responses to common questions about GM organisms.

"Nobody ever told me what to say," says Folta, who considers public outreach to be a key part of his job. "There's nothing I have ever said or done that is not consistent with the science."

He adds that he has never accepted honoraria for outreach work, and that the University of Florida does not require him to disclose travel reimbursements. But the e-mails show that Folta did receive an unrestricted US\$25,000 grant last year from Monsanto, which noted that the money "may be

used at your discretion in support of your research and outreach projects". Folta says that the funds are earmarked for a proposed University of Florida programme on communicating biotechnology.

Monsanto spokeswoman Charla Lord says that the company was "happy to support Dr Folta's proposal for an outreach programme to increase understanding of biotechnology", and that the \$25,000 grant "predominately covered travel expenses". Lord adds that Monsanto considers public-private collaborations to be "essential to the advancement of science".

Such explanations do not satisfy Gary Ruskin, executive director of US Right to Know. "I think it's important for professors who take money from industry to disclose it," he says. "And if they're not disclosing it, that's a problem. And if they say they aren't taking money, and they are, then that's a problem."

Ruskin's group, which was founded in 2014, calls for mandatory labelling of food that contains GM ingredients — even though numerous scientific bodies, including the US National Academy of Sciences, have found no evidence that such food harms human health.

US Right to Know launched its investigation of academic researchers after it noticed that several had fielded questions about crop biotechnology on a website called GMO Answers, which is funded by members of the biotech industry. The group considers the site, which is aimed at consumers and managed by public-relations firm Ketchum of New York, to be a "straight-up marketing tool to spin GMOs in a positive light". It is now seeking the records of public-sector researchers — who are subject to state freedom-of-information laws — to confirm its suspicions.

Ruskin says that the group has received responses to about 10% of its records requests. At least one institution, the University of Nebraska, has refused to provide documents requested by the group.

US Right to Know argues that its requests are reasonable, because the researchers who are under scrutiny are public employees. "Part of democracy is that we get to know what our public employees do," says Ruskin.

McGuire is not sure why the group is seeking her records, because she has not contributed to the GMO Answers website. Some ►

In March, preliminary results from a study commissioned by the UK Department for International Development (DFID) in 2011 found little benefit from an £11.5-million (\$18-million) expansion of the Millennium Villages project in northern Ghana. Sachs asserts that effects are hard to see at the Ghana site because it is in its early stages; his critics see the analysis as further evidence that the Millennium Villages approach may not work as advertised. "The trumpeting of the project as a model is just indescribably disproportionate to the deafening silence about its actual results," says Michael Clemens, a senior fellow at the Center for Global Development, a non-profit think tank in Washington DC.

Clemens has long been an outspoken critic of the MVP and was among researchers who challenged¹ a 2012 study in *The Lancet*² that reported that child mortality had dropped in Millennium Villages three times faster than elsewhere in the host nations. The challenge ultimately led to a retraction of that claim by the paper's lead author. Clemens argues that aid money should be spent either on projects that generate useful knowledge or on things that have been shown to work, noting that malaria bednets, which have a demonstrated benefit and are part of the MVP's suite of interventions, cost \$15–20 per household.

The MVP typically budgets \$120 per capita annually, according to its website, although Sachs says that outside contributions can reduce MVP's investment to half that. At the Ghana site funded by DFID, the total investment by all parties was projected to be \$27.1 million over 5 years for 30,000 people. That is \$181 per person annually, or about \$4,500 per household over the course of the project — less than the \$5,408 per household calculated by a randomized controlled trial in Ghana testing a two-year package of interventions that included food, cash, health services and training³.

The MVP hopes to release its analysis by the end of 2016, and Sachs says that his team will be in a better position to talk about cost-effectiveness and other considerations once the analysis is out.

Dean Karlan, an economist at Yale University in New Haven, Connecticut, says that it is probably too late for the project itself to advance the science of global development in a significant way, but he credits Sachs with raising awareness about global poverty issues. "I do see it as a missed opportunity," Karlan says, "but in the grand scheme of things there are tons of missed opportunities." ■ **SEE EDITORIAL P.135**

1. Bumpa, J. B., Clemens, M. A., Demombynes, G. & Haddadd, L. *Lancet* **379**, 1945 (2012).
2. Pronyk, P. M. *et al. Lancet* **379**, 2179–2188 (2012).
3. Banerjee, A. *et al. Science* <http://dx.doi.org/10.1126/science.1260799> (2015).

"Part of democracy is that we get to know what our public employees do."

► of her recent research refutes claims that glyphosate, a herbicide often used on GM crops, accumulates in breast milk; the work relied on an assay developed with assistance from Monsanto. Still, says McGuire, “I’m a milk-lactation researcher.”

But Folta’s e-mails show him to be a frequent contributor to GMO Answers. Ketchum employees repeatedly asked him to respond to common questions posed by biotechnology critics. In some cases, they even drafted answers for him. “We want your responses to be authentically yours,” one Ketchum representative wrote in a message on 5 July 2013. “Please feel free to edit or draft all-new responses.”

“They thought they could save me time by providing canned answers,” Folta says of his “extremely annoying” Ketchum contacts. “And I don’t know if I used them, modified them or what, but they stopped doing it at some point.” He adds that the correspondence obtained by US Right to Know reveals only a fraction of his work as a scientist, and taken alone does not paint an accurate picture of his work.

Bruce Chassy, a toxicologist at the University of Illinois at Urbana-Champaign who is the subject of two freedom-of-information requests by US Right to Know, says that his e-mails would reveal a similar portrait of “people trying to defend the science against malicious attacks”.

But Chassy acknowledges the ethical questions raised by close relationships between the biotech industry and the public sector. “Are we working for them, or are they working for us?” he asks. “Probably a little bit of both” — in part because universities and companies often have overlapping research interests. US Right to Know aims to reveal this overlap in full.

Michael Halpern, an expert on scientific integrity at the Union of Concerned Scientists in Washington DC, says that Folta’s case suggests that universities should do more to educate researchers on what constitutes a conflict of interest and what types of financial relationship should be disclosed.

“It behooves scientists to disclose their funding sources so there’s no perception of inappropriate influence,” says Halpern. “But that doesn’t mean all private money is tainted or suspect.” ■



Samples from the Ebola epidemic in West Africa are held by public-health agencies in the region and abroad.

INFECTIOUS DISEASE

Biobank planned for Ebola samples

International public-health officials discuss how to maximize research benefits of a widely dispersed collection.

BY ERIKA CHECK HAYDEN

As West Africa’s Ebola outbreak winds down, an effort is under way to make the best use of the tens of thousands of patient samples collected by public-health agencies fighting the epidemic. On 6–7 August, the World Health Organization (WHO) convened a meeting in Freetown, Sierra Leone, to discuss how to establish a biobank for up to 100,000 samples of blood, semen, urine and breast milk from confirmed and suspected Ebola patients, as well as swabs taken from the bodies of people who died from the virus. Held by health agencies in both West

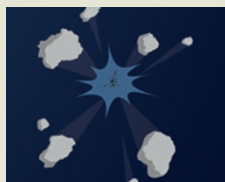
Africa and the West, the samples could be valuable in understanding how the current Ebola crisis evolved, preparing for future outbreaks and developing public-health research capacity in a region that depends on outside experts.

“There are many, many ways that this resource could be precious,” says Cathy Roth, an adviser to the WHO directorate in Geneva, Switzerland, which arranged the meeting as part of a series of international discussions about the creation of an Ebola biobank. One of the difficulties is that there is no blueprint for how such a biobank would work, so countries have not yet committed to joining it.

DANIEL BEREHULAK/NTY/REDUX/EVYNE

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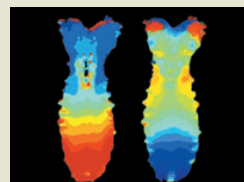


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