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An anti-biotechnology activist group has targeted 40 scientists, including myself. I am Professor Kevin Folta from the University of Florida, here to talk about ties between scientists and industry. Ask Me Anything!

PROF_KEVIN_FOLTA [R/SCIENCE](#)

ABSTRACT

In February of 2015, fourteen public scientists were mandated to turn over personal emails to US Right to Know, an activist organization funded by interests opposed to biotechnology. They are using public records requests because they feel corporations control scientists that are active in science communication, and wish to build supporting evidence. The sweep has now expanded to 40 public scientists. I was the first scientist to fully comply, releasing hundreds of emails comprising >5000 pages. Within these documents were private discussions with students, friends and individuals from corporations, including discussion of corporate support of my science communication outreach program. These companies have never sponsored my research, and sponsors never directed or manipulated the content of these programs. They only shared my goal for expanding science literacy. Groups that wish to limit the public's understanding of science have seized this opportunity to suggest that my education and outreach is some form of deep collusion, and have attacked my scientific and personal integrity. Careful scrutiny of any claims or any of my presentations shows strict adherence to the scientific evidence. This AMA is your opportunity to interrogate me about these claims, and my time to enjoy the light of full disclosure. I have nothing to hide. I am a public scientist that has dedicated thousands of hours of my own time to teaching the public about science.

As this situation has raised questions the AMA platform allows me to answer them. At the same time I hope to recruit others to get involved in helping educate the public about science, and push back against those that want us to be silent and kept separate from the public and industry.

I will be back at 1 pm EDT to answer your questions, ask me anything!

Moderator Note:

[Here is a some background on the issue.](#)

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**Given the impact of this have you seen a chilling effect on your colleagues communications?
Have you started to self-edit in what you might otherwise consider private correspondence?
Given the media frenzy around other email dumps (such as those of climate scientists), how
do you feel science in general is affected by this scrutiny?**

[vengefultacos](#)

Great questions. Let me start with #2. I never will self-edit. I don't have time to do that. I don't have time to hide or delete emails, even though there are cases where it is acceptable. I want it all out there because I've done nothing wrong. Seriously, the day I have to re-read everything I write for misinterpretation is the day I quit public science.

It is absolutely clear how this has changed things. People call me rather than email-- for simple stuff. Even if they open a new position or are thinking of a new company angle... we're talking little seed companies, fruit growers, you name it. They don't want their names, companies, questions to be out in public. Their competitors can FOIA me to find out what they are thinking. Think about this. I get phone calls all the time when I never used to, and I'm guessing it is about this.

I know that no young scientist will ever enter into public discourse around any controversial topic in my state. If you dare work in GMO policy, surveys or research... if you work on climate or sea level rise... if you work in fertilizers or pesticides... if you work in any area with an activist push-back-- you're going to be dragged through the mud for your life's work. Thank you for great questions.

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You mention private emails to students. Were you not in violation of FERPA when you released these emails? How was a public records request able to circumvent FERPA?

[CreatrixAnima](#)

Florida laws allow everything to be seen except student info from my university, like grades, SS#'s etc. The law allows everything. When all of these are in the public space you'll see email between me and a 9th grader looking to do a science fair experiment on GM seeds. I connected her to a scientist at Monsanto (I think) and now through their cc's that kid, with their email address, is in activist hands.

I think that is awful.

As a scientist do you notice corporations or private entities have any influence over research.

[Penguinmaster1](#)

Only that they can allow it to happen with funding. Currently I have no research funding from corporations except for some funding from the FL strawberry industry (and I'm due a small research grant from an LED light company).

Furthermore, if anyone ever told me that I had to produce some set of results, I'd record it, and share it. Remember, this all started with my transparency. Nobody tells me what to research, what to write, who to talk to. My record shows that 95% of my outreach and communications work is to non-corporations.

While I'm glad to take their investments in research, they do not control the results or their publication. They are allowed to ask for an embargo on the publication, meaning that since they paid for the research they get a 6 month lead time to get it marketed, etc. I have never had to go there, but that would be one way they would control research finding flow.

What particular aspects of biotechnology were you working on? Why are these areas in particular being attacked by these groups?

[JeffTheAlmighty](#)

Nobody attacks my research. We use genomics tools to identify genes associated with flavors in strawberry-- really cool computational approaches. These findings are tested in transgenics. Then we use validated gene discoveries to speed traditional breeding.

My lab also uses light to manipulate gene expression during growth and after harvest. We're able to change flavors, nutrition and appearance of fruits/veg.

I also feel it is very important to communicate science, especially in areas the public does not understand. I do a lot of public outreach and speaking in schools. This is what they want to stop. Thank you.

Science funding in academic labs can sometimes be a mishmash of multiple funding sources, including private foundations, public grants, and corporate contacts. What agencies fund you that make you vulnerable to these open records "attacks," and do you have any ability to distinguish which projects fall under the public work versus the privately funded work? Or have you just released everything?

Also, does this increase your fears of having promising work get "scooped?"

[Cersad](#)

Great questions. Right now my lab is running a little lean on funds. I have good USDA support for a \$500K grant over 3 years (two labs, so not much \$ in reality) and a grant from FL strawberry growers.

The attacks come because I freely speak about transgenic (GMO) crops and speak from a 100% scientific, evidence-based platform. I teach people how to effectively talk about science, especially farmers, dietitians and scientists. You can see why the anti-GMO movement would not like this.

So their goal is to silence me by generating these massive records requests and assembling narratives that are not true- but impeach my integrity.

I have to release EVERYTHING. There are cases where deleting is allowed, but I don't do that. So if I'm cc'd on any correspondence, even stuff I don't want, it is in my record.

Go ahead, email me "Cosby's tricks to landing the ladies" and that will end up in activist hands, even if I don't open it. It will be used to paint me as some sort of problem and may even be the basis for pursuing my dismissal.

Getting scooped. You bet. Right now I have a project going on that is revolutionary and exciting. There are folks at my university in the legal dept that are my only contacts. Monsanto COULD FOIA that and get my secrets, and steal my technology. Nice, huh?

Of course if they did that it would be bad form for them, and I don't think they want that battle.

It looks like they are trying to argue that there is no place for corporations in academic research. So, I guess I will ask about what you think a reasonable corporate role should be.

Should there be zero connections between corporate/industrial interests and university research? Should it be limited to sponsored professorships (where the company gives the university money to pay for the salary and maybe lab startup funds, but has no control over who is hired or what they do). Should corporate research grants be allowed, which lets them push for specific directions of research, but not control the results or what is published? Or should there be full scale collaboration projects between academic and industrial researchers? What limits should there be?

[kerovon](#)

It is a great point. As a public employee at a land-grant university, it is my job to integrate with commerce and industry. We are experts that can do research that they can't do, or don't want to do. It is great that we can be sponsored to conduct that work, and good for them because they get independent evaluation of their hypotheses. That's good.

This is NOT about public-private funding. This is about a cyber lynching of an effective science communicator. They want me to shut up. They want to stop me from talking about science effectively to public audiences, especially to kids. This is why they need to shut down my outreach and harm my reputation.

And in general, people don't care about universities doing research for private entities. This was triggered by one word- Monsanto. This is a way they can FINALLY attempt to harm me and stop me from my mission of sharing science with a public that claims a 'right to know'.

As a current student at the University of Florida, I'm a bit shocked I hadn't heard about this.

Has UF's administration been supportive throughout this process? How has it affected the department or your relationship with colleagues?

[morganelle](#)

Thanks Morganelle,

This is all pretty fresh and UF administration has been unwaveringly supportive. Dr. Payne is great, and sees this as intense harassment.

We'll see going forward. In the docs I use some choice language. I call a guy (who was abusive and awful) "a prick" and a few other less-than-scholarly statements of frustration. That will end up on the President's desk with calls for my dismissal. We'll see what happens.

However, yesterday at graduation he spoke of reaching out for good change and the truth. If he stands by those words I have nothing to fear.

Thank you for doing this AMA. I don't believe you would argue that some scientists have clearly elected to manipulate findings at the behest of corporations and other pressures (for example, one must look no further than studies failing to link smoking and cancer, or climate change denial). As a scientist and someone who is providing transparency, what would be a better method of discovering and exposing incentivized, bad science? What would be an effective way to recognize biased or bought opinions on a massive scale?

[multiple iterations](#)

Science is self policing. I think that the cases of collusion and impropriety are best discovered using the literature and more experimentation. Manipulated findings always are discovered, oftentimes just as papers that are dead ends scientifically. The anti-GMO world is loaded with them. Good science grows and expands, and our reputations as scientists are our most important assets. I think this is the central incentive for us to keep it clean.

I am an undergraduate student of physics. I'm curious what level of animosity you have to deal with as a scientist on a daily basis? The farther I travel into this field, the more it seems like science is a target for a lot of hate from the public, with your situation being a great example.

[JacenGraff](#)

Good question. Online it runs deep. I'm daily harassed by a veterinarian in Long Beach, CA that just is bat\$^ crazy. Others too. Check out my twitter feed sometime @kevinfolta

But you can't let that stop you from communicating facts and science. Most people are concerned and just want good answers. It is important to meet them there and kindly understand their concerns, then address them from the peer-reviewed science. People feel much better when they understand the science.

That's why these groups have to destroy my credibility. We're making people smarter, and that hurts their profits and their causes.

Hi Dr. Folta - I produced a talk show you were on a couple months ago, and I wanted to start by saying thanks again for coming on.

Onto the topic at hand:

1) In what ways (if any) are actions like this preventing solutions to industry-wide issues like citrus greening?

2) How would you respond to critics like Dr David Pearlmutter when he points to studies like [this one](#) and says things like, "Glyphosate represents a clear and present danger to human health and is part of the untold story as it relates to the bigger picture of the threat of GMO seeds now so prevalent in America's farming industry."

[wei-long](#)

Hello Wei-Long, 1. Part of the funded outreach in this controversy goes to widen my elementary programs in citrus greening. I have a presentation called, "No More Oranges" that I do in local schools. Awareness of the problem is key, and I've devised a clever communications plan for that. I wanted to provide online resources and more travel, but if I give back the funding that will not happen.

Collaterally, the GM solutions in orange do look promising. However, their acceptance will be slowed by painting scientists as criminals and somehow on-the-take and performing corrupt research.

1. That is not a study. It is an opinion in a kooky journal by two non-scientists that have clear activist bends. They publish wild cherry-picked reviews in an odd journal. I have to defer to the copious legitimate reports in impact journals that show glyphosate is quite safe when used as directed.

As someone who is currently getting a bachelor's in biotechnology, what can you tell me about this field? I'm fascinated by the study of anything science related and biotechnology has always been the field I wish to study. Books and examples are one thing. But I would love to hear from someone who actually works in the field.

[Awes0me_0possum](#)

Please check out my podcast at www.talkingbiotechpodcast.com. Great stories from the experts.

It is a good area to be in, but get your computational chops up and never forget the biology. Most of all, work harder than you ever did before. Successes are rare, and breakthroughs almost never happen. You need to be pushing it to make things happen.

Learn to speak, learn to write, become a solid communicator. This will set you apart from many.

Send me an email anytime and always think of me as an extra advisor.

Who are the interests funding these groups and what do they have to gain from demonizing your work to the public?

[omghiparker](#)

The answer is below from cazbot. These are activist organizations that are against corporations (unless they are THEIR corporate friends), and folks that wish to include organic market share. That's well discovered. Of course, they are not subject to the same transparency rules I am as a public scientist. Tax returns etc show that these groups are remarkably well funded, and need to keep independent scientists out of the discussion. That's what I feel this is about.

Just out of curiosity, what legitimate concern do you have concerning the biotech industry & research? To be clear, I am in total support of bio-tech as a tool and solution to address the needs of the world today, though I am keen to know if there are things within the industry that you are concerned with, and believe that the public should know. And of course, thank you very much for your work.

[101Radec](#)

Personally, I'd like to see more industry funding and partnership. We can't do it anymore on federal and state grants. I live in a state with almost no GMO crops and diverse fruit/veg crops, so Big Ag does not have much interest here at the moment. However, our strawberry, citrus, tomato and other industries do sponsor quite a bit of research.

The issue comes when researchers go bad, which is not often. If a researcher commits fraud it is career ending and reputation damaging. That is a substantial disincentive.

How has this situation changed your view of the corporate-academic connection, if at all? Additionally, for someone just about to start a doctorate program: do you have any advice on how to present ones research and communications in an open way, considering the competitive nature of science?

[Godinjointform](#)

Wow, great questions! To be honest, I wish we didn't need corporate support. There are a number of corps that donated to my outreach program because it was doing good things for communication and education and they appreciated that work. Who else would fund that?

At the same time, if they are going to make money from a discovery and need independent testing, then they should pay for that. Why get a free ride?

Your last question is important. I've had great benefit in my career from developing resources and information and giving it away to whoever it can help, even pre-publication. It didn't always get me the first paper, but it gave me the reputation as a fair and collaborative scientist that puts the field ahead of his own needs and own interests. Always share. Be open. Take the high road. Work for others.

Right now is one of the saddest times of my career. I'm being attacked and misrepresented, and many are trying hard to destroy me over a few bucks to a small outreach program.

I don't regret it, I'll survive this. It is not about me. It is about how activists will happily destroy those that stand in the way of their agenda, and use the tools of transparency to do it. Don't let that stop you. Communicate and share the science.

Best wishes in your PhD career. Work harder than you ever have, and reach out if I can be of service.

Dr. Folta,

Great to see you doing this, we met at the 2014 NC state Biotech. summit.

The way I see things going is we are pushing more and more towards unregulated transgenics. This is the direction my lab is going

Despite working in the field, and believing strongly in the necessity of the technology, I often wonder if this is the correct path to take

What is your take on non-regulated transgenics? While use the technology is still somewhat restricted just due to costs involved, P.S. Because of what you told at the conference my sister and I have been working on an Agricultural PodCast, called The Green Minuet to discuss just this kind of stuff. First episode should be coming out soon :)

[KyleBenzle](#)

First great news on the podcast! I hope you are listening to mine at www.talkingbiotechpodcast.com.

You raise an important point and I like it. I LOVE the idea of unregulated transgenics, but keeping in mind that there is massive liability. We live in a time where each trait needs to be assessed on its own risks/benefits, not one-size-fits-all. I think we keep regulation fast and loose, oversight in place, and safety assessments strong pre-release and appropriate to the trait.

Good luck in all you do. It is a great time to be in plant science. Just don't use four-letter words in emails, because you'll get to own them on a viral meme someday.

How do you feel about the seemingly growing resistance to science at large - especially considering the potential applications of new technology (DNA sequencing, medical devices such as prosthetics that are ever more advanced, and regenerative medicine to list a few) and the ethical issues they pose?

[CourierThree](#)

It is a symptom of a population that has it good, and does not want to invite change. People in the USA have plenty of calories and disposable income. They forget that farmers are 1% of this population with an average age of 58. They forget that 1 in 6 don't have water, and many are hungry.

How do we stop pursuing the best scientific solutions because a few pampered and affluent loud voices don't like it?

That to me is the real ethical question. Thank you.

Hi. As a scientist, the prospect of having to release all of my emails is scary (even the scientific ones: I do computer security research and discussions of potential vulnerabilities should not be made public lightly). As someone who regularly and personally (as in, for personal reasons) emails other scientists, the prospect of one of them publishing the contents of these personal emails without my consent---or even my knowledge---is even scarier. Three questions related to this:

- **Did you contact all the people involved in the email discussions you released to ask them for consent or inform them of your decision to make all these conversations public?**
- **How does Right to Know justify this cost to the privacy of those people in the name of transparency?**
- **Do you think responding in kind (and asking for full disclosure of all their emails) would be appropriate? (It would either bring to light their motivations, or at least their hypocrisy...)**

[groumpf](#)

1. There is no way I could! UF released the docs 1.5 months before I found out. There are THOUSANDs of names in there.
2. They say it is all in the "public's interest to understand the deep tentacles of corporations into public scientists"
3. I have asked others to NOT do this in retaliation. While there are a few faculty that are quite anti GMO (like Chuck Benbrook at WSU, that I think is 100% industry funded) that could be very interesting, I do not wish this on anyone. It is invasive and immoral. While legal, it is not fair to set up faculty to have their careers damaged because of the science they communicate.

Thanks for doing this AMA. On the JRE podcast, you explained that there are westerns organizations in Africa trying to stop scientists like your self from trying to make that a better place. So what can we do to stop that or bring these companies doings to light?

[FREEDOM-BITCH](#)

The efforts are groups like Greenpeace that pollute local lore with misinformation. Remember in a lot of these needy places people don't understand science. They barely have electricity or water, let alone a concept of what a "germ" is. It is easy to go into such places and talk of spells and sterility, of hidden dangers and problems that can frighten a population. That's much easier to do than to teach science.

Firstly, thank you for taking time out of your busy schedule to do this AMA. Secondly, is this unnerving to you that members of the public, essentially people who you are aiming to help with your greater understanding, are trying to hinder your work and the world's understanding of the universe, it's properties and how everything works?

[perryyy](#)

The last days have just killed me. It has been an emotional roller coaster because I am trying to reconcile why so many are trying to permanently harm my reputation. It is because they need me out of the discussion, out of the public space. I represent science, truth and evidence, and that is incompatible with their mission. They need me, and other communicating scientists, silent to promote their agenda.

Do you feel the media (if it gives any attention to this issue) does so on a neutral basis, meaning do they simply report on it or do they take a side (preferably the activists, because that generates more clicks)? Have you been invited to any non-science-specific programmes to talk about this, if they are talking about it at all?

[Burgerkrieg](#)

It depends. I was completely sand-bagged on RT, a crazy anti-GMO leaning 'news' source. Dr Oz has manipulated and edited scientists. The larger media is getting behind us though. That change is measurable, and I think there is a flight away from the crazies that always controlled this narrative. I think good science, a failure of their dire predictions and a new excitement about how biotech can help people is moving us in the right direction.

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Yay! I'll include it in my accomplishment report! Not.

Thank you for doing the AMA. Do you share any concerns (about issues that emerge from the field of biotechnology) with the groups such as US Right to Know, and what would you propose as a better way to deal with these concerns?

Personally, I find that having to submit vast amounts of largely unrelated e-mails is intrusive, but that there needs to be a way to address potential concerns in genetic modification. I would just like to know what would be your take on tackling these issues and promoting transparency.

[Marmun-King](#)

My main concerns are that food is safe and affordable, and that our best technologies are deployed in ways to help our farmers, the needy, the environment and the US consumer. I'm first a proponent of safety and that's true for all of us.

The Email/FOIA thing is important and transparency is good. They should not be afforded the opportunity to scour through my 200 emails a day and construct a story that destroys me long-earned reputation. If I did something wrong, that's fine, let's discuss. But let's not impeach my credibility because I choose to communicate science based on the peer-reviewed literature.

Can you expand on your work?

As per GMO technology, I see it as the advancement of selective breeding and am not much concerned with the direct physical health issues of consuming a modified crop. On the other hand, GMO's tend to further a system of agriculture that hasn't proven very sustainable in terms of economic return, food security or food sovereignty.

Farms in Canada are becoming fewer and larger, or smaller and more diverse. We hear a lot about how GMO's are advantaging large scale agriculture, but I understand that permaculture has been included in the picture: how could GMO's allow for competitive smaller scale, more biodiverse profitable ventures for low level entrepreneurs to a part of?

[untumulted](#)

My lab uses genomics tools and clever solutions to identify genes associated with small fruit sensory quality. We also use narrow bandwidth light treatments to enhance fruit/veg quality. All of this is funded by state/federal sources, with some small support from strawberry industry concerns.

I don't agree that the technology hasn't proven sustainable. Farmers use it because it works. It cuts costs, in many cases because of lowered insecticide use. That's a good thing. We could do much more toward sustainability, but the rigorous deregulation environment makes that impossible. Don't call the runner slow when you made him wear lead boots.

I love the idea of GMO technology being used in small scale. My lab has strawberries that don't need fungicides. Even organic uses tons of chemicals to control disease. My plants would require none, but they can't be commercialized. I think the problem with a few big players is a symptom of deregulation. Smarter rules would allow many smaller players, including those in universities. That would be really great in shaking the Big Ag stranglehold.

How do you approach the teaching of science? How do you make sure or could make sure that the public understands and accepts science more generally?

[Downing Street Cat](#)

Great question. It is important to start from defining the things we agree upon. That's easy. We all want safe food, affordable food, profits for farmers, environmental sustainability and much more care for the needy. Once we define that it is easy to show how biotech tools can help solve those issues. From there, it is molecular legos, really just speeding what we have been doing with traditional breeding, only with much more precision and safety. That resonates well.

You describe these groups as wanting "to limit the public's understanding of science."

While that might be the end product of their actions, do you really believe that is these people's motivation?

[DerbyTho](#)

Absolutely. I speak from the peer-reviewed literature and distill it in ways the public understands. I am exactly who they have to remove, which is why I am targeted and now being dragged through the mud in social media. Their motivation is two-fold. Take me out of the conversation or at least damage my reputation as an independent scientist, and to discourage anyone from engaging the public in a controversial area.

Anyone talking to the public about GMO, vaccines, climate or sea level rise would have to have their head examined after this nightmare. The goal is to take out the independent trusted voices.

Given your field of expertise, you must know people inside Monsanto. How do they feel about the terrible reputation their company has with the general public? Does it influence them or the company in any way?

[atthecoast](#)

I do know people in the company, as friends have gone there as well as former students. Over time I've met many others. Robb Fraley came to UF to speak last year, and I hope to have Fred Perlak on my podcast (talkingbiotechpodcast.com). I also have met many others that have become friends, especially in discussing how to share science with a concerned public. Let's face it, they are operating at a deficit in public approval. They've invested tons in how to fix that, and there's a lot a guy like me can learn from watching how they communicate their science.

In general, they enjoy working there. it is consistently ranked one of the best companies to work for. Who knows, if this character assassination is successful maybe I'll go there too. Ha ha.

The folks that do work there are moms and dads, husbands and wives. In a lot of ways they have to be extra careful and really watch their steps, and employees have a high code of ethics to uphold that I find rather impressive.

It is funny, I was speaking to an old friend at a meeting a few weeks ago and he could not buy me a beer, because of its 'gift' nature. How crazy is that? All so sensitive to how this looks. It is a good thing, because it allows us to be open and honest, which is why we're here in the first place.

Hi,

Thanks for the AMA!

- **How did your University react?**
- **Are they having your back by (for example) also providing legal support for you?**

I wish you all the best.

[ABBDVD](#)

My university followed the law to the letter. We provided everything requested.

They provide legal support and guidance. My administration has been sensational and sees this as a wild attack on science and reason. Sad, because we live in an important state that has many controversial concerns in ag and climate. No scientist would ever want to go through what I'm going through.

Experts will stop interacting with the public. That's exactly what USRTK and the anti-science movements want.

Slightly off topic, but this question is for you, Professor Folta:

- **What can the general public, the scientific community (those involved in biotechnology), and the government specifically do to assuage some of the fears that these anti-biotech activists have?**
- **Is there another way to establish a constructive dialogue to address the concerns of the Bio-tech skeptics?**
- **What is the most challenging issue regarding informing and educating Bio-tech skeptics about what you do?**
- **And thank you in advance. (I'll take my answer as a PM if it proves unwieldy in this forum).**

[cornelius_t](#)

1. Communicate. Learn the facts, use my slides, get out and teach people. Talk like a person, not a scientist, to concerned people that just want to learn. Don't waste time in the nutcases.
2. Yes. Start at the core values. What are things you all share? I'm an environmentalist, concerned about feeding the hungry, animal welfare, profitable farming, and want better food for consumers.

Now here's how biotech can address these areas. That is the winning formula, especially when you explain the things we could have done, but didn't do, because of activist pressure. It is in my slide deck on slideshare.net

3. That herbicides and insecticides can be used safely. People are so freaked out about chemicals and the dangers of legacy compounds that they lose their ability to critically evaluate facts. Today we have remarkable compounds with high specificity and minimal toxicity. People just don't get that.
4. Thank you for the questions!! kf

Have you discussed the issue with the other scientists on the list? Is this intimidating them?

[nallen](#)

Absolutely. Many have backed out of public discussion. Others in corporations just call me instead of email because they don't want to be in the next FOIA request. That's crap. I have nothing to hide and email is my best way to manage 200 communication contacts a day.

Yes, young scientists would have to be out of their mind to be involved in GMO, vaccines, animal research, or climate change. You're setting yourself up for a world of invasive hassles.

In your opinion, why are some people so opposed to biotechnology? Do you think a lack of knowledge contributes greatly to these fears, and if so, how would you suggest educating a population of mostly non-scientists to help remedy this?

[palm_of_a_tiny_hand](#)

They don't fear biotech in their insulin, medicines or cheese. This is anti-corporate. Period. They paint a negative picture of a technology that will help save lives worldwide. It is because they have subscribed to a lifestyle choice and a range of thinking that forces them to dismiss this science in order to be members of the tribe in good standing.

You'll see that all of their anti-biotech rhetoric is fear based, not on facts. My science comes from the literature, risks and benefits. To fix it we need to be better communicators and my SciComm budget and program do this. We teach scientists how to talk about science.

That is what Monsanto funded and what activists need to stop. They need me to stop training others on how to be effective communicators because the more science people learn, the less their fear message works.

To what extent can activist groups like these be ignored? How much effort do you, as the scientists, have to put into preventing these groups from undermining the progression of your research? How do you deal with these kinds of people?

[IRKSOME](#)

The problem is that they affect the majority of folks that just don't know, and those that just want their questions answered. That's why I like GMO Answers.com and why I enjoy the outreach.

This is why the activists need me stopped. I'm teaching effectively, and that takes away from their corporations. These folks are well funded and represent a giant industry onto itself. They are the Goliath here, I'm just a scientist talking about science. they need me to stop.

I'm thinking you must have had some contact with corporations and/or individuals where the difference between 'casual contact' and 'conflict of interest' is not immediately clear. Especially if used out-of-context. That's just inherent to the field in which you work, or even to the field of science and technology in general.

So out of the communications you have turned over, is there anything you expect this group will try to use against you? And if you can think of something, how will you parry that attack?

Bonus round: have you and the others in this group of scientists considered filing a mirroring motion, requesting that this activist group discloses *their* corporate/financial connections?

[MrSourceUnknown](#)

There never is anything "conflict of interest" in research, because they never funded my research. Never. There's nothing I can think of.

BUT the activists will create a story from emails. One good example is that someone at Monsanto was asked to find someone to write a column on GM safety, and they thought it would be better coming from an independent scientist than a company person.

So I replied, "Sure, glad to do it. Just tell me what you need me to do and I'll be glad to take care of it."

Think about how that will be used! I can see the memes already!

The funny part is that I say the same thing to 4-H, master gardeners, and the retirement home where I give lectures.

They have a TON of stuff like this and will paint an unfair and inaccurate defamation of me.

All I can do is be honest. In the age of the internet, like one colleague put it, "You're screwed".

BONUS: We cannot file anything against the activist organization. They are protected by law. We're forced to be transparent by law. Sweet, isn't it?

How does the average layperson distinguish from innocuous corporate contact funding critical research and the corrupt influences that creates real or perceived improprieties? And is the fear of corporate-funded research overblown, or something we should be concerned with?

[Nowiwantacellardoor](#)

It's easy. When the research does not fit with the rest of the scientific literature. That's a red flag. Also, bad research dies, good research grows. Everyone wants to be number two. If it is never repeated, then that's a sign.

In looking at [Right to Know's website](#) their largest donor is an organization called [the US Organic Consumer's association](#). The organic group's [largest donors are](#):

- Educational Foundation of America
- Pond Foundation
- John Merck Fund
- Dr Bronners Family Foundation
- Horst Rechelbacher Foundation
- Wallace Genetic Foundation
- Foundation for Deep Ecology

Have these organizations public endorsed the scorched earth record requests that you are experiencing?

[PubliusTheYounger](#)

No, but they need to find out that this is what they are sponsoring. Read this one. They are discouraging students from entering the profession, and this one is an under-represented female in our discipline. <http://kfolta.blogspot.com/2015/08/a-crisis-building.html>

Can you explain your work ? What are the pros and possible cons of your work ?

[someoneonly](#)

My research is pretty cool. We use genomics methods to identify genes associated with flavors in fruits. We use transgenics to validate our findings, then use traditional breeding to make new varieties through our breeders. My lab also studies how light can control fruit/veg quality traits.

Pros: better tasting food with higher nutrient content, that lasts longer, from better genetics and non-chemical treatments.

Cons: None I can think of.

What is your research and who funds it?

[anu_sun_god](#)

Partially copied from above for speed; My research is pretty cool. We use genomics methods to identify genes associated with flavors in fruits. We use transgenics to validate our findings, then use traditional breeding to make new varieties through our breeders. My lab also studies how light can control fruit/veg quality traits. The light work is funded by USDA and strawberry work from Florida Strawberry Research and Education Foundation. I had a student funded by CAPES (Brazil gov't) and one by Malaysia gov't and a student funded by the UF Plant Molecular Breeding Initiative.

Hi Dr. Folta, thank you for doing this AMA. What sort of outcome are you expecting from this situation? From my perspective it seems that cooperating with groups such as these can only result in negative consequences. Are you worried about what they plan on doing with this information and how it will affect your work/job?

[AnEvilToaster](#)

I am legally bound to cooperate. Withholding information is a criminal offense in my state. Outcomes? I want everyone to see how abuse of public records law only silences conversations and stops scientists from communicating with the public. That is the message. They have said for ages they want me silent. Now they can manufacture a narrative that can harm my professional (and rather sterling) reputation. It will likely not affect me much I guess, but I do hate reading about how I'm a corporate stooge when I've been a public scientist my whole life.

This will stop others from communicating about agriculture, sea level rise, climate and other issues where activists have no respect for science or scientists.

Can you give some background on the legal basis the group targetting you used to force release of all your emails? You said FOIA request, but on what basis? Is it purely due to your employment by U of Florida or were there specific government grants in your funding?

[shiningPate](#)

They need no basis. I answered questions for the public on GMOAnswers.com. I was not compensated. They exploit our state's loose transparency laws to obtain all emails, personal, private, whatever they want, and we have to provide them. It is an invasive, intrusive and chilling process to science.

Read the email I just received here. <http://kfolta.blogspot.com/2015/08/a-crisis-building.html>

Can you give some background on the legal basis the group targetting you used to force release of all your emails? You said FOIA request, but on what basis? Is it purely due to your employment by U of Florida or were there specific government grants in your funding?

[shiningPate](#)

Yes. It is 100% because they can. I have done nothing wrong, there is no probable cause. The documents released show that.

But look at the shitstorm of public opinion this has put me into. It is not fair. I just want to teach science, and they just want to stop me.

I am starting work on my Ph.D. in science this week. How do you see these activists changing the realm of science. Do you think they will influence funding, jobs, and what fields do they oppose that could see limitations later?

[carebear14789](#)

Yes. You will be crazy to engage any kind of meaningful public outreach in controversial areas in your early years. That said, be crazy. We need people reaching out about the science they understand. This has a chilling effect on science. Read my blog about an email I just received.

<http://kfolta.blogspot.com/2015/08/a-crisis-building.html>

Would you agree or disagree that the desires of the corporation can still, indirectly influence the direction of the research due to a goal agreement for "proving something true"?

Perhaps it is a failure of the current status of researcher journals, but given that the hand the funds directs the hypothesis, that the researcher must publish to graduate/get funding, and the quality of the publication is based off the significance of the finding, it would seem like there is a motivation for the researcher to find ways to support the original hypothesis rather than disproving the granter's interests.

I saw this happen several times when I was in grad school. Corporation gives PI money to "explore a relationship between x and y" and explains what they're interest is. Research doesn't support their direction. PI tells researcher to keep trying until it does. Now this wasn't anything important or nefarious, but it didn't take long for me to see the corruption in academic research. Nobody is rewarded for failing to disprove a null hypothesis.

[Diablo689er](#)

I reject the premise of your first question. It implies that scientists are willing to fabricate data due to corporate desires, and I see that as just an insane path to career death.

You failed to do your job. When you saw such corruption you should have IMMEDIATELY documented what you could and reported to your Chair, Dean, President.

If this EVER came to my desk that faculty member would be fired. Tenure or not, academic misconduct, especially involving students and potentially harming their careers, would not be tolerated. Ever.

We test hypotheses. That's it. We can't control outcomes, we just report them and integrate them into the fabric of science. I'm grateful to be the Chair of a department of people with great integrity and I do not feel I will ever have to address this concern.

What are your feelings on Whole Foods? They seem to be the most powerful anti GMO advocate, to the point they sell organic, gluten free, non GMO salt.

[Overunderrated](#)

I've never liked Whole Foods because I disagree with the elitist lifestyle message they promote. Plus I'm a cheap bastard and I'm not going to pay \$10 for a pint of soup. I shop at farmers markets, farmstands, local grocery chain (Publix here in FL). I can't stomach scaring people into expensive food choices. Sure, take money from the wealthy and stupid-- love it. But it trickles down to middle class and economically challenged families that forego other opportunities because they feed their families boutique produce and boutique processed foods out of fear. That is not a good thing and I think Whole Foods should be ashamed at raising market share using fear.

Correct me if I'm wrong, but isn't an experiment all about being reproducible?

I've never understood these people who claim that scientists are manipulating data because corporations tell them to do so. If you want to find out the truth, follow the procedure in the published journal!

[ephenstephen88](#)

You got it. Science is self-policing. Anyone doctoring results for some company would be found out fast these days, especially if in a sensitive area.

What aspects of biotechnology are they against? and why?

Also what are the names of these groups?

[Nice_Fucking_DaWgs](#)

I'm no expert on all of them, but Organic Consumers Association is funding the invasive email probe. Greenpeace, Food and Water Watch, Environmental Working Group, Center for Food Safety and many others take lots of dollars to cast doubt on sound technology. That is unacceptable.

This is why they need to stop outreach programs like mine. More educated population and scientists ready to more effectively communicate are their worst nightmare.

As an 8th grade science teacher, what is the simplest most straightforward way to battle this sort of thing that I can do? Please avoid the obvious 'teach good science.' Thanks.

[Tranesblues](#)

You have to start by asking about common concerns about food. Then you show how GM technology can help. If you start from our shared interests, the technology is much more palatable. And use me as a resource. I'm glad you do what you do, and I have tons of stuff (like ppt slides) available on slideshare.net.

Also, we can include you in our citizen science experiments-- one coming with GM corn vs non-GM to show that animals do/do not notice. Thanks.

How much of your salary is paid by florida taxpayers and how much is paid by outside funds?

[anu_sun_god](#)

100% by the State of Florida, perhaps with a tiny amount (<1%) from an NIH federal grant.

How do you think we could change the patent system so that humanity has the profit of new biotech, and not some company that kills progress and competition for financial gain...

[Aeri73](#)

Patents protect innovations and are necessary. IMHO, don't change that system. Instead, fund work

that comes from the public sector. Keep that IP in public hands and allow public scientists to be more free with its distribution and restrictions. Plus, allow the public scientists to profit and build programs for public benefit. That's my solution. I have a new technology that could be really cool, and I want it to be available and widely used. We'll see how much people fight me on its release, and it could be that partnering with a big biotech is the only solution to getting it out.

Public perception, attacks on scientists, only keep IP in the private sector.

What right did they have to mandate the release of your private emails? Surely emails between students and professors could be kept confidentially.

[hail_snappos](#)

Nope. Florida Sunshine Laws make them all accessible. To me, no big deal, I'm doing nothing wrong. However, it is a bit invasive and uncomfortable because I don't censor myself and they've obtained some choice language and other tidbits that I'm sure will be used to harm my reputation.

They have all of these privacy rights, I have none. It is really sad that they can get unlimited fuel to harm independent scientists with constructed narratives.

Dr Folta, I only post here to say that I graduated recently from UF, I'm up in Philly and seeing Florida in awesome ways like this and plates of cars I pass by, etc, it makes me feel like the gator nation really is everywhere! It fills me with a bit of pride and and gives me a bit of comfort, since I'm so far from my old home. GO GATORS, always do honest work and thank you for this AMA!

question, just in case I gotta meet a subreddit rule: ever been approached to develop superpowered turtles with italian names to fight crime?

[m3rcury6](#)

Not yet, but accepting proposals. Glad you enjoyed your time here and it is serving you well. UF is a special place.

If you work at a public university and you use university computers and a network that was built and is serviced with tax payer dollars then there is nothing "private" in its utility. Emails created on these networks are public record - every public employee knows this. That's why we all also know that "off the record" type stuff happens over the phone or in the office where conversations aren't documented.

[bombilla42](#)

(this is a copy/paste to save me some time, with an add-on) Sunshine Laws are the most open in the world. That's good. The problem is that it allows activists like USRTK to obtain all of my records and use them in bad ways, like constructing narratives that are not true. That is happening already. Plus, who among us has not had a bad day and used a four-letter word or commented on someone? These things will be public, will be broadcast tied to me, and will be used to harm my reputation or have me removed from academic research. I see it coming. I don't think that's fair. I'm glad to be transparent, but when transparency is used to harm innocent people with contrived narratives, that's bad.

You're right about the "off the record" stuff. Even though I've done nothing wrong, people don't want to be in the next email sweep. My phone calls have gone up 1000000% since this happened, which is a huge waste of time.

I tell everyone to use the damn email. It is the only way I can effectively manage communication. Keep your nose clean and your language cleaner. That's all I got.

Recently we have heard scientists like Stephen Hawkins rally to say that we have to be carefull about AI, and that it could be dangerous. I was wondering is there anything within biotechnology that we should be carefull about in the future? I guess my question is have these activists legitimate concerns? (although their actions are not alright, their concerns may be)

[Chillypill](#)

It is like any tool. Viruses could be easily engineered to do harm. There is lots that can be done. But we need to appeal to our angels here and know that most scientists that get into this see a way to help people. This is why I do it, and my record reflects that. We generate knowledge and good applications. You'll never stop dangerous people. Just don't handcuff the kind ones away from their missions.

As a scientist, I understand your interest in progressing knowledge in your field. As a US citizen living in rural Ohio, I've seen the immediate effects of monoculture farming and common

sense tells me the unprecedented rise in first-world diseases (e.g., heart disease, obesity, diabetes) is intimately linked to the food we eat. Still, there's nothing wrong with getting funded by corporations to do research as long as this funding is disclosed and adherence to the scientific method is maintained. My question is, data acquisition aside, have large GM corporations that have funded your such as Monsanto ever given you an *angle* from which to interpret your data?

[theTutorial](#)

FIRST-- MONSANTO HAS NEVER FUNDED MY RESEARCH. This needs to be clear. I have no data subject to their interpretation because they never paid for data to be developed or interpreted.

They gave me an unrestricted gift to run my outreach program. This is renting a venue, travel, donuts, coffee, a rental car, maybe a night on the cheapest hotel on Hotwire. It is so I can teach farmers, scientists and others to talk about science, as well as educate kids and college students about science and science communication.

Are you saying industry is not influencing scientific research? Perhaps you mean to say you, yourself, are not being influenced. Which industries and companies are actually influencing which scientists and why. Because I cannot accept the assertion that scientists who accept funding or favors from corporations are not influenced, and I don't think it's right to come on an ama as a squeaky clean scientist when it only serves to obscure the misdeeds of others who wouldn't dare present themselves for examination.

[zxcvbnm9878](#)

Then you need to provide evidence of such influence. Frankly, I can't think of any scientist I know that would blow a career because of a few shekels from some damn company. If anyone in my dept, where I'm Chair, bent the rules because of corporate influence, I'd do everything in my power to have them fired.

Such actions are career suicide, they always come out, and it is wrong. It would not happen on my watch.

Professor, What is your opinion on GMO labeling? I'm trying to form an opinion on it and I thought that someone who is very knowledgeable on the subject would help. One one hand, it helps make buyers aware of what they're buying, but on the other hand, buyers would have an outrage over the lies about GMOs.

[KimJong_Bill](#)

Your second point is spot on. The main reason I don't like it is because we should label products, not processes. In other words sugar from a GM sugar beet is the same form a conventional one, so why label it?

The FDA also mandates labels for anything dangerous. That is on the books now.

Also each state has different definitions, exemptions and rules. It would be a mess to distribute food and would exacerbate scarcity and waste.

Many other reasons.

Also, people really worries about it have choices. They can buy organic or non-GMO Project. That way their fear does not become my burden.

While I detest anyone who attempts to somehow delay any scientific advancement and the public's knowledge on scientific subjects, wouldn't you agree that if this weeds out those more interested in personal gain rather than science itself, it could bring some good along with the bad?

[Zallarion](#)

Not too many people get into public science for personal gain. Companies pay better and you never write grants. It is looking pretty good to me today, honestly. Sometimes the public does not deserve us. That kills me to say that, but when I read about how we're all crooks and frauds, I don't know why I bother investing my energy there. Maybe I should just go to industry, get out of education, take vacations and lunches, and count the cash.

Did you not know university email is public record? Why were you using university email for personal use?

[MittensRmoney](#)

Always use for personal use. I don't have the personal bandwidth to use multiple accounts, crazy servers. It is what it is. I can do this because I choose to do this honestly and cleanly. I've been told that I can delete certain things, but choose not to. It is all there, don't need the allegations.

Many scientists I interact with believe their duty to science stops with *performing* science, and that the usefulness or promotion of their results is outside their scope. Those who do have an interest in using science for gain have capitalized on that void (after all, we are a capitalist society).

Do you really believe scientists have no obligation to try to make their results useful to industry when industry is footing the bill? Why accept private money at all if the desire is to have completely clean hands?

If you're going to accept private money, aren't you by definition moving science into the realm of polarized politics? How can you have it both ways?

[potatoisafruit](#)

I can have it both ways. Damn right I can. My teaching and outreach in ag biotech goes back 14 years before anyone funded anything. The message has not changed and remains 100% consistent with the peer-reviewed literature. I discuss strengths and weaknesses, risks and benefits, and all of my talks are freely available. The only thing any funding does is allow me to do more of it. That's all. It makes sense that companies that rely on science would want more science communication, and industries that profit from denying science would want to stop it. That's why we are here today.

Nobody tells me what to say, nobody tells me where to say it. That's my decision, always will be, and if they ever tried to manipulate me I'd throw them under the bus in a heartbeat.

There was an effort by the folks running GMO Answers to supply me with helpful guidelines in answering questions. I thought it was offensive, unprofessional and I did not accept their assistance. Since then they do not furnish me with anything except questions to answer.