Monsanto Offered \$10M To Prove GMO Safety: Monsanto Never Shows...

Monsanto can't prove GMO safety standards





On Monday December 21, students from Livingston High School joined Dr. Shiva Ayyadurai, an American scientist with a PhD in systems biology from MIT, to debate the 'safety' of GMO crops. Monsanto was invited to come and prove that there are indeed GMO safety assessment standards (http://naturalsociety.com/united-nations-doctor-outlines-5-key-gmo-dangers-in-recent-talk/), and was even offered a \$10 million enticement to send representatives to argue its side. But the company was entirely absent from the event. [1]

Dr. Ayyadurai had offered Monsanto a healthy prize for proving their GM crops such as soy, corn, or cotton had adequate safety standards.

"If Monsanto can disprove the fact that there are no safety assessment standards for GMOs, the conclusion of our fourth paper, then I will give them my \$10 million building," Ayyadurai had told the press. [2]

Dr. Ayyadurai is the lead author of four papers that used a computational systems biology approach to analyze the effects of the genetic engineering process on key biochemical pathways affecting plant physiology. The results predicted that the carcinogen formaldehyde could accumulate in the GM soybean (http://naturalsociety.com/study-gmo-soy-accumulates-cancer-causing-formaldehyde/) plants, with concomitant depletion of the antioxidant glutathione, but not in the non-GM plants. [3]

"This is not a pro- or anti-GMO question," Ayyadurai wrote in his abstract. "But [rather], are we following the scientific method to ensure the safety of our food supply? Right now, the answer is no. But we need to, and we can if we engage in open, transparent and collaborative scientific discourse, based on a systems approach."

With \$10 million on the line, Dr. Ayyadurai said, "prove me wrong." Does Monsanto's absence mean it can't?



The debate had a good turnout, with many hearing Ayyadurai's points about the need for more safety testing for GMOs. He and his colleagues, including LHS students and Science Supervisor Brian Carey, shared what they have learned through their research on GMOs. Too bad Monsanto didn't RSVP.

Here is an interview held by GMWatch in November:

"GMW: You said "there are no safety assessment standards for GMOs". But here in Europe we do have safety assessments for GMOs, albeit they are weak.

Dr. Ayyadurai: I'm talking about *standards* for testing the material difference or equivalence of GMO vs. non-GMO. A claimed lack of difference is used to assert that GMOs are "substantially equivalent" to non-GMOs and therefore safe. But objective standards to measure equivalence or difference do not exist. This is explained in the conclusion of my paper (http://www.scirp.org/journal/PaperInformation.aspx? PaperID=57871&#abstract), "Do GMOs accumulate formaldehyde and disrupt molecular systems equilibria? Systems biology may provide answers."

GMW: Do you think you need to clarify your meaning to Monsanto? Otherwise they could cite safety assessment requirements in one country to prove that they exist – and claim your \$10 million building!

Dr. Ayyadurai: I think in the context of the research we just completed, it's quite clear what we mean. We are talking about standards, not "requirements". A standard provides rigorous protocols, processes and procedures: for example, what ingredients should be in the soil and what kind of chemical assay should be done to measure whether that GMO is "materially different" from, or "substantially equivalent" to, its non-GMO counterpart. More importantly, any independent lab should be able to execute those standards, so the results would be reproducible, not just behind closed doors at Monsanto or by a university professor they have funded.

GMW: Your papers use computational systems biology to predict that formaldehyde could accumulate in GM soy plants. Why didn't you test some to see if the prediction was true?

Dr. Ayyadurai: An important point related to this question is that our predictions are not "just a model" we made up using mathematics. The research is based on amalgamating the molecular pathway interactions derived from 6,497 actual wet lab tests, conducted across 184 institutions in 23 countries. The systems biology method integrates those pathway interactions to develop a whole systems understanding of the effects of genetic modification.

We definitely want to do testing to validate the predictions, but it's difficult. First, as we explain in our paper (http://www.scirp.org/journal/PaperInformation.aspx? PaperID=57871&#abstract), it is difficult to obtain the research materials – the GM and non-GM crops grown side-by-side in the same conditions – in an objective and independent manner, while ensuring legal compliance. We are actually in the midst of trying to get samples. The second reason is that, given the current environment, any

testing done by either proponents or opponents of GMOs will be contested since there are no agreed standards for conducting such testing to compare a GMO with its non-GMO counterpart.

GMW: Isn't your challenge to Monsanto just a publicity stunt?

Dr. Ayyadurai: The difference or equivalence between GMOs and their non-GMO counterparts goes to the heart of the GMO safety issue. This challenge aims to bring the issue forward in a manner that helps the public and scientists to see it clearly. If anything, Monsanto has been doing publicity stunts by paying off academics, while spending tens of millions in advertising to brainwash us with beautiful images of African and Indian children frolicking in open fields of flowers, etc., to make us believe that GMOs are safe, while manipulating mainstream media to claim that safety standards for GMOs exist and that the organizations such as the US FDA have determined and assessed the safety of GMOs in the market. This is not true; thus, the challenge." [3]

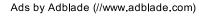
Source:

- [1] Livingston (http://www.livingston.org/site/default.aspx? PageType=3&DomainID=1&ModuleInstanceID=3007&ViewID=047E6BE3-6D87-4130-8424-D8E4E9ED6C2A&RenderLoc=0&FlexDataID=69928&PageID=1)
- [2] RT (https://www.rt.com/usa/321802-monsanto-gmo-safety-standards/)
- [3] GMWatch (http://www.gmwatch.org/news/latest-news/16522-scientist-challenges-monsanto-over-gmo-safety-standards)



(https://shop.naturalsociety.com/product-category/preparedness)

Trending Articles and Offers











(http://web.adblade.com/clicks.pl (http:

absent-from-gmo-debateoffered-by-mit-biologist-toprove-genetically-modifiedcrops-are-not-safe%2F)

'Skinny' Pill Takes India By Storm...

absent-from-gmo-debategist-tooffered-by-mit-biologist-tonodifiedprove-genetically-modifiedcrops-are-not-safe%2F)

India By

Wanna Know How to Make

Rs. 6,302/Day

absent-from-gmo-debateoffered-by-mit-biologist-toprove-genetically-modifiedcrops-are-not-safe%2F)

Become 6 shades fairer naturally with this

absent-from-gmo-debateoffered-by-mit-biologist-toprove-genetically-modifiedcrops-are-not-safe%2F)

These Celebrities changed our lives forever, but left too









(http://web.adblade.com/clicks.pl (http://web.adblade.com/clicks.pl (http://web.adblade.com/clicks.pl (http://web.adblade.com/clicks.pl

appld=15390&zid=54b6a71164a& appld=15390&zid=54c6579bdc2 appld=15390&zid=54c65d1d897! appld=15390&zid=554a6e0520c

absent-from-gmo-debateoffered-by-mit-biologist-toprove-genetically-modifiedcrops-are-not-safe%2F)

These 12 super foods speed up your weight loss and can

absent-from-gmo-debateoffered-by-mit-biologist-toprove-genetically-modifiedcrops-are-not-safe%2F)

These are the most toxic places on earth. You'll never

absent-from-gmo-debateoffered-by-mit-biologist-toprove-genetically-modifiedcrops-are-not-safe%2F)

These celebs will motivate you to want to work out!

absent-from-gmo-debateoffered-by-mit-biologist-toprove-genetically-modifiedcrops-are-not-safe%2F)

Can you have 20/20 Vision again without surgery?

About Christina Sarich:



Christina Sarich is a humanitarian and freelance writer helping you to Wake up Your Sleepy Little Head, and See the Big Picture. Her blog is Yoga for the New World. Her latest book is Pharma Sutra: Healing the Body And Mind Through the Art of Yoga.

Other Popular Stories:

- 1. Study: GMO Soy Accumulates Cancer-Causing Formaldehyde (http://naturalsociety.com/study-gmo-soy-accumulates-cancer-causing-formaldehyde/)
- 2. New Study: GMO Soy Accumulates Cancerous Formaldehyde (http://naturalsociety.com/new-study-gmo-soy-accumulates-cancerous-formaldehyde/)
- 3. Report: 81% of GM Crops Approved Without Adequate Safety Studies (http://naturalsociety.com/81-gm-crops-approved-scientific-safety-studies/)
- 4. World Health Organization Only Requires 90 Days 'Safety Testing' on GMOS (http://naturalsociety.com/world-health-organization-only-requires-90-days-safety-testing-on-gmos/)
- Totally Safe: China Greenlights Monsanto's RoundUp After Hiding Safety Studies From Public (http://naturalsociety.com/china-registers-monsantos-roundup-halting-younger-labs-toxicology-tests-refusing-release-lab-results-public/)
- Consumer Reports Poll Shows 92% of Citizens Want Strict GMO Regulations
 (http://naturalsociety.com/national-consumer-reports-poll-shows-92-citizens-want-strict-gmo-regulations/)