CREATING COLLABORATIVE PARTNERSHIPS BETWEEN INDUSTRY AND UNIVERSITIES TO SOLVE COMPLEX AGRICULTURAL PROBLEMS

Catherine W. Shoulders, University of Arkansas
Valerie N. Bayes, Monsanto Company
Brian E. Myers, University of Florida
Robert Terry, Jr. Oklahoma State University
Debra Spielmaker, Utah State University
Monica Pastor, University of Arizona Cooperative Extension
LEAN FINELY TEXTURED BEEF

“WE’RE PROUD THAT TODAY WE CAN DERIVE MORE BEEF FROM A BEEF ANIMAL WITH LESS WASTE.” – MEATSAFETY.ORG, 2018
“[INDIA] HALTED INDEFINITELY THE COMMERCIAL CULTIVATION OF GENETICALLY MODIFIED EGGPLANT.” – WALL STREET JOURNAL, 2010
“THOUGH THE USDA CONSIDERS THE PRODUCT SAFE FOR HUMAN CONSUMPTION, MCDONALD’S, BURGER KING, AND TACO BELL PUBLICLY RENOUNCED IT AND PUBLIC SCHOOLS...STOPPED SERVING IT FOR LUNCH.”

– JOHN SUNBURN, TIME MAGAZINE, 2014
SEEDS OF MISTRUTH
HOW FOOD MYTHS GO VIRAL

On social media, it's shockingly easy for poor science related to food, advocated by a single researcher or influencer, to spread into a "hive mind" of misinformation, causing people to make dietary decisions based on half-truths or even paranoia.

JANUARY 2012
Study published in the Journal of Diabetes, Metabolic Syndrome and Obesity claims that "significant reductions were observed in body weight in people who consumed a commercial green coffee bean extract."

APRIL 2012
Dr. Oz (with 25 million viewers) touts green coffee extract pills as a secret weight loss "miracle pill"

REMAINDEER OF 2013
350 thousand total tweets, reaching 271 million people, celebrated the new "miracle pill"

JUNE 2013
Media starts questioning the credibility of the research, which:
- Had sample size of 16
- Included no control group
- Had a principal investigator who didn't conduct the actual research

AUGUST 2013
Dr. Oz conducts an on-air clinical trial to validate the original research, failing to obtain ethical approval prior to conducting research on human participants.

JANUARY 2015
The Federal Trade Commission files a claim, and the study is retracted. By this time, $60M of extract pills had been sold.

UNCONFIRMED DATE
DoctorOz.com removes the original segment and the on-air trial from the website.

TODAY
People keep repeating the studies show incredible natural weight loss from Green Coffee Extract.
- July 4, 2015

- "Painless Diet: Pure Green Coffee Bean Extract for weight loss."
- July 5, 2015

- "Green Coffee Bean is great for weight loss."
- July 13, 2015

International Food Information Council Foundation
PILOT A COLLABORATIVE “THINK TANK” BETWEEN INDUSTRY AND UNIVERSITY FACULTY TO CREATE A MULTIDIMENSIONAL, INTERDISCIPLINARY VENTURE TO COMBAT PSEUDOSCIENCE IN AGRICULTURE.

Tribes Self Organize by Interest

Agriculture

Computer Techno

STEM

Food Minded

Pragmatic Environmentalists

Skeptics
THE PROCESS

Identify Experts Within Tribes
April 28 at 5:21pm

I enjoyed presenting “The Science of a GMO” to the Region 1 NAAE (ag teachers) conference today. If there are any teachers here that’d like to present at a summer conference, let me know! I’d love to pass on the workshop info. It went great!

May 10 at 4:09pm

Just wanted to share a project we’ve been working on, helping students to experience modern agriculture with technology...
http://oregonaitc.org/oregon-map (Be sure to check out the videos on the right!)

January 20

All, I found another cool resources to share with you. Take a look at how students at Univ of Nebraska are telling the science of ag story.

STREAMINGSCIENCE.COM

Streaming Science

Bringing the science directly to you!
Folks...think we can get together on an idea for this?? Comment below if you're interested in a brainstorming session!

NSF.GOV

Advancing Informal STEM Learning | NSF - National Science Foundation

NSF’s mission is to advance the progress of science, a mission accomplished by funding proposals for research and education made by scientists, engineers, and educators from across the country.

LEGIS.GA.GOV

SB 243 2017-2018 Regular Session

A BILL to be entitled an Act to amend Article 6 of Chapter 2 of Title 20 of the Official Code of Georgia Annotated, relating to the Quality Basic Education Act, so as to provide that the agricultural education program is based on a three-component model; to provide for a pilot program to develop and...

I want to conduct a learning experience with my students in which they think about the tribes to which they belong and, consequently, how these tribes influence decisions related to food literacy. Does anyone have a helpful resource describing what a tribe is and how it functions in modern society (as opposed to a traditional definition of tribe)?

Hey all 😊 I’ve been coming across major sources of curriculum for agriculture educators, and I thought I could make a list and post it here. Perhaps we can find a way to get more inquiry based instruction in classrooms through the sources that are reaching a large number of instructors? Not sure who among you could use the list, but it seems valuable; you know- things lead to things 😊 If you have any in mind, please pm me and I'll add it before posting within the next few weeks. Hope everyone is doing well!
Hey all! Deb and I will be at the NSTA conference next week in Atlanta, GA. I am looking through the program here and a couple of things are coming to mind:
1. The Univ of FL College of Edu will have a booth there- do you know who is managing that?
2. The Univ of NE (but Kearney) will be there, any idea who that could be?
3. UGA 4-H will be there, do you know who that will be? Also, are you near Atlanta? Do you want to get dinner with Debra and I one night?

Thanks all!

March 22

Update: Hello all! The 30 min Follow Up calls are going well. I am so thrilled to hear the enthusiasm around your interest in working on some of the team projects proposed. After I have connected with everyone I will send an updated goals/project email.

Would you mind sharing some of the things you’re working on?
Hey group! Here to share some good news. This is my kiddo. Yesterday he competed in the County Farm Bureau speech competition. The assigned topic: “How has the introduction of agricultural mobile apps impacted the agriculture industry?” His speech opened with Climate Fieldview. Out of 11 competitors, he won!! It takes a hive, everybody 😊

Hello all. I wanted to share some exciting updates with the group.
1. [Name] proposed and coordinated a Skeptics in the Pub night featuring Dr. Larry Gilbertson from Monsanto Company who will be talking about GMOs and Gene Editing in Agriculture. Followed by a Ask Me Anything Q&A.
2. [Name] wrote and submitted a proposal for the NACTA conference titled, “Creating Collaborative Partnerships between Industry and Universities to Solve Complex Agricultural Problems”. The proposal was ACCEPTED! And the reviewer comments were very positive.
3. [Name] was instrumental in spearheading a viewing of Food Evolution at University High School during FFA week.

Great work all! Feel free to expand on these highlights in the comments. Keep the highlights coming so I can track the progress we have been making.
April 1

AH YES, THE FIRST OF APRIL

THE ONLY DAY OF THE YEAR THAT PEOPLE CRITICALLY EVALUATE THINGS THEY SEE ON THE INTERNET BEFORE ACCEPTING IT AS TRUE

January 31 - Stillwater, OK

Wanted to report this pseudoscience!

The Skinny Cow

February 9

DON'T THINK GMOS ARE BAD?

LOOK WHAT THEY'VE DONE TO THIS DUCK. THANKS MONSANTO
YOU’RE PART OF THE OUTCOME!

If you’d like to join in the conversation, please contact one of us!

Dr. Kate Shoulders  
University of Arkansas  
cshoulde@uark.edu

Dr. Brian Myers  
University of Florida  
bmyers@ufl.edu

Dr. Rob Terry  
Oklahoma State University  
rob.terry@okstate.edu

Ms. Valerie Bayes  
Monsanto Company  
Valerie.n.bayes@Monsanto.com