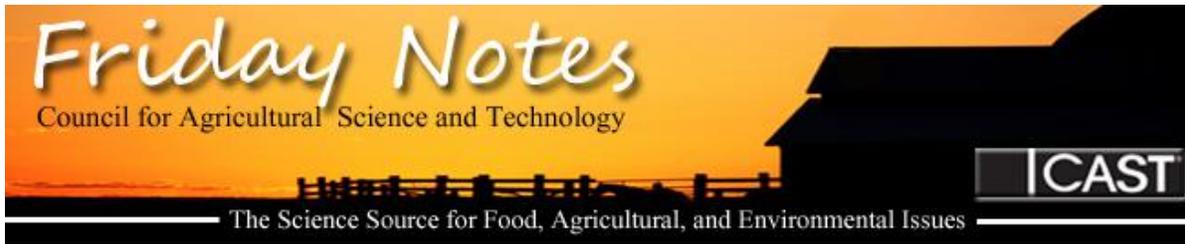


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Friday Notes is designed to enhance communication among various agricultural sectors, educators, students, and the public who are interested in a variety of plant, animal, food, and environmental issues. *Friday Notes* advocates the pursuit of credible, unbiased, science-based information. Material contained in linked articles is from the original authors and does not necessarily reflect the views of CAST.

In This Issue..... [Click to Read](#)

[BCCA Winners Represent Science and Agriculture--P. 2](#)

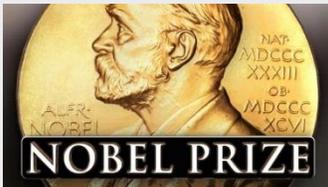
[Animal Agriculture News](#)

[Food Science and Safety News](#)

[Plant and Environment News](#)

[International News](#)

[General Interest News](#)



The [2018 Nobel Prize winners](#) are listed here.

Mizzou Nobel Connection

George Smith, emeritus professor of biology at the University of Missouri-Columbia, won the [Nobel Prize in chemistry](#) for developing a technology that could help treat autoimmune diseases and cancer.

USDA Input

USDA/NIFA is [hosting stakeholder listening opportunities](#) at locations across the United States. Input from these sessions will be used to help prioritize research, extension, and educational initiatives.

Enhancing Productivity in a Changing Climate

The American Society of Agronomy, Crop Science Society of America, and Canadian Society of Agronomy will host approximately 2,500 [scientists, professionals, educators,](#)

October 12, 2018

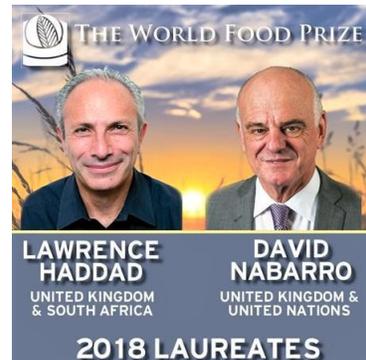
Agriculture on Center Stage

CAST involved with global efforts at World Food Prize

With so many award shows on television, it is surprising there is no award show specifically honoring award shows. But for those involved with feeding the world, the highlight comes with the [annual World Food Prize](#)--what some call the "Nobel Prize" of agriculture. On October 18, [Dr. Lawrence Haddad and Dr. David Nabarro will receive the 2018 World Food Prize](#) for their global leadership in elevating maternal and child undernutrition to a central issue at national and international levels.

The week-long gathering in Des Moines, Iowa, will involve many events, including the [Borlaug Dialogue--Rise to the Challenge](#).

The Council for Agricultural Science and Technology is actively involved with the proceedings, including the October 17 morning event honoring the 2018 Borlaug CAST Communication Award winner, Marty Matlock. [Click here for details and an invitation to the event](#). CAST has sponsored the award for the past nine years, and the recipients--from last year's winner, Jayson Lusk, to the first laureate in 2010, Akin Adesina--have been beacons of research, scholarship, and communication in the ag/science world. [Scroll to page two below](#) for more about these illustrious BCCA winners.



News and Views

The Heat Is On: A Nobel Prize-winning panel issued a gloomy report about [global warming and the challenges](#) it creates, and a new study quantifies how [food production and consumption](#) affect the planet.

[and students at the 2018 International Annual Meeting.](#)



Your Ideas Welcome

CAST [welcomes suggestions](#) for future publications and projects.

Sustaining the Wildcats

October has been designated as [Campus Sustainability Month](#) at the University of Kentucky.

STEM in Reno

The University of Nevada-Reno will host its [STEM Career and Internship Fair](#) in February of 2019. Check here regarding attending or sponsoring.



Catch CAST Online!

Follow us on [social media](#) to stay up to date on the latest ag trends and recent CAST news!

Waste, Loss, and Remedies: The two reports above generate discussion and controversy, but most everyone agrees that reducing food loss and waste will benefit us all. Click here for a recent CAST [blog that provides information](#) about this issue, and click here for free access to the [CAST Issue Paper, Food Loss and Waste](#).



Administration's Ethanol Announcement: Corn farmers are [optimistic about the E-15 announcement](#), but many are waiting to see what unfolds.

A Destructive Harvest Wind: Hurricane Michael ravaged many states, and reports about [its effects on agriculture](#) continue to come in.

News from the Far Side of the Barn

The Season of Thankfulness (video): This video highlights why we should [be thankful for farmers and scientists](#).



Dazzling Display (video): Utah has [gained national attention](#) with its beautiful fall colors.

Perfectly Timed Pics: Animals are [unpredictable and therefore hilarious](#).

Maybe pigs can't yet fly, but as this video shows, tourists in the Bahamas [find out they can swim](#).

Communication in Focus

Marty Matlock will join prestigious group of influencers



On October 17, CAST and CropLife Foundation will host a [morning event at the World Food Prize to honor Marty Matlock](#)--the 2018 BCCA winner. Dr. Matlock's research focuses on technologies and processes to increase the resilience of ecosystems. His interdisciplinary work has been praised and honored, and he coordinates a variety of programs at the University of Arkansas.

Matlock will speak at the event with the topic "The Promise of Prosperity from the Land in the 21st Century." A panel discussion--hosted in conjunction with the American Society of Agricultural and Biological Engineers and the American Society of Agronomy--will follow: "Global Sustainability for a Vibrant Earth."

BCCA Winners Continue to Make an Impact

If an award includes the words "Borlaug" and "communication," it has to live up to the hype. The Borlaug CAST Communication Award has done just that. The honor is presented annually for outstanding achievement by a scientist, engineer, technologist, or other professional working in the agricultural, environmental, or food sectors for contributing to the advancement of science in the public policy arena.

[All of the laureates](#) have shown that science and research are important, but they also know that communication is essential. They "walk the walk" in various ways as they promote global food security. Check their websites and social media activities to gain from their insights.

For example:

Jayson Lusk, the 2017 laureate, [uses blogs](#) and other forms of media to advocate for science as he explains how innovation and growth in agriculture are critical for food security and global progress.

Alison Van Eenennaam, 2014 winner, was recently featured in a profile that points out her prominence in the fields of livestock breeding and biotechnology--and her [tireless advocacy for getting the science right](#).

Akinwumi Adesina, a [strong proponent for agriculture in Africa](#), was the 2010 BCCA winner and selected as the 2017 World Food Prize Laureate.



Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 Nobel graphic from WILX.com, WFP winners' photo from dtnpf.com, pig pic from islandroutest.com. Animal Sec. snake pic from bioengineering.dtu.dk. Food Sec. burger pic from farandwide.com and Amilton photo from Theresa Danna-Douglas. Plant Sec. cartoon from pinterest.com. Inter. Sec. moon announcement photo from bbc.co.uk. General Sec. robot pic from farmjournalagtech.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News



Researchers have [cracked the code on producing experimental snakebite anti-venom](#).

Cool & Calm Cows (video): The University of Florida is looking to breed cattle possessing genes that [regulate their body temperature more efficiently](#), resulting in less milk and meat loss.

enhancing the quality of treatment and avoiding the severe and rarely lethal side effects of the remedy.

Confronting a Hog Disease: African swine fever has generated nervousness among pig professionals. This link provides 10 [key points about the disease](#).

Improving Poultry: Brazilian researchers have [discovered new genes for the selection of healthier chickens](#) with more meat and less fat, thus making better use of feed nutrients.

Happy Crew, Happy Cattle: A recent Texas A&M study tested the impact feedlot employees' empathy toward cattle, positive relationships with coworkers, and high job satisfaction [have on animal welfare and handling](#).

Welfare Research: Click here to access [the CAST publication](#) *Scientific, Ethical, and Economic Aspects of Farm Animal Welfare*.

A Picture Book Promoting Pork: A new fiction book by children's author Katie Olthoff will help [tell the story of raising pigs](#) on a modern Iowa farm.

Healthy Animals, Healthy World: Jeff Simmons, president of Elanco and [2013 BCCA laureate](#), says that a healthier world [starts with healthier animals](#).



Food Science and Safety News

Wine Country Wildfires (podcast): A year ago, California's wine country went up in smoke, leaving an opportunity for [vintners and viticulture specialists to seek a solution for smoke taint in wine](#).

Food Irradiation: The CDC estimates that 48 million people get sick from food poisoning annually. [Some believe that food irradiation could help](#) with this problem.

"I Can't Believe It's Really Butter": The American Butter Institute says the USDA should take action against butter substitutes that--according to them--violate the agency's [labeling requirements](#).

Confusion Remains: *GMO Answers* recently released a survey showing most [Americans remain confused about GMOs](#), despite an overwhelming health and safety consensus among experts.

Coffee Caffeine Kick: An Australian study investigating five popular types of coffee-brewing methods has found that [espresso contains the highest concentration of caffeine](#).



Honors for Food Safety and Research: Dr. Amilton de Mello's study of pathogens at the University of Nevada-Reno has led to new methodologies to reduce illness-causing bacteria in meats. He also developed the Bonanza Cut, a succulent piece of meat offering the industry a profitable new product. His expertise has led to an [appointment to the National Advisory Committee on Meat and Poultry Inspection](#).



Styles range from avocado to wagyu to "trick dog," but this photo essay claims these are the [best reviewed burgers from across America](#).



Plant Agriculture and Environmental News

The "Miracle Tree" (video): Although more studies are needed, UC-Davis researchers show that moringa has [potential to be a contributor for a healthful and sustainable food supply](#).

Working with Wax: Researchers at Iowa State believe [soybean wax can be used as a coating for cardboard boxes](#)-- an environmentally friendly alternative to paraffin wax.

Soil and Global Warming: Soil microbes get more active in warmer temperatures, causing increased CO2 emissions. This [study indicates that in prolonged warming](#), the amount of microbial biomass decreases, balancing the effect.

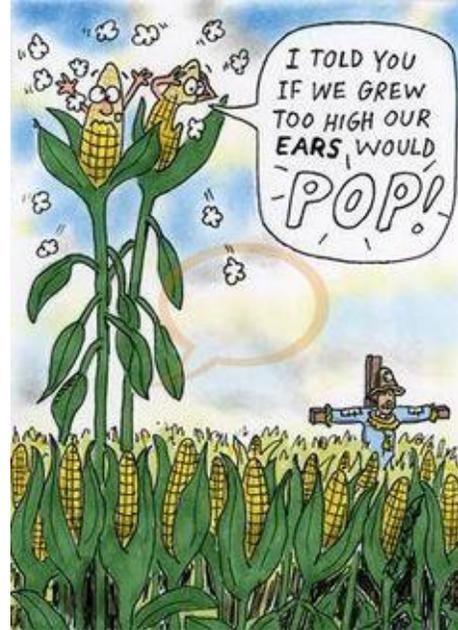
Cancer and Chemicals (opinion): This ACSH editorial says that [those who accept science](#) must accept that Roundup does not cause cancer. Note: A San Francisco [judge will order a new trial](#) in a \$289 million judgment regarding Roundup and cancer.

Weeds at Harvest Time: The USDA suggests these harvesting tips to [control weeds in the fields](#).

Drivers of Corn Photosynthesis: A University of Illinois study shows how the [tiny pores found on the leaves of corn plants open and close](#) in response to internal and external cues.

Grapes Aid in the Fight against Cancer: A molecule present in [grape skin and seeds has shown promise as protection against lung cancer](#) when administered nasally.

Striving To Be the Unbiased Information Source: North Carolina State experts are making changes designed to provide growers with faster [access to more robust crop data](#).



Scientists have boosted a carbon-craving enzyme [to turbocharge photosynthesis in corn](#)--a key step in improving efficiency and yield.



International News

Cutting the Baby Loose (video): It took two hours to free a newborn humpback [whale from a shark net](#) off Australia's Gold Coast.

Goat Fire Fighters (video): Wildfires rage in many countries, but this project in Spain uses a simple way to [stop the flames taking hold](#) in the first place.

Seed Access (video): This international project in Burundi seeks to improve the seed sector and ensure farmers' [access to quality seeds at an affordable price](#).

Fighting Hunger: The Food and Agricultural Organization reported that [the number of hungry people in the world is increasing](#) rather than decreasing--reasons are varied and unpredictable.

Raw Milk in Kiwi Land: The New Zealand government is [reviewing a law that limits raw milk sales](#) to registered dairy farms where gate purchases and home delivery are permitted.

Bacon Abroad: Take [a quick trip to the United Kingdom](#) to see if British bacon is different from American bacon.

Fly the Environmentally Friendly Skies: The government of Norway says that any airline operating in the country will now be required to use more environmentally friendly [jet fuel mixed with biofuel](#).



Fly me to the Moon? A Japanese billionaire is the [first person to buy a ticket](#) for the proposed 2023 mission to the Moon.



General Interest News

A New Approach to Teaching STEM (video): Test scores, class attendance, and participation have improved since [these Iowa State professors switched to a team-based learning approach](#) as part of an initiative to retain students in STEM majors.

Labor Demand and Aging Farmers: According to this U.S. Commerce Department report, nearly 20% of the [people who work on farms are not the owners](#)--a rise from 15% twenty years ago.

He Is in the "Kid Business": As he starts his 40th year of teaching agriculture in Oklahoma, this instructor says ["there is no greater calling."](#)

Food Ventures: Food entrepreneurs in New York are getting a big boost from [advanced technologies and facilities now available](#) at the Cornell Food Venture Center.



This Silicon Valley [startup is using robotics and AI](#) to "grow better foods."

Testing Tusks: Scientists developed a method of identifying where an elephant was living when it was killed by poachers through [the analysis of tusk DNA and matching it to a map](#) of sequenced elephant genomes.

The Power of Advocacy: This Ohio State University professor explains [the benefits of advocating face-to-face with consumers](#), and she shares a few tips she uses when speaking with students and farmers.

Snow, Water, and Climate: An estimated three-quarters of the water used by farms and ranches in California originates as snow in the Sierra Nevada mountain range--[climate change might be affecting this situation](#).

CAST Information

Check out CAST's page at the [YouTube site](#) to view highly regarded ag-science videos about probiotics, food safety, and water issues--or the latest video dealing with proposed mandatory labeling of GMO food items.



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- * American Farm Bureau Federation
- * American Meat Science Association
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- * Innovation Center for U.S. Dairy
- * Land O'Lakes
- * Monsanto
- * National Corn Growers Association/Iowa Corn Promotion Board
- * National Milk Producers Federation
- * National Pork Board
- * North Carolina Biotechnology Center
- * North Central Weed Science Society
- * Northeastern Weed Science Society
- * Poultry Science Association
- * Society for In Vitro Biology
- * Soil Science Society of America
- * Syngenta Crop Protection
- * The Fertilizer Institute
- * Tyson Foods
- * United Soybean Board
- * Weed Science Society of America
- * Western Society of Weed Science



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