**Opportunities for Women in STEM**
*Recent research on women in science-related careers*

STEM jobs in the United States are growing twice as fast as other fields. This huge growth has created a situation in which demand for qualified STEM professionals is high, but the supply for qualified workers is low—especially among women and minority groups. As the school year ends, many college and high school graduates are preparing to embark on the next chapter in their lives—but how many of them will choose a path in science, technology, engineering, or mathematics?

This podcast features Alabama meteorologist, Jill Gilardi, who shares her story behind discovering her passion for weather, science, and the outdoors as well as the obstacles she faced throughout her journey. Jill believes that although there are opportunities for women to become involved in STEM, there seem to be less women interested in pursuing these types of careers.

This article uses data from recent research studies as well as personal opinion to study a so-called “gender-equality paradox” among multiple countries that may hinder women from pursuing STEM-related careers. And this economist provides six strategies to help women achieve success in any given field regardless of their gender or work environment.

It is obvious that many strides have been made to equal the playing field for women in STEM, but there is still a way to go. Graduates, as you begin the next chapters of your life, reach for the stars, work hard, and never let small obstacles get in the way of achieving your goals.

**News and Views**

**Consumer Trust Is Increasing:** According to a recent survey by the IFIC Foundation, U.S. consumers are putting more trust in government agencies when it comes to food and nutrition information.

**USDA Seeks Comments:** The USDA is seeking comments on a proposed rule that will provide a uniform way to offer meaningful disclosure for consumers who want more information about their food.
Top Ten Reasons
This Texas Tech University student came up with a list of reasons why your child should join FFA or 4-H.

Ag Data Act (opinion): A bipartisan bill could help policymakers and the public understand that evolving farm practices are benefiting something they care about--the environment.

News from the Far Side of the Barn
Aquarium Love Stories (videos): Go behind the scenes of Georgia Aquarium with these ten remarkable episodes.

"Wheeler Heeler" (video): After his accident, this dog had no trouble standing on his own two feet.

Oh Deer (video): A man looking for mushrooms ended up discovering something incredible--conjoined twins.

Have you ever wondered how to tell the sex of an alligator? Check out this video if you're interested!

May: The Month of Planting and Protein
It's hard to believe we are already halfway through the month of May. As farmers get closer to wrapping up this year's planting season, it seems like an appropriate time to mention just how important this month is to the agricultural industry. Not only are farmers planting seeds in hopes of a bountiful harvest later this fall--but we also pay tribute to several commodity groups and the individuals who work tirelessly to provide a healthy, nutritious product for our dinner plates.

In this week's blog, CAST's Communications and Social Media Specialist, Kylie Peterson, celebrates National Beef Month and National Egg Month by featuring recent research articles that highlight these important protein sources. Click here for access to the full blog.

For the remainder of the month, Kylie encourages you to find ways to get involved and salute these delicious and nutritious sources of protein. Fire up the grill to cook yourself a juicy steak, add eggs to your diet, share your story from the farm to help educate others, or schedule a visit for some hands-on learning. Whatever you choose, let's celebrate the power of protein!

Summary of Activities
As CAST consistently works to implement the 2016-2020 CAST Strategic Plan, one of the critical areas identified was improving communication of CAST activities and events. The CAST Summary of Activities for January-May 2018 highlights recent publication releases, the annual report, board updates, and the Borlaug CAST Communication award announcement.

As you can see from the summary, the beginning of 2018 has been very productive. We anticipate continued success for the remainder of the year with the rollout of several publications; CAST's Annual Meeting in Sacramento/Davis, California (October 23-25); and the 2018 Borlaug CAST Communication Award event in October.
Friday Notes News Categories


Animal Agriculture and Environmental News

The First Robot Rotary in the U.S. (video): This technology has been in place in Canada for several years, but just recently received approval in the U.S. The Hoffmans have seen great return on their investment.

On-farm Salmonella Control (video): According to this Mississippi State professor, contaminated chicken feathers and feet may be the primary vectors for transmitting Salmonella from poultry houses to processing plants.

Pigs Present Potential Risk: According to new research conducted at Ohio State University, this porcine virus raises concern for potential human health implications.

Live Yeast in Cattle Diets: Italian and French researchers have been studying the use of live yeast in a high-concentrate finishing diet and its impact on bull growth and harvest performance.

Horses Get the Flu Too: A small study involving six horses was conducted to develop a new live equine vaccine that is safe, keeps horses healthy, and protects humans.

Rollover Response Team: People involved in responding to semi accidents involving animals can now receive critical information on the proper protocols, training, and equipment needed to manage these events.

Livestock Lowers Allergy Risk: Results from a Dutch study show that exposure to farms seems to reduce the risk of allergy sensitivity among children and young adults.

Food Science and Safety News

Lego My Eggo (video): This marvelous machine can whip up and serve your eggs sunny-side up or scrambled with a side of crispy bacon.
The Age of the Prosumer: Consumer priorities are changing rapidly and these vocal advocates may significantly affect the success or failure of companies, products, and brands.

Pork Supports Infant Growth: New research shows that meat, such as pork, could be an important source of protein in an infant’s diet during their transition to solid foods.

Consumers Crave Cider: This Cornell professor has been tapping into cider’s full potential as the industry continues to flourish.

Dairy-Free: The trend of dairy-free beverages is on the rise, resulting in competition for the dairy sector—but is this really what consumers want?

But First, Food Safety: A new online tool released by the FDA can help importers determine if their suppliers have a clean food safety record and comply with the new safety standards.

Plant Agriculture and Environmental News

A Multitude of Cucumbers in One Gulp (video): It’s rather repetitive, but somehow satisfying, to watch this big machine harvest thousands of cucumbers.

Nano-engineered Texture: Ohio State University researchers report that they found a way to adapt a nature-inspired coating to plastic-based synthetic leather.

Living Snow Fence: Farmers in Minnesota are being compensated for leaving corn rows standing near highways to control blowing snow in the winter.

Healthier Chocolate Trees: With a bit of help from CRISPR, scientists could help breed cacao trees that exhibit desirable traits such as enhanced resistance to diseases.

Less Spring Smoke, More Opportunities: Because spring pasture burning was put on hold due to dry weather conditions, Kansas State researchers are encouraging landowners to try a new approach this fall.

Benefits of Indoor Plants: This plant physiologist shares how using the right plants could improve indoor air quality in a cost-effective and sustainable way.

International News

Turning a Profit in Uganda (video): This veterinarian and smallholder farmer shares how she uses unique and highly effective integrated farming practices to generate a profit on just one acre of land.
Making Changes in China (video): China is looking to boost its domestic production of soybeans in hopes of becoming less reliant on U.S. farmers.

Pass the Kimchi: In Korea, some foods--from ginseng to fermented vegetables--are widely believed to help treat ailments, boost health, and prevent disease.

Boost in Budget: Australian scientists welcome a boost in their new federal budget to improve scientific infrastructure and health research--however, not everyone is happy about the change.

The Future of the Flock: The British poultry industry has launched a new apprenticeship standard for workers--developing existing skills and talent while shaping the next generation.

Multistory Hog Farming: This Chinese company is going higher than any other company has ever gone before as animal health and labor efficiency drive the efforts.

Ending Poverty with Protein: Eggs are paving the way to a poverty-free world as they soar in popularity because of fewer religious restrictions, continued research, and nutritional quality.

General Interest News

Arthropods of the Great Indoors (video): This researcher says, “Don't kill the next spider you see in your home,” as she explains the important role spiders play in nature and our indoor ecosystems.

Blood Sample Discovery (video): Scientists have discovered miniature antibodies in sharks and camels that could lead to the future creation of drugs for cancer and other diseases.

3D Printing Potential (video): In this groundbreaking study, researchers printed electronics on a human hand for the first time. This technology could be used by soldiers on the battlefield for wound healing or sensory mechanisms.

Beekeeping Facts: This article provides fun facts about honey, bees, and beekeeping in your state.

Bee Health (related to above): Check out this CAST publication--Why Does Bee Health Matter? The Science Surrounding Honey Bee Health Concerns and What We Can Do About It.

Canine Genome Study: Scientists report identifying 59 genes that link to canine athletics and affect everything from heart rate to muscle strength.
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.

CAST provides Friday Notes as a benefit to its members. Please do not forward, edit, copy, or distribute the Notes in any form to nonmembers without the express permission of the CAST Executive Vice President Kent Schescke (kschescke@cast-science.org). Instead, please encourage your colleagues to join CAST and thereby become eligible for all membership benefits. Contact Colleen Hamilton at 515-292-2125, ext. 224 or chamilton@cast-science.org, or CLICK HERE for CAST membership information.

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* American Association of Bovine Practitioners
* American Bar Association, Section of Environment, Energy, & Resources-Agricultural Management
* American Dairy Science Association
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* American Meteorological Society, Committee on Agricultural and Forest Meteorology
* American Seed Trade Association
* American Society for Nutrition Nutritional Sciences Council
* American Society of Agricultural and Biological Engineers
* American Society of Agronomy
* American Society of Animal Science
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* Soil Science Society of America
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* The Fertilizer Institute
* Tyson Foods
* United Soybean Board
* Weed Science Society of America
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CAST assembles, interprets, and communicates credible, science-based information regionally, nationally, and internationally to legislators, regulators, policymakers, the media, the private sector, and the public.
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Note: WinField Solutions (Land O’Lakes) provides sponsorship for the distribution of Friday Notes to the National Association of Agricultural Educators.