

Council for Agricultural Science and Technology

cast-science.org

**CAST**<sup>®</sup>

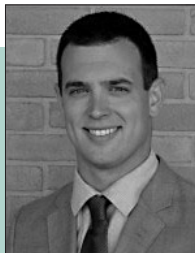
# ANNUAL REPORT 2018

*The Science Source for Food, Agricultural, and Environmental Issues*



*Contributing to a  
Sustainable Future*

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*List as of December 31, 2018*

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## PRESIDENT

**CAST showed no signs of slowing down** in 2018. The mission of communicating credible science has proven to be more important than ever. The primary way CAST has been able to achieve their mission is through an incredibly strong publication output. The publications CAST released in 2018 also proved to be some of the most popular and relevant papers the organization has ever put forth. *Genome Editing in Agriculture: Methods, Applications, and Governance* is arguably the single most popular and influential publication in CAST's history. In addition to publications, CAST celebrated the 2018 Borlaug CAST Communication Award recipient Marty Matlock. Dr. Matlock carries on the tradition of excellence in science communication.

CAST remains relevant due to the work of the CAST staff and the Board of Representatives, Board of Directors, and Board of Trustees as well as the support of membership. I have tremendous appreciation for those who donate their time and treasure to CAST. You are what make this organization great. One person who should also be recognized for her tireless devotion to CAST is our Past President, Nancy Reichert. Nancy has provided a lasting legacy in CAST by her work to create an Executive Committee and a Past President's Network. Her vision is inspiring.

CAST's future remains bright because of its people. The publication pipeline is stronger than ever and the topics are critically important to the future of agriculture. We are nearing the end of the Strategic Plan 2016–2020 cycle. The Board of Directors will soon begin work on the next five years of the Strategic Plan, which will help position CAST to maintain relevance in science communication. CAST will likely need to adapt to the changing landscape of science communication, but one thing remains the same: CAST does important work!



Gabe Middleton  
CAST President

**CAST rolled out 2X more publications in 2018.**

## WHO WE ARE:

**CAST is a nonprofit 501(c)(3)** organization composed of scientific societies and many individual, student, company, nonprofit, and associate society members. Established in 1972, CAST's primary work is the publication of task force reports, commentary papers, special publications, and issue papers written by scientists and subject matter experts from many disciplines including agriculture, environment, and food and health.

These publications and their distribution are fundamental activities that accomplish our mission to assemble, interpret,

## EXECUTIVE VICE PRESIDENT

**As Executive Vice President** of CAST, I have the opportunity to spend time with lots of people talking about our organization, what we do, how we do it, and most importantly why we

do the work we do. I want to share with you three of the most common questions I get and how I respond.

The first question is how CAST decides what topics will produce papers. That question gives me the opportunity to talk about all of our wonderful dedicated volunteers who serve on the CAST Boards of Representatives, Trustees, and Directors. I share with them our work group structure, monthly conference calls, and process of taking ideas and turning them into proposals that form the basis of the publications we produce. It is "ideation to creation to validation." It is an amazing process that happens every day in the CAST world.

The second question is who writes those papers, which prompts me to explain our process of recruiting volunteer scientists, engineers, economists, and others willing to voluntarily share their knowledge, skills, and ability. We bring together subject matter experts from many disciplines to serve on a task force that will produce a CAST paper. Our task force members coalesce to synthesize, translate, and explain the science, technology, and innovation of food and modern agriculture to a broader audience of policymakers, the media, and the public. This is difficult work to do, and I am constantly amazed at the quality that their efforts produce.

The third most frequent question is how CAST is financed. I am very proud to share that we are a membership-based nonprofit organization. It is the financial commitment that our member organizations and individual members make each year that makes our work possible. This annual report is just one way we want to say thank you for your support and for joining us on this journey we call our CAST Mission.

2018 was a very successful year for CAST and with the continued support of our members, the dedicated work of our boards and task forces, and a small but mighty CAST staff, we strive to make 2019 an even more impactful year.



Kent Schescke  
CAST Executive Vice President

**"CAST's future remains bright because of its people."**

— GABE MIDDLETON  
CAST PRESIDENT



## BOARD MEETINGS

### Spring Board of Directors Meeting

- Syngenta office in Washington, D.C.
- April 25–26
- Borlaug CAST Communication Award announcement at USDA Whitten Patio followed by stakeholder reception
- Stakeholder visits

### Fall Board Meeting

- University of California-Davis, California Farm Bureau Federation, and Syngenta Seeds
- October 23–25
- Attendees enjoyed one of three tours of the College of Agriculture and Life Sciences at UC-Davis; each tour reflected the focus of a particular work group.
- A welcome reception and dinner took place at the World Food Center following Tuesday's tours. Speakers included Dr. David Campbell, Dr. Alison Van Eenennaam, and Dr. Carl Winter.
- A smart farm panel discussion was moderated by Kent Schescke (CAST EVP) prior to Wednesday's lunch. Panelists included David Slaughter (UC-Davis), Chris Hostetler (National Pork Board), and Steve Maddox (Maddox Dairy).
- A tour of Syngenta Seed's Woodland facility took place on Wednesday evening followed by dinner and a reception. Attendees were welcomed by Syngenta employees Craig Sandlin, Mat Kinkade, and Ajay Sandhu.
- A sustainability panel was moderated by Nancy Reichert (2018 CAST President) on Thursday morning. Panelists included Dr. Amrith Gunasekara (Office of Environmental Farming and Innovation), Dr. Gabriele Ludwig (Almond Board of California), and A. G. Kawamura (Orange County Produce, LLC).

## ROLLOUTS IN 2018

### Regulatory Barriers to the Development of Innovative Agricultural Biotechnology by Small Businesses and Universities

- Issue Paper 59, March 22–23 in Washington, D.C.
- Chair: Dr. Alan McHughen (University of California-Riverside)
- Rolled out in cooperation with National Ag Week, the APLU, and NC-FAR

### Scientific, Ethical, and Economic Aspects of Farm Animal Welfare

- Task Force Report 143, April 23 in Washington, D.C.
- Cochairs: Dr. Candace Croney (Purdue University), Dr. Joy Mench (University of California-Davis), and Dr. William Muir (Purdue University)
- Rolled out in cooperation with NC-FAR, Animal Ag Alliance, and American Farm Bureau Federation

### Omega-3 Fatty Acids: Health Benefits and Dietary Recommendations

- Special Publication 32, May 8 in Minnesota
- Chair: Dr. Don Beitz (Iowa State University)
- Rolled out in cooperation with the American Oil Chemists' Society's annual meeting

### Genome Editing in Agriculture: Methods, Applications, and Governance

- A paper in the series on *The Need for Agricultural Innovation to Sustainably Feed the World by 2050*
- Issue Paper 60, July 9 in Washington, D.C.
- Chair: Dr. Adam Bogdanove (Cornell University)
- Rolled out in cooperation with APLU and NC-FAR

### Impact of Free-range Poultry Production Systems on Animal Health, Human Health, Productivity, Environment, Food Safety, and Animal Welfare Issues

- Issue Paper 61, July 18 in Washington, D.C.
- Cochairs: Dr. Jacqueline P. Jacob (University of Kentucky) and Dr. Anthony J. Pescatore (University of Kentucky)
- Rolled out in cooperation with the Food Marketing Institute

### Food Loss and Waste

- A paper in the series on *The Need for Agricultural Innovation to Sustainably Feed the World by 2050*
- Issue Paper 62, September 28 in Washington, D.C.
- Chair: Dr. Zhengxia Dou (University of Pennsylvania)





## BORLAUG CAST COMMUNICATION AWARD

**Dr. Marty Matlock**, Executive Director of the University of Arkansas Resiliency Center and Professor of Ecological Engineering in the Department of Biological and Agricultural Engineering, was announced as the recipient of the 2018 Borlaug CAST Communication Award

(BCCA) at the USDA Whitten Patio in Washington, D.C., on April 24. CAST and Syngenta hosted the event that began with a presentation from 2017 BCCA winner Dr. Jayson Lusk titled *The Politicization of Food Consumption and Communication*.

An internationally recognized expert in agricultural sustainability metrics and assessment, Matlock has become the world's leader in the science of agricultural sustainability during the past 10 years through his global communication efforts. Sharing his expertise with farmers, industry professionals, students, and consumers has helped them develop, implement, and communicate issues of great importance to the agricultural industry and science communities.

On October 17, Dr. Matlock was honored at a World Food Prize side event where he gave a memorable keynote address: *The Promise of Prosperity from the Land in the 21st Century*. After a breakfast sponsored by CropLife Foundation, the session began with short remarks by CAST Executive Vice President Kent Schescke, World Food Prize President Kenneth Quinn, and CropLife Foundation's Jay Vroom. Julie Borlaug Larson of the Norman E. Borlaug Institute for International Agriculture spoke about her grandfather's legacy, and Mark Cochran of the University of Arkansas formally introduced the award recipient.

After the Borlaug CAST Communication Award sculpture was handed to Marty Matlock, he began his speech by explaining how he was inspired by Dr. Norman Borlaug, and he paid tribute to his legacy by emphasizing the need for interdisciplinary efforts as we work to feed the world. Dr. Matlock's presentation demonstrated why he won this year's award—his ability to synthesize interconnected topics and present them to diverse audiences.

Matlock's colleagues praise him for his abilities to integrate complex issues into simple concepts that resonate with his target audience. One of his supporters states it perfectly: "His commitment embodies many of the attributes and characteristics of Dr. Borlaug, most notably providing leadership to advance science and engineering in a way that not only benefits agriculture and food production, but also contributes to the betterment of society."

Following Matlock's speech, the American Society of Agricultural and Biological Engineers (ASABE) and American Society of Agronomy (ASA) organized a presentation and panel discussion—*Global Sustainability for a Vibrant Earth*. Chris Novak (President and CEO of CropLife America) moderated the program. The panelists included Erin Fitzgerald (U.S. Farmers & Ranchers Alliance), Jan-Hendrick Mohr (CLAAS Group), Jason Weller (Land O'Lakes SUSTAIN), and Marty Matlock. The gathering ended with a Q & A session, providing each speaker with an opportunity to provide specifics about what works best for a vibrant and sustainable food system.



Marty Matlock



Left: Kent Schescke, Jay Vroom, Nancy Reichert, Marty Matlock, Bill Kuckuck, and Chris Novak

Below: Chris Novak, Jan-Hendrick Mohr, Jason Weller, Erin Fitzgerald, and Marty Matlock



## CAST SCIENCE COMMUNICATION SCHOLARSHIP

Thanks to the generosity of one of CAST's individual members, five University of California-Davis graduate students—focusing on careers in agriculture and food science—were given the opportunity to attend the 2018 CAST Annual Meeting. This gave students an orientation of CAST and its mission, provided networking opportunities with scientists and students in multiple disciplines, and exemplified the importance of science communication. As part of the application process, students were asked to submit a 30-second video explaining why they chose a career in scientific research or why they thought science communication was important. These videos were featured on CAST social media throughout the month of November along with a heterobiography on CAST's blog as a reminder of why supporting CAST on Giving Tuesday is so important for the future of science.



2018 CAST Science Communication Scholarship Winners (from left): Rylie Ellison, Alonna Wright, Maci Mueller, Kylie Peterson (CAST staff member), Sarah Klopatek, and Mackenzie Batali

### KEY

- ◇ Lifetime Member
- Millennium Club
- President's Club
- ▲ Friends of CAST Individual Member (includes retired, young professional, and students)
- ▼ Loyalty Member

List as of December 31, 2018

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 Daniel Carter, Prattville  
 Xavier Charles, Auburn  
 Lane Galloway, Auburn  
 Annabelle McEachin, Auburn  
 Jacqueline Nix, Prattville  
 Channapatna Prakash, Tuskegee ◇  
 Harry S. Prim Jr., Gordon ◇  
 Mark Slay, Opelika

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 Roger D. Howard, Fountain Hills ◇  
 Charles R. Krueger, Mesa ◇  
 Gary Marchant, Tempe  
 W. Gerald Matlock, Tucson ▼  
 Richard E. Stuckey, Surprise ◇  
 Kai Umeda, Tempe ▼

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 Fred Bourland, Keiser ▼  
 Olivia Caillouet, Fayetteville  
 Mark Cochran, Little Rock  
 David Gealy, Stuttgart ▼  
 Marei Houpert, Fayetteville  
 Marty Matlock, Fayetteville  
 Michelle Thomas, Fort Smith

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 Kassim Al-Khatib, Davis ◇  
 Lars Anderson, Davis  
 M. J. Bakke, Clovis ◇  
 Janet Caprile, Pleasant Hill ▼  
 Fred M. Carasso, Van Nuys ◇  
 Richard Cavaletto, San Luis Obispo ◇  
 Alexandra Duval, San Luis Obispo  
 Robert C. Ehn, Clovis ▼  
 Rylie Ellison, Davis

Saul Estrada, Chico  
 Yuanhui Fu, Walnut □  
 Paul Gepts, Davis  
 Nichole Ginnan, Riverside  
 Donald W. Grimes, Reedley ▼  
 Sarah Klopatek, Woodland  
 Peggy G. Lemaux, Berkeley ▼  
 Jack Liebeck, Huntington Beach  
 Gabriele Ludwig, Modesto  
 John Madsen, Davis ▼  
 Gary Markegard, Fortuna ▼  
 Pamela Gail Marrone, Davis ▼  
 George C. Martin, Paradise ▼  
 Roland D. Meyer, Davis ▼  
 Maci Mueller, Davis  
 Randy Oliver, Grass Valley  
 James W. Oltjen, Winters ▼  
 Calvin O. Qualset, Davis ◇  
 Dan Y. Rosenberg, Galt ◇  
 Julie Schellhase, Turlock  
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 Joyce F. Strand, Sacramento ◇  
 Joe Traynor, Bakersfield ▼  
 Alison Van Eenennaam, Davis ◇  
 Carl Winter, Davis ◇  
 Alonna Wright, Sacramento  
 Broc G. Zoller, Kelseyville ▼

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 Stephen Del Grosso, Fort Collins  
 Franklyn Garry, Fort Collins ▼  
 Marvin E. Jensen, Fort Collins ▼  
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 E. Gordon Kruse, Fort Collins ▼  
 W. Dennis Lamm, Wellington ▼  
 Delbert Miles, Greeley ▼  
 Jerry Olson, Fort Collins ▼  
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 R. Vance Morey, Roseville ♥  
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 Nat Graham, Columbia  
 Gary F. Hartnell, St. Peters ♥  
 David Heering, St. Louis ▲  
 Chris Knight, St. Louis ◇  
 Charles McFatrach, Washington ♥  
 Ken Schneeberger, Columbia  
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- Millennium Club
- President's Club
- ▲ Friends of CAST Individual Member (includes retired, young professional, and students)
- ♥ Loyalty Member

List as of December 31, 2018

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 Carroll Moseley, Greensboro ♥  
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Pravin Mishra, Mymensingh

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Ahmadnagar, Maharashtra  
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Telangana

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# CAST<sup>®</sup>

## INDIVIDUAL MEMBERSHIP OPTIONS

- **Lifetime Member:** \$2,500/contribution or pledge
- **Millennium Club:** \$1,000/calendar year
- **President's Club:** \$500/calendar year
- **Friends of CAST:** \$250/calendar year
- **Individual Member:** \$100/calendar year
- **Retired Member:** \$60/calendar year
- **Young Professional:** \$35/calendar year
- **Student Member:** \$0/calendar year

## BENEFITS OF MEMBERSHIP

- With your generous support, CAST will continue to strengthen its position at the international forefront of science communication.
- Receive *Friday Notes* and electronic material.
- Receive CAST's publications and "members only" website access.
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Join online today @ [cast-science.org](http://cast-science.org).

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- Gary Thompson—Associate Dean for Research/Graduate Education Director, PA Agricultural Experiment Station, Penn State College of Agricultural Science

*In 2018, CAST received*  
**\$21,365** *in donations from individuals.*  
*That's 85 percent more than*  
**2017 individual contributions.**

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Agricultural and Applied Economics Association  
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 Poultry Science Association  
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 Farm Foundation  
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 Iowa Soybean Association  
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 Mississippi State University  
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 American Oil Chemists' Society  
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 University of California—Davis World Food Center  
 USDA—Agricultural Research Service  
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# 2018 REVENUE SOURCES



# 2018 EXPENSES

## PROGRAM SUPPORT 31%

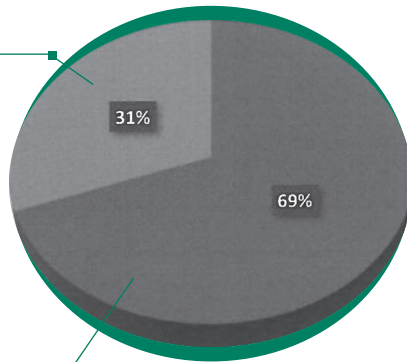
- 5% Borlaug CAST Communication Award
- 14% Unrestricted Fund
- 3% Designated Publication Support

## GOVERNMENT GRANTS

- 3% CRIS Grant
- 6% ARS and APHIS Grants

## MEMBERSHIP 69%

- 5% Individual Memberships
- 25% Company Memberships
- 15% Nonprofit Memberships
- 17% Education/Subscriber Memberships
- 7% Society and Associate Society Memberships



## DEVELOPMENT EXPENSE 3%

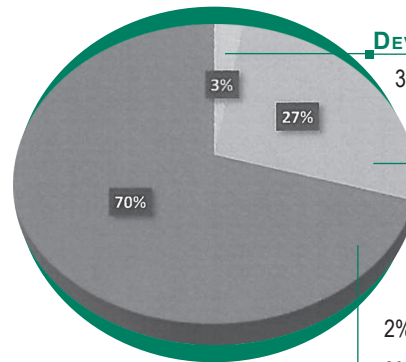
- 3% Membership Recruiting and Development

## PROGRAM EXPENSE 27%

- 14% CAST Publication Payroll
- 2% Borlaug CAST Communication Award Payroll
- 2% Direct Publication Expenses
- 9% Travel: Officers, Staff, BCCA, Publications, and Other

## ADMINISTRATIVE EXPENSE 70%

- 53% Payroll Salaries Expense
- 16% Office Expense
- 1% Depreciation Expense



## SOCIAL MEDIA

- Website ([cast-science.org](http://cast-science.org))
- Blog ([cast-science.blogspot.com](http://cast-science.blogspot.com))
- Facebook (@CASTagScience)
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## People Really "Like" Us!

- In 2018:
- + Facebook totaled 1,457 followers
  - + Twitter climbed to more than 6,600 followers
  - + Pinterest grew to 762 followers
  - + LinkedIn gained more than 250 followers
  - + CAST's blog published 71 posts, resulting in more than 44,500 views



2018 CAST staff (first row from left): Caryn Dawson, Gale Osborn, Melissa Sly, and Dan Gogerty, (second row) Carol Gosteale, Kent Schescke, and Kylie Peterson. Colleen Hamilton (inset).



## MISSION

CAST, through its network of experts, assembles, interprets, and communicates credible, balanced, science-based information to policymakers, the media, the private sector, and the public.



## VISION

A world where decision making related to agriculture and natural resources is based on credible information developed through reason, science, and consensus building.

Council for Agricultural Science and Technology  
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