

CAST[®]

ANNUAL REPORT 2022

The Science Source for Food, Agricultural, and Environmental Issues



MARKING A MILESTONE

CAST[®]

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American Dairy Science Association: Kathryn Proudfoot, Sir James Dunn Animal Welfare - UPEI

American Meat Science Association: Kaitlyn Compart, Smithfield

American Meteorological Society Committee on Agricultural and Forest Meteorology: Eduardo Santos, Kansas State University

American Society of Agricultural and Biological Engineers: Alex Thomasson, Mississippi State University

American Society of Agronomy: Sharon Clay, South Dakota State University

American Society of Animal Science: Kent Odde, Kansas State University

American Society of Plant Biologists: Amit Dhingra, Texas A&M University, Horticultural Sciences

American Veterinary Medical Association: Eric Gonder, DVM, MS, PhD, ACPV

Aquatic Plant Management Society: Lyn Gettys, University of Florida FLREC

Crop Science Society of America: P.V. Vara Prasad, Kansas State University

North Central Weed Science Society: John Hinz, Bayer

Northeastern Weed Science Society: Anthony Witcher, Tennessee State University

Poultry Science Association: Jacob Lum, EURODUNA Americas Inc.

Rural Sociological Society: Michelle Worosz, Auburn University

Society for In Vitro Biology: Dwight Tomes

Society for Range Management: Barry Perryman, University of Nevada-Reno

Soil Science Society of America: Charles Rice, Kansas State University

Weed Science Society of America: Jill Schroeder, USDA-ARS

Western Society of Weed Science: Greg Dahl, Land O'Lakes, Inc.

REPRESENTATIVES OF MEMBER COMPANIES

BASF Corporation: Padma Commuri

Bayer CropScience: John Swarthout

Corteva Agriscience: Melissa Johnson

The Mosaic Company: Adam Herges

Nutrien: Sally Flis

Syngenta Crop Protection, LLC: Tony Burd

Zoetis: Wendy Feik Pinkerton

REPRESENTATIVES OF MEMBER NONPROFITS

American Farm Bureau Federation: Roger Cryan

American Seed Trade Association: Andy LaVigne

Association of Equipment Manufacturers: Anita Sennett

CropLife America: Manojit Basu

Innovation Center for U.S. Dairy: Stephanie Masiello Schuette

Minor Use Foundation: Daniel Kunkel

National Cattlemen's Beef Association: Julia Herman

National Corn Growers Association/Iowa Corn Promotion Board: David Ertl

National Milk Producers Federation: Jamie Jonker

National Pork Board: Stephanie Wisdom

National Turkey Federation: Lindy Froebel

The Fertilizer Institute: Leanne Leverich Nigon

U.S. Poultry & Egg Association: Paul Bredwell

United Soybean Board: Andrew Scott

REPRESENTATIVES OF MEMBER UNIVERSITIES

Iowa State University: Curtis Youngs

Mississippi State University: Nancy Reichert

Penn State University: Blair Siegfried

Texas A&M University: David Baltensperger

Tuskegee University: Marceline Egnin

University of Nevada-Reno: Melinda Yerka

ADDITIONAL ORGANIZATIONAL BOARD MEMBERS

Cornell University, Kansas State University, North Carolina A&T State University, North Carolina State University, The Ohio State University, University of Arkansas, University of California-Davis, University of Florida, University of Illinois, University of Kentucky, University of Missouri, University of Nebraska

BOARD OF TRUSTEES

Gary Thompson (Chair)—Executive Director, Southern Association of Agricultural Experiment Station Directors, University of Arkansas, Fayetteville
 Christopher Daubert (Vice Chair)—Vice Chancellor and Dean, College of Agriculture, Food and Natural Resources, University of Missouri
 Mohamed Ahmedna—Dean, College of Agriculture and Environmental Sciences, North Carolina A&T State University
 Julie Borlaug—President, Borlaug Consulting
 Jamie Eichorn—Commercial Unit Head, South and East Coast, Syngenta Crop Protection, LLC
 Julie Funk—Dean, Veterinary Medicine, University of Arizona
 Craig Hill—Iowa Farm Bureau Federation
 Cathann Kress—Vice President and Dean, Agricultural Administration, The Ohio State University
 Nick Place—Dean and Director, CAES, University of Georgia
 Mike Strain—Commissioner, Louisiana Department of Agriculture and Forestry

List as of December 31, 2022

PRESIDENT

Over the last three years, CAST has weathered many challenges and changes, both within our organization and across agricultural and food production industries. Through this time the organization was able to adapt and meet the challenges while seeing growth in membership and continuing to publish high quality materials. In 2023, we will be transitioning to new leadership, with Kent Schescke retiring and Dr. Chris Boomsma moving into the role of Executive Vice President and CEO. Kent is an outstanding leader and a good friend, and he will be missed in and out of the CAST office. But with the addition of Dr. Boomsma, CAST is poised to evaluate new paths of growth, learn how to grow the reach of our educational materials, and make new connections.

For me, the last few years have really shown how connected we are globally. The challenges and successes around the globe impact us closer and closer every day. And with that we see every day how important it is to have the quality science reviews available from an organization like CAST. While CAST continues to develop the highest quality information, backed with the most up to date science, our speed of publishing papers and avenues for communications can be slow. Task force teams have worked with the CAST staff over the last three years to plan for ways to move the process faster and to expand the reach of this work. CAST has published a few rapid response papers in the last three years in response to the new global challenges and these were well received. I would like to see CAST continue to develop this avenue for when new challenges erupt in the agriculture and feed landscape.

CAST continues to be one of my favorite organizations to work for and with to communicate agricultural and food science at a national scale. The staff, members, and volunteer authors are all passionate about their work and it shows in the quality of work and connections that we all make as participants in CAST. I look forward to blending the changes in leadership at CAST in 2023 and supporting the organization's continued success.

Sally Flis
Sally Flis, CAST President

In 2022, CAST had 33 volunteer task force chairs, authors, reviewers, and board liaisons.

EXECUTIVE VP & CEO

In 2022, after two years of dealing with pandemic-related disruptions, we started to experience a new normalcy in our lives and work. People started returning to their offices, travel resumed, and we again enjoyed face-to-face interactions with extended family, friends, and colleagues. We moved from being "on hold" to "looking ahead."

It is with this backdrop that I experienced two major events, both professionally and personally. First was the observance of CAST's 50th anniversary, held at our 2022 Fall Annual Meeting in Ames, Iowa. It was fitting that this celebration was held in Ames as that is where CAST was founded in 1972, and where its office is still located. It was great to see many long-time friends and former leaders of CAST during that event as we recalled and celebrated past successes, and discussed and considered ways to continue the organization's legacy.

The second major occurrence was the official announcement of my planned retirement. Throughout that process, I appreciate that the past and present CAST Board of Directors established a timeline that not only worked for me, but also helped strengthen and position the organization to take on new opportunities, challenges, and direction. Their insights and good judgment will allow us to continue CAST's mission, while setting us up for even greater success following my retirement.

As I reflect on the last eight years in my role as EVP and CEO of CAST, I am filled with overwhelming gratitude. First, I am grateful to the organization's leadership for providing me this opportunity in 2015. Their encouragement and constant support allowed me to set and achieve many significant goals and objectives during my tenure.

This is followed very closely by my appreciation and respect for the talented, hard-working, dedicated team of CAST staff whom I served with throughout my time here. "Small but mighty" is an understatement of their capacity to work hard every day to help CAST accomplish its mission. I have always shared with them that while the work we do together is important, it should also be fun and fulfilling. I believe we achieved that balance as a team.

I also want to thank the many task force volunteers whom I have had the privilege of working with to produce CAST papers around critical agricultural topics. Their service, dedication, and volunteer efforts make our work relevant, reliable, and trusted.

Last but not least, I am grateful to CAST's members, supporters, and industry allies. Their advocacy and financial commitments have helped CAST remain a valued voice for the science, technology, and innovation so important to our food, agriculture, and environment systems.

Looking ahead, I am excited about the new opportunities that await my family and me in my retirement, and am certain that I am leaving CAST in excellent hands.

Kent Schescke

Kent Schescke, CAST Executive Vice President & CEO

"...CAST is poised to evaluate new paths of growth, learn how to grow the reach of our educational materials, and make new connections."

— SALLY FLIS
CAST PRESIDENT

2022 BOARD MEETINGS

Spring Board of Directors Meeting

The CAST Board of Directors met virtually for the 2022 spring board meeting on April 25 and 26. Discussions centered around the upcoming fall annual meeting and CAST's 50th anniversary; university sites for future annual meetings; the 2021–2025 adaptive plan; financial reports; and staffing needs due to pending transitions.

Fall Annual Meeting

CAST's 50th anniversary celebration culminated at the 2022 Annual Meeting on October 25–27 in Ames, Iowa. A few highlights of the event included:

- Iowa State University (ISU) President Dr. Wendy Wintersteen spoke at the 50th anniversary reception, hosted by ISU.
- Invited speakers included Dr. Dan Grooms, Dr. Dan Robison, Dr. Ruth MacDonald, Dr. Rodrigo Tarté, Dr. Lisa Schulte-Moore, Dr. Mohamed El-Gazzar, and Dr. Eric Gonder.
- Three past EVPs—Dr. Richard Stuckey, Dr. John Bonner, and Linda Chimenti—joined EVP Kent Schescke in a discussion reflecting on the past 50 years of CAST.
- Meeting attendees toured the Corteva research facilities in Johnston, Iowa, followed by a reception and dinner where Iowa Secretary of Agriculture Mike Naig spoke.
- Current CAST President Dr. Anna Dilger passed the gavel on to Dr. Sally Flis as the incoming CAST President.



Dr. Wendy Wintersteen and Dr. Dan Robison at Iowa State University.



Dr. Dirk Drost, Sandra Bonner, and Dr. John Bonner at the 50th Anniversary Reception at Iowa State University.

SCHESCKE ANNOUNCES RETIREMENT FROM CAST MID-2023

Kent Schescke, Executive Vice President and CEO of the Council for Agricultural Science and Technology (CAST), has [announced his plans to retire](#) in 2023 after almost 50 years of service to the agriculture, education, and scientific communities.

Schescke joined CAST in 2015 after serving 22 years with the National FFA Foundation and organization, and two years with the National Junior Achievement organization. Prior to that he served as a high school agricultural science educator for 14 years in three different schools located in Missouri.

Schescke has been instrumental in increasing the awareness of CAST's mission and activities; growing its membership



and publication production; and guiding the nonprofit through a challenging pandemic. He has also focused on enhancing the engagement of its membership, which includes scientific/professional societies, universities, nonprofit organizations, companies, and individuals.

"I have enjoyed my time with CAST, particularly the opportunity to work with a talented, hardworking staff and a committed leadership," says Schescke. "All these dedicated individuals have supported me in telling CAST's story about communicating the science, technology, and innovation so important to the future of food, agriculture, and the environment. It has been a privilege to work within the agricultural community throughout my career."

WHO WE ARE:

CAST is a nonprofit 501(c)(3) organization with a membership composed of scientific and professional societies, universities, companies, nonprofits, libraries, and individuals. Established in 1972, CAST's primary work is creating and distributing science communications developed by scientists and subject matter experts from many disciplines, including food, agriculture, and the environment.

These diverse communications are fundamental activities that accomplish our mission to convene and coordinate networks of experts to assemble, interpret, and communicate credible, unbi-

ased, science-based information to policymakers, the media, the private sector, and the public.

The wide distribution of CAST communications to non-scientists—including publications, a weekly e-newsletter, many forms of social media, and a website with extensive resources—enhances the education and understanding of the general public. This in turn supports and reinforces its vision of a world where decision making related to agriculture, food, and natural resources is based on credible information developed through reason, science, and consensus building.

BORLAUG CAST COMMUNICATION AWARD

On October 19, CAST celebrated the 13th anniversary of its annual Borlaug CAST Communication Award (BCCA) by honoring this year's recipient, Dr. Martin Wiedmann. Wiedmann is the Gellert Family Professor of Food Safety, Department of Food Science in the College of Agriculture and Life Sciences at Cornell University. He spoke on *Beauty and risk: Thoughts on communicating food safety risks*. In his dynamic presentation, he focused heavily on how there is no such thing as zero risk, and that science can only share the magnitude of a particular food risk. The decision from there is up to the consumer, based on their lifestyle, choices, and other personal aspects. Wiedmann's presentation was recorded and is [available for viewing on the CAST website](#).



Dr. Martin Wiedmann, 2022 BCCA Recipient, and Kent Schescke, CAST EVP and CEO.

The BCCA breakfast was held as a side-event to the 2022 World Food Prize at the Iowa Events Center in Des Moines, Iowa. The program included remarks from World Food Prize Foundation President Barbara Stinson; Dr. Simon Liu, Acting Administrator of the USDA/ARS; and Julie Borlaug, President of the Borlaug Foundation.



Attendees of the 2022 BCCA Ceremony at the World Food Prize.

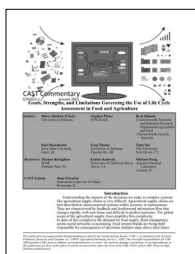
PUBLICATIONS IN 2022

This year marked the return to in-person publication rollouts in Washington, D.C. as well as continuing to host a separate webinar presentation. Both the in-person and webinar presentations were led by the paper's task force chair, with the webinars also providing an opportunity for a Q&A panel with the authors. Recorded webinars and Ag quickCASTs can be [viewed on our website](#) on each publication's landing page.

Goals, Strengths, and Limitations Governing the Use of Life Cycle Assessment in Food and Agriculture

Commentary QTA-2022-1, January 24
Chaired by Dr. Marty Matlock

This commentary discussed the use of life cycle assessment (LCA) in agriculture. LCA describes the inputs (e.g. energy, materials, and resources) to a process and all the resulting outputs including the emissions and losses to the environment. This provides a modeling framework to link all processes together such that the sum of the inputs and outputs of all involved processes are included. The

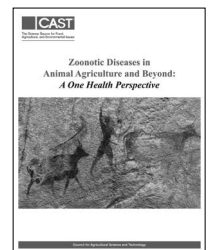


use of LCA then provides a system perspective that considers a product's life cycle and quantifies the relevant impacts caused by it.

Zoonotic Diseases in Animal Agriculture and Beyond: A One Health Perspective

Special Publication 33, November 14
Chaired by Dr. Lonnie King

This special publication explored the importance of One Health's role in animal agriculture. By looking through the lens of One Health, the authors identify key lessons learned in the dynamics of zoonotic diseases including their transmission and prevention. With this knowledge and the insights from the vignettes presented in this paper, more effective recommendations to address the growing challenges of zoonoses can be made. Finally, the paper discusses the need and benefits for agriculture to become more engaged in One Health activities and opportunities to better manage the global threats of zoonotic diseases.



Thank you for supporting CAST and helping us mark this important milestone!

2022 CAST Science Communication Scholarship Recipients

The CAST Science Communication Scholarship encourages graduate-level student scientists, specifically those focusing on careers in agriculture or food sciences, to grow their abilities to communicate with nonscientific audiences. Selected graduate and veterinary medicine students were invited to learn about the application of science communication at the 2022 CAST Annual Meeting held at Iowa State University. This opportunity instilled the importance of science communication by allowing students to participate in CAST's ongoing work and mission as well as provide students with networking opportunities with like-minded scientists from across the nation.

This year, 13 graduate students from Iowa State University received the CAST Science Communication Scholarship during the CAST Annual Meeting. The recipients were nominated by their professors. A blog with all the students' media is [available for viewing on the CAST website](#). This scholarship is supported by individual donors of CAST.



The 2022 scholarship recipients with CAST Communications Specialist Dylana Luett (front row, far right).



CAST's Digital Presence

Follow Us on Social Media:

Blog: cast-science.org/news

Facebook: [@CASTagScience](https://www.facebook.com/CASTagScience)

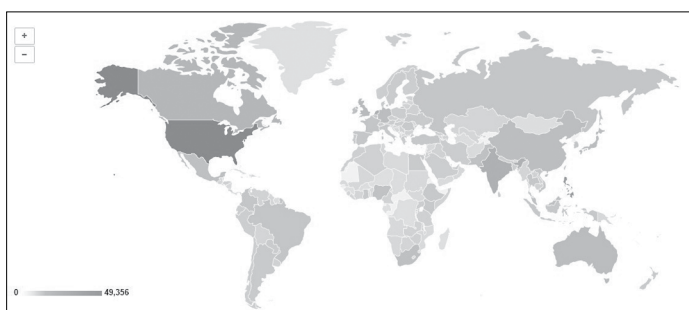
Twitter: [@CASTagScience](https://twitter.com/CASTagScience)

LinkedIn: [linkedin.com/company/castagscience](https://www.linkedin.com/company/castagscience)

YouTube: [youtube.com/CASTagScience](https://www.youtube.com/CASTagScience)

Pinterest: [pinterest.com/castagscience](https://www.pinterest.com/castagscience)

Website: cast-science.org



CAST's website received more than 83.2k views from all over the world in 2022.

People Really "Like" Us!

In 2022, we had almost 12k followers across all our social media accounts:

+ Facebook reached 2,058 followers

+ Twitter totaled 8,394 followers

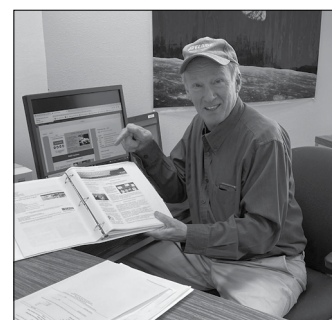
+ LinkedIn climbed to 782 followers

+ YouTube had 607 subscribers & over 1,400 views

GOGERTY RETIRES FROM CAST

Dan Gogerty retired from CAST in spring 2022 after passionately serving as the *Friday Notes*' editor for more than a decade. Dan grew up on a traditional Midwest family farm and after teaching thirty-six years at seven schools in Japan, Australia, and Iowa, he "signed on with an organization that has a reputation for doing what I was trying to teach: communicating effectively and clearly."

If anyone could receive a Ph.D. in *Friday Notes*, it would be Dan as he created more than 560 editions of the weekly newsletter. All of the naked mole rat articles that he found over the years deserve an honorable mention. He discusses his reflections on his blog that you can [read on our website](#).



Dan Gogerty in his CAST office with copies of *Friday Notes*.

TOP 5 CAST PUBLICATIONS

Below, we provide our top five publications based on impact data—all publications are [available for download](#) at cast-science.org/publications.

1. *Zoonotic Diseases in Animal Agriculture and Beyond: A One Health Perspective* – SP33 – Released November 2022
2. *Mycotoxins: Risks in Plant, Animal, and Human Systems* – R139 – Released January 2003
3. *Goals, Strengths and Limitations Governing the Use of Life Cycle Assessment (LCA) in Food and Agriculture* – QTA2022-1 – Released January 2022
4. *Gains Foregone by Going GMO Free: Potential Impacts on Consumers, the Environment, and Agricultural Producers* – QTA2021-2 – Released November 2021
5. *Economic Impacts of COVID-19 on Food and Agricultural Markets* – QTA2020-3 – Released June 2020

KEY

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

List as of December 31, 2022

UNITED STATES

ALABAMA

Lane Galloway, Auburn
Heather Gladney, Buhl
Kaitlyn Gordon, Empire
Channapatna Prakash, Tuskegee ◇
Harry Prim, Gordon ◇

ARIZONA

Michael Brumm, Chandler ▼
P. Thomas Cox, Phoenix ◇
Roger Howard, Fountain Hills ◇
Richard Stuckey, Surprise ◇
Kai Umeda, Tempe ▼

ARKANSAS

Fred Bourland, Keiser ▼
Mark Cochran, Little Rock ▼
Marty Matlock, Fayetteville ◇
Mila Pessotto, Fayetteville
Gary Thompson, Fayetteville ◇

CALIFORNIA

Julie Adams, Modesto ▼
Kassim Al-Khatib, Davis ◇
M. J. "Moe" Bakke, Clovis ◇
Fred M. Carasso, Van Nuys ◇
Richard Cavaletto, Somis ◇
Nathan Diplock, Oakland
Robert Ehn, Clovis ▼
Rowan Ennis, San Luis Obispo
Donald Grimes, Reedley ▼
Jesse Johnson, Mission Viejo
Peggy Lemaux, Berkeley ▼
Jack Liebeck, Huntington Beach
Alfredo R. Loperena, San Diego ▼
John Madsen, Woodland ▼
Jared Mandrell, Morgan Hill
Gary Markegard, Fortuna ▼
Pamela Marrone, Davis ▼
Connor McCabe, Davis ▼
Roland Meyer, Davis ▼
Frank Mitloehner, Davis ◇

Maci Mueller, Davis
James W. Oltjen, Winters ▼
Calvin Qualset, Davis ◇
Dan Rosenberg, Galt ◇
David Songstad, San Marcos ▼
Richard Stier, Sonoma ◇
Joyce Strand, Sacramento ◇
Joe Traynor, Bakersfield ▼
Alison Van Eenennaam, Davis ◇
Steven Watson, Fremont
Carl Winter, Davis ◇
Broc Zoller, Kelseyville ▼

COLORADO

John Avens, Fort Collins ▼
Stephen Del Grosso, Fort Collins ▼
Franklyn Garry, Fort Collins ▼
Wayne F. Keim, Fort Collins ◇
W. Dennis Lamm, Wellington ▼
William Mcbeth, Wray
Delbert Miles, Greeley ▼
Kimberly Nelson, Lakewood
Jerry Olson, Fort Collins ▼
Henry Shands, Fort Collins ◇
Lee Sommers, Fort Collins ◇

CONNECTICUT

Lynn R. Brown, Willington ▼

DELAWARE

Robert Thompson, Bethany Beach ▼
Mark VanGessel, Georgetown ▼

DISTRICT OF COLUMBIA

Michael Goldblatt, Washington ◇
Teresa Gruber, Washington ◇
Hans Herren, Washington ◇
Peter Barton Hutt, Washington ▼

FLORIDA

Clarence Ammerman, Gainesville ◇
Daniel Botts, Maitland ◇
Joel Brendemuhl, Gainesville ▼
Bobby Darst, Tavernier ◇
Biswadeep Dhar, Gainesville
Kevin Folta, Gainesville ◇
Melvin Greeley, Mount Dora ◇
Edward Hanlon, Immokalee ◇
Tracy Hoover, Gainesville
Haley Jeneske, Molino
Marlyn Kallau, Gainesville
Richard Lower, St. Petersburg ▼
Gail Mahnken, Gainesville ▼
Donald McFeeters, DeLand ▼
Harry Mersmann, Palm Harbor ▼
Arthur Miller, Sarasota ▼
Gilberto Olaya, Vero Beach ▼

William Orendorff, Bradenton ▼
Kailash Purohit, Lake City ◇
Pedro Sanchez, Gainesville ◇
Ayush K. Sharma, Gainesville
Tia Tyler, Gainesville
H. H. (Jack) Van Horn, Gainesville ◇
Clayton Williams, Fort Myers ◇

GEORGIA

Elizabeth L. Andress, Athens ▼
Todd Applegate, Athens
Louis J. Boyd, Watkinsville ◇
Gale A. Buchanan, Adel ◇
William Flatt, Newnan ◇
Stanley Fletcher, Peachtree City ◇
David Knauff, Watkinsville ◇
Alexa Lamm, Athens ◇
Albert Pope, Gainesville ◇

HAWAII

Sabina Budhathoki, Honolulu
James R. Carpenter, Hilo ◇

IDAHO

Md Hossen, Moscow

ILLINOIS

Jody Bickel, Champaign
Anna Dilger, Urbana ◇
Richard Fredrickson, Urbana ◇
Ralph Grotelueschen, East Moline ◇
Phillip Lofgren, River Forest ▼
Kenneth Olson, Schaumburg ▼
Wendell Shauman, Kirkwood ◇
Juan Tricarico, Rosemont ◇
James Usry, Chicago ◇
Paul Walker, Danvers ▼
Jack Widholm, Tolono ▼

INDIANA

Lindsey Berebitsky, West Lafayette
Daniel Dorney, Vincennes ▼▲
David Evans, Bloomington ◇
Larry Huggins, West Lafayette ◇
Eileen Kladviko, West Lafayette ▼
Victor Lechtenberg, West Lafayette ◇
Jayson Lusk, West Lafayette ◇
Lance Murrell, West Lafayette ◇
Lewis Naylor, Goshen ▼
Jeff Simmons, Greenfield ◇
Jeffrey Volenec, West Lafayette ▼

IOWA

Duane Acker, Atlantic ◇
Paul Armbrecht, Rockwell City ▼
Donald Beermann, Ames ▼
Donald Beitz, Ames ◇
John Bonner, Vincent ◇

Linda Chimenti, Ames ◇
Paula Davis, Grimes ▼
Cornelia Flora, Ames ◇
Laura Foell, Schaller
Dan Gogerty, Ames
G. William Griffel Jr., Fort Dodge ▼
John Hagie, Clarion ◇
Bill Harriott, Council Bluffs ◇
Craig Hill, West Des Moines
John Hinz, Story City
Maynard Hogberg, Ames ▼
Palmer Holden, Iowa City ▼
Maddy Hoover, Ames
Jeff Iles, Ames
Dennis R. and Betty Keeney, Ames ◇
Marvin Koeper, Rhodes ◇
William Kuhn, Urbandale ◇
Frank Loeffel, Norwalk ◇
Steve Lupkes, West Des Moines ▼
Rick McConnell, Grimes ◇
Nolan Monaghan, Manchester
Bill Northey, Des Moines
Christopher Nuss, Des Moines ▼
Todd Peterson, Urbandale ◇
Nate Richards, Monroe
John Sawyer, Ames ▼
Kent Schescke, Ames ◇
Sue Sullivan-Twilley, Urbandale ◇
M. A. Tabatabai, Ames ▼
Rodrigo Tarté, Ames ▼
Phillip Thien, Des Moines ▼
Dwight Tomes, Johnston
Jerry Wille, Ames ▼
Wendy Wintersteen, Ames ▼
Curtis R. Youngs, Ames

KANSAS

Ethan Denson, Manhattan
George Ham, Manhattan ◇
Jerry Heath, Olathe ▼
M. B. Kirkham, Manhattan ▼
R. Gary Lortscher, Bern ◇
Doug and Cathy Nord, Larned ▼
Gerry Posler, Manhattan ◇
P.V. Vara Prasad, Manhattan
Robert Rowland, Olathe ◇
Dan Senestraro, Johnson ▼
Phillip Stahlman, Hays ◇
David Whitney, Manhattan ▼

KENTUCKY

Dennis Egli, Lexington ▼
Benjamin W. Harmon, Olive Hill ▼
Merlin Lindemann, Lexington ▼

KEY

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

List as of December 31, 2022

LOUISIANA

Cecil Brooking, Ferriday ▼
Kenneth McMillin, Baton Rouge ◇
Christine Navarre, Port Allen

MAINE

Maxwell McCormack, Jr., Orono ▼

MARYLAND

Muhammad Khan, Delmar
Lowell Midla, Ijamsville ◇
Ronald Myers, Gambrills ▼
Richard Reynnells, Laurel ▼
Ronald Ritter, Odenton ▼
Jane Robens, Bethesda ◇
David Ross, Laurel ▼
Nathaniel Tablante, College Park ▼

MASSACHUSETTS

Prasanta Bhowmik, Amherst ◇
John Gerber, Amherst ◇
James F. Martin, Chelmsford
Paul Peters, Brimfield ▼

MICHIGAN

Max Benne, Sturgis ▼
Catherine Ernst, Lansing ▼
Russell Freed, East Lansing ▼
Lee Jacobs, Perry ◇
Dean Krauskopf, Parma ▼
Thomas Redick, Spring Lake ◇

MINNESOTA

Francis Busta, Roseville ◇
Vernon Cardwell, Wyoming ◇
H. Cheng, St. Paul ◇
Charles Clanton, Hampton ▼
David Craigmile, Boyd ▼
Gregory Dahl, Eagan ▼
Kevin Janni, St. Paul ◇
Douglas Karlen, St. Paul ▼
Gordon Marten, Roseville ▼
Cynthia Moen, Windom ▼
Josie Pechous, Hastings
Howard Rines, Roseville ▼
Luther Tweeten, Northfield ◇

MISSISSIPPI

Dakota Hester, Starkville
Johnie Jenkins, Starkville ▼
Barbara Okai, Starkville
Nancy Reichert, Mississippi State ◇
Earl Watson, Brandon ◇

MISSOURI

Kaleb Baber, Weston
Sydney Baxter, Chillicothe
Will Carpenter, Chesterfield ◇
Harold Cleberg, Kansas City ◇
Robert Fraley, St. Louis ◇
Chris Knight, St. Louis ◇
Charles McFatrigh, Washington ▼
Mohammad Mobarok, Columbia
Nick Plaughter, Columbia
Thad Simons, Creve Coeur ◇

MONTANA

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2022 EXPENSES

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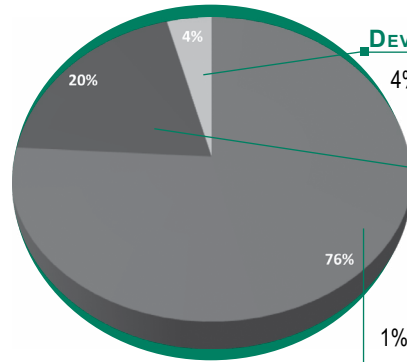
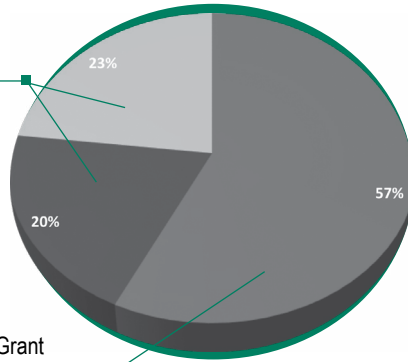
- 15% Unrestricted Fund
- 8% Designated Publication Support

GOVERNMENT GRANTS

- 8% Grants
- 3% CRIS Contract
- 9% ARS-APHIS-NIFA-USDA Grant

MEMBERSHIP 57%

- 4% Individual Memberships
- 24% Company Memberships
- 11% Nonprofit Memberships
- 11% Education Memberships
- 7% Society and Associate Memberships



DEVELOPMENTAL EXPENSES 4%

- 4% Membership Recruiting and Development

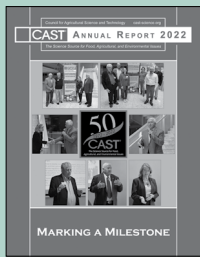
PROGRAM EXPENSES 20%

- 14% CAST Publication Payroll
- 3% Borlaug CAST Communication Award Payroll
- 1% Direct Publication Expenses
- 2% Travel: Officers, Staff, BCCA, Publications, and Other

PERSONNEL/ADMINISTRATION EXPENSES 76%

- 56% Payroll Salaries Expense
- 20% Office Expense

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