# CAST<sup>®</sup> Annual Report 2014



All great achievements require time. ~ Maya Angelou

## Council for Agricultural Science and Technology

www.cast-science.org

### **CAST Board**



David Songstad President



Mark Armfelt President-Elect



Lowell T. Midla Past President



Daniel Gingerich Treasurer



Linda M. Chimenti Executive Vice President



#### Directors

- President: David Songstad, Cibus, LLC, San Diego, California
- President-Elect: Mark Armfelt, Elanco Animal Health, Gambier, Ohio
- Past President: Lowell T. Midla, The Ohio State University, Marysville
- **Treasurer**: Daniel Gingerich, Turtle Creek Biostatistical Services, Lebanon, Ohio
- Liaisons: Donald Beitz, Iowa State University, Ames; Richard A. Cavaletto, Cal Poly State University, San Luis Obispo; Dirk Drost, Syngenta Crop Protection, LLC, Greensboro, North Carolina; Todd Peterson, Winfield Solutions, LLC, Johnston, Iowa; Paul Sundberg, National Pork Board, Des Moines, Iowa; Wendy Wintersteen, Iowa State University, Ames
- Executive Vice President: Linda M. Chimenti, CAST, Ames, Iowa

#### **Representatives of Member Societies**

- American Association of Avian Pathologists: Robert D. Evans, Cargill Turkey Production, LLC, Harrisonburg, Virginia
- American Association of Bovine Practitioners: Gabe Middleton, Orville Vet Clinic, Orville, Ohio
- American Bar Association, Section of Environment, Energy, and Resources–Agricultural Management: Todd Janzen, Plews Shadley Racher & Braun, LLP, Indianapolis, Indiana
- American Dairy Science Association: Open
- American Meat Science Association: Anna Dilger, University of Illinois, Urbana
- American Meteorological Society, Committee on Agricultural and Forest Meteorology: Joseph Alfieri, USDA/ ARS/ANRI/HRSL, Beltsville, Maryland
- American Society for Nutrition: Kimberly Barnes, West Virginia University, Morgantown
- American Society of Agricultural and Biological Engineers: Bernie Engel, Purdue University, West Lafayette, Indiana
- American Society of Animal Science: Open
- American Society of Plant Biologists: Daniel Schachtman, University of Nebraska, Lincoln
  - **Board Meetings**

In April, CAST Directors and senior staff gathered in Washington, D.C., for their Spring Board of Directors' meeting. Two days of business meetings were hosted at the office of Texas A&M University, and one afternoon was devoted to meetings with senior Hill staff members and a briefing by Fran Boyd of Meyers & Associates.

Executive Vice President Linda Chimenti provided updates on project initiatives. Committee and work group representatives reported on current activities, an ad hoc fundraising committee was established, and the Board approved one new publication proposal.

The Fall Annual Board Meeting was held in India-

- American Veterinary Medical Association: Donald Sanders, Vaca Resources, Urbana, Ohio
- Aquatic Plant Management Society: Joe Vassios, UPL Limited, Rocklin, California
- **Council of Entomology Department Administrators**: Gary J. Brewer, University of Nebraska, Lincoln
- Crop Science Society of America: David Baltensperger, Texas A&M University, College Station
- North Central Weed Science Society: Curtis Thompson, Kansas State University, Manhattan
- Northeastern Weed Science Society: Randall Prostak, University of Massachusetts, Amherst
- Poultry Science Association: Murray Bakst, Beltsville Agricultural Research Center, Beltsville, Maryland
- Society for In Vitro Biology: Nancy Reichert, Mississippi State University, Mississippi State
- Weed Science Society of America: Open

Western Society of Weed Science: Philip Westra, Colorado State University, Fort Collins

#### **Representatives of Member Companies**

**DuPont Pioneer**: Wendy Srnic, Crop Genetics Research and Development, Johnston, Iowa

- Elanco Animal Health: Jose Simas, Research and Development, Greenfield, Indiana
- Land O'Lakes: Open
- Monsanto: John Vicini, Monsanto Company, St. Louis, Missouri
- Syngenta Crop Protection, Inc.: Open

#### **Representatives of Member Nonprofits**

- American Farm Bureau Federation: Bob Young, Economic Analysis Department, Washington, D.C.
- California Dairy Research Foundation: Gonca Pasin, Davis, California
- CropLife America: Open
- Innovation Center for U.S. Dairy: Juan Tricarico, Cow of the Future, Rosemont, Illinois
- **Iowa Soybean Association**: Carol Balvanz, Policy and Producer Outreach, Ankeny, Iowa
- National Pork Board: Chris Hostetler, Animal Science, Des Moines, Iowa
- National Turkey Federation: Lisa Wallenda Picard, Scientific and Regulatory Affairs, Washington, D.C.

United Soybean Board: Laura Foell, Schaller, Iowa

napolis, Indiana, at the end of October. The Boards of Directors, Representatives, and Trustees gathered for meetings, guest speakers, and work group breakout sessions. Several noteworthy speakers addressed the group at various times throughout the meeting: Ted McKinney, Director of the Indiana State Department of Agriculture; Jeff Simmons, President of Elanco Animal Health; Mike McCarty, Food Industry & Consumer Affairs at Elanco; Doug Miller, Global Scientific Affairs at Elanco; and Scott Hutchins, Global R&D Leader for Dow AgroSciences.

On the last day of the meeting, the gavel was passed from Dr. Lowell Midla to Dr. David Songstad, who will serve as the CAST President for 2014–2015.

### Letter from the CAST Executive Vice President

### As Time Goes By

Every time you tear a leaf off a calendar, you present a new place for new ideas and progress. ~ Charles Kettering, American Inventor

With a gentle reminder from the Editor that it's time to prepare another letter for the *Annual Report*, I'm made aware once again of the passing of time. An "annual report," after all, indicates that a whole year has gone by since the last one. Of course during that time there have been many pieces of communication from CAST to its members and stakeholders, but the *Annual Report* is special, a milestone marking the years since this organization was founded. And that number stands at 42 and counting!

As described in the article titled "CAST Growth," **membership** was a significant focus of activity in 2014. CAST gained new or returning members in all categories—companies, nonprofit organizations, societies, and universities in the Education Program. In addition, we honored our Individual Members of long standing with a Loyalty Recognition certificate.

**Publications** were another important focus in 2014. As detailed in President Songstad's letter and the "CAST News" section, CAST publications were very timely. Each one brought valuable information to readers on important topics in agriculture just as those topics were in the news and on people's minds.

The CAST Strategic Plan states that "CAST will seek diverse audiences for educational programs and develop procedures and partnerships to facilitate program delivery." Following that guidance, the third focus of CAST activity in 2014 was **partnerships**. We interacted with numerous ag-related organizations to reach new and expanded audiences and to share opportunities of mutual interest. I hope those partnerships, and others, will continue in the future.

As 2014 neared its end, I notified the CAST Board of Directors of my plan to step down from the Executive Vice President's position in mid-2015. I'm sure this decision comes at the right time, not only for me personally but also for CAST. With strong leadership from the Board of Directors, active participation by the Board of Representatives, and thoughtful guidance by the Board of Trustees, this organization is strong. And with the vital support of the capable Headquarters Office Staff, this organization will maintain its forward progress. I wish CAST all the best, as time goes by.

inda M. Chimenti

Linda M. Chimenti Executive Vice President



Linda M. Chimenti Executive Vice President



On the cover: Photo from Brian A Jackson/ Shutterstock.com

#### **CAST Growth**

The year was a banner one for CAST, particularly in terms of membership and collaboration.

New in 2014, CAST offered the "CAST Member-Plus-One Campaign" to encourage current loyal members to recruit others to join CAST. Another new program in 2014, Loyal Member Recognition, honors member loyalty—those individual members who joined CAST ten or more years ago and have contributed annually.

Organizations new to CAST this year include the California Dairy Research Foundation, the California Farm Bureau Federation, the Innovation Center for U.S. Dairy, the National Turkey Federation, and the North Carolina Pork Council. Society additions are the Association of American Veterinary Medical Colleges, the Crop Science Society of America, the Midwest Poultry Federation, Ohio Dairy Vets, and the Philadelphia Society for Promoting Agriculture. Merck Animal Health and BASF joined as company members. The Education Program also added new members: the University of Kentucky, the University of Nevada, and Mississippi State University.

CAST collaborated with several organizations centered around publication rollouts—FoodPolicy.US; the American Farm Bureau; the American Society of Plant Biologists; the Agronomy, Crop Science, and Soil Science Societies; the Modern Agricultural Caucus; and the Aquatic Plant Management Society. Additionally, two issue paper authors were the speakers at a web seminar presented by CAST and Food Seminars International.

CAST and DuPont cohosted the 2014 Borlaug CAST Communication Award breakfast at the World Food Prize on October 15. Additionally, CAST and the U.S. Farmers and Ranchers Alliance presented a Food Dialogues discussion after the breakfast.



### Letter from the CAST President



David Songstad President







As we enter 2015, we will certainly be focused on the future and the future will involve a new EVP. Linda Chimenti announced in 2014 that she plans to step down as CAST EVP at the end of May in 2015. I have formed a search committee to lead the effort to present a short list of candidates to the CAST Board of Directors for consideration. We do expect to have this position filled by May.

It is human nature not to embrace change. However, this is an opportunity for everyone involved with CAST from the Boards of Directors, Trustees, and Representatives, to the staff and to all the individual members of CAST—to see that this is a chance to positively influence the future of this organization. The choice of the new EVP should be a reflection of both the history of CAST and also the future as we fulfill our mission to assemble, interpret, and communicate credible science-based information and to advocate for (the sole exception to the above advocacy proscription) the use of science in the formation of both agricultural public policy and the public's understanding of agricultural issues.

Reflecting back on 2014, CAST made a profound impact regarding communication of science. These publications include the following:

The Issue Paper *The Potential Impacts of Mandatory Labeling for Genetically Engineered Food in the United States* was released in April, and this publication received considerable attention. Dr. Alison Van Eenennaam, the Task Force Chair for this Issue Paper, was interviewed by several news agencies and the timing for this Issue Paper was "spot on!"

In July, the Commentary *Benefits of Controlling Nuisance Aquatic Plants and Algae in the United States* was released, with Dr. Kurt Getsinger as the Task Force Chair. The release of this CAST Commentary was also very timely because of the news of the loss of drinking water in Toledo, Ohio, due to algal contamination.

This past November, Dr. Stephen Weller led the Task Force that produced *The Contributions of Pesticides to Pest Management in Meeting the Global Need for Food Production by 2050.* This message was also timely, based on what I heard at the World Food Prize with regard to feeding the population by the year 2050.

The common theme that I want to see continue is the rollout of "timely" CAST publications—timely in the sense of impact that CAST publications have on policymakers, regulators, government officials, and the public at large. The year 2014 will be held as an example for the impact of timely CAST publications. I hope to see more of the same in 2015.

I would like to personally thank Linda and everyone in the CAST office for their dedication and hard work throughout 2014. The publications highlighted above would not be possible without their diligence and steadfast efforts. Further, I would like to thank the members of the three CAST Boards (Representatives, Directors, and Trustees), as well as the authors and reviewers of our publications, who have volunteered their time and talent contributing to the success of CAST. I challenge everyone reading this to consider what you can do to contribute to CAST's future success—and then do it.

In preparing this letter, I reread last year's submission by Past President Lowell Midla and appreciated his words. I echo what he shared by saying that science is defined as "the search for the truth." Let us keep our eyes and ears focused on this search, and I believe that our efforts will be even more recognized in the years to come.

With highest regards,

David D. Songstad President of CAST





CAST<sup>®</sup> www.cast-science.org

Lowell Midla passing the gavel to David Songstad in Indianapolis.

### 2014 CAST News

#### **Rollouts**

The Potential Impacts of Mandatory Labeling for Genetically Engineered Food in the United States, Issue Paper 54, April. Chair: Dr. Alison Van Eenennaam, Department of Animal Science, University of California, Davis. April rollout and presentations given by Alison Van Eenennaam:

- Russell Senate Office Building, Washington, D.C.
- National Coalition for Food and Agricultural Research (NC-FAR) "Lunch-N-Learn" seminar (in collaboration with the American Society of Plant Biologists; The Agronomy, Crop Science, and Soil Science Societies; and the Modern Agricultural Caucus), Washington, D.C.
- Panel discussion cohosted by FoodPolicy.US and CAST at the Georgetown University School of Continuing Studies, Washington, D.C.



Linda Chimenti, Alison Van Eenennaam, and Lowell Midla (CAST President).

#### **Board of Trustees**

The CAST Board of Trustees is composed of nationally prominent individuals from academia, industry, and nonprofit organizations. Trustees discuss and evaluate national concerns and the role of CAST publications in addressing them. They also focus on improving the communications between CAST and potential stakeholders. CAST has been fortunate to include many wellrespected experts on its Board of Trustees, and during 2014 several more individuals have agreed to serve.

Current members are Barbara Allen-Diaz, Vice President of UC Agriculture and Natural Resources at the University of California; Claude Brown, President and Founder of Ag Industrial Manufacturing; Mark J. Cochran, Vice President for Agriculture, Head of the University of Arkansas Division of Agriculture, and Professor of Agricultural Economics and Agribusiness; Nancy M. Cox, Dean of the College of Agriculture, Food and Environment at the University of Kentucky and Director of the Kentucky Agricultural Experiment Station; Craig Hill, President of the Iowa Farm Bureau; Stanley Johnson, University of Nevada–Reno; and Wendy Wintersteen, Dean of the College of Agriculture and Life Sciences at Iowa State University. Benefits of Controlling Nuisance Aquatic Plants and Algae in the United States, Commentary QTA2014-1, July. Chair: Dr. Kurt Getsinger, U.S. Army Engineer Research and Development Center, Vicksburg, Mississippi. July rollout and presentation given by John H. Rodgers, Jr. (Task Force Author):

- Aquatic Plant Management Society Annual Meeting, Savannah, Georgia
- Additional presentations planned at regional meetings in 2015



John Rodgers at APMS presentation.

The Contributions of Pesticides to Pest Management in Meeting the Global Need for Food Production by 2050, Issue Paper 55, November. Chair: Dr. Stephen C. Weller, Department of Horticulture and Landscape Architecture, Purdue University, West Lafayette, Indiana. November rollout and presentations given by Stephen Weller:

- Russell Senate Office Building, Washington, D.C.
- NC-FAR "Lunch-N-Learn" seminar, Washington, D.C.
- Panel discussion hosted by the American Farm Bureau Federation at their office suite, Washington, D.C.



Panel discussion at American Farm Bureau Federation.

#### 2014 Borlaug CAST Communication Award

CAST President Lowell Midla announced Alison Van Eenennaam as the winner of the 2014 Borlaug CAST Communication Award at an event at the World Bank in Washington, D.C., on Thursday, May 1.

CAST and DuPont—in conjunction with the World Bank—hosted a presentation by Jeff Simmons, President of Elanco and the 2013 Borlaug CAST Communication Award recipient. He emphasized viable solutions in the movement for a food-secure future, and he focused on the "Enough" campaign—*The Fight for a Food-secure Tomorrow*.

Following Simmons' speech, the announcement of Dr. Van Eenennaam's award was made. An official presentation occurred at a breakfast side event cohosted by DuPont and CAST at the World Food Prize Symposium in Des Moines, Iowa, on October 15. After the breakfast, a Food Dialogues event organized by the U.S. Farmers and Ranchers Alliance was held, and Van Eenennaam served as a panelist. She is a specialist in the field of animal genomics and biotechnology, and she is at the forefront of those delivering clear, science-based information to the public and policymakers alike.





Linda Chimenti presents the 2014 Borlaug CAST Communication Award to Dr. Alison Van Eenennaam.



#### KEY

- Ilifetime Member
- Millennium Club
- President's Club
- ▲ Friends of CAST Individual Member (includes retired and student)
- ♥ Loyalty Member (≥10 years of annual giving)

List as of December 31, 2014

#### **UNITED STATES**

#### Alabama

John Beasley, Jr., Auburn Jacqueline Nix, Prattville Harry S. Prim, Jr., Gordon ◊ Stanley Wilson, Auburn ◊

#### Arizona

P. Thomas Cox, Phoenix ◊ Hillary Hibbard, Gilbert Roger D. Howard, Fountain Hills ◊ Charles R. Krueger, Mesa ◊ Gary Marchant, Tempe W. Gerald Matlock, Tucson ♥ Susan Pater, Willcox John Soper, Phoenix Richard E. Stuckey, Surprise ◊ Kai Umeda, Phoenix

#### Arkansas

Fred Bourland, Keiser ♥ Mark Cochran, Little Rock Steve Eddington, Little Rock David Gealy, Stuttgart Clifford S. Snyder, Conway Samuel H. Weaver, Bella Vista Robert N. Wiedenmann, Fayetteville

#### California

Julie G. Adams, Modesto Kassim Al-Khatib, Davis  $\diamond$ M. J. Bakke, Clovis  $\diamond$ Filmore E. Bender, Bakersfield  $\diamond$ Claude Brown, Lodi  $\diamond$ Janet Caprile, Pleasant Hill Fred M. Carasso, Van Nuys  $\diamond$ Richard Cavaletto, San Luis Obispo Gregory Coleman, Modesto  $\Box$ Dennis Daugherty, Turlock  $\blacklozenge$ Richard E. Dresser, Fortuna  $\diamond$ J. A. Driver, Knights Landing  $\diamond$ Robert C. Ehn, Clovis Stanley G. Goodrich, Rocklin

Donald W. Grimes, Reedley Marjolaine Hafermann, Yorba Linda Robert C. Hargreaves, Bakersfield ¥ Franz R. Kegel, Stockton Mark Kreul, Baldwin Park Charles M. Lawrence, Eureka V Peggy G. Lemaux, Berkeley Alfredo R. Loperena, San Diego John Madsen, Davis Gary Markegard, Fortuna V Pamela Gail Marrone, Davis George C. Martin, Paradise V Roland D. Meyer, Davis Arthur J. Miller, Irvine Randy Oliver, Grass Valley Brad Olson, Castro Vallev James W. Oltjen, Winters ¥ Anthony Padgett, San Francisco Franklin Parks, Pinedale ◊ James Petta, Walnut Creek Stuart Pettygrove, Davis ¥ Calvin O. Qualset, Davis ◊ Dan Y. Rosenberg, Sacramento ◊ Joe Smith, Davis David Songstad, San Diego Richard F. Stier, Sonoma ◊ Joyce F. Strand, Sacramento ◊ Joe Traynor, Bakersfield ¥ Carl Winter, Davis ◊ Broc G. Zoller, Kelseyville ¥

#### Colorado

John S. Avens, Fort Collins ¥ Mandy Carr, Highlands Ranch Stephen Del Grosso, Fort Collins Franklyn Garry, Fort Collins V Michael Goldblatt, Colorado Springs ◊ Carl Hittle, Fort Collins ◊ Thomas Holtzer, Fort Collins Marvin E. Jensen, Fort Collins ¥ Albert R. Johnson, Durango Wayne F. Keim, Fort Collins ◊ E. Gordon Kruse, Fort Collins W. Dennis Lamm, Wellington Delbert Miles, Greeley • Jerry Olson, Fort Collins ¥ Bill Orendorff, Denver Calvin Pearson, Fruita V Henry L. Shands, Fort Collins ◊ Lee E. Sommers, Fort Collins ◊ James R. Watson, Jr., Littleton ◊

#### Connecticut

Lynn R. Brown, Willington W. A. Cowan, Storrs ◊ Chris Laughton, Enfield Todd L. Mervosh, Suffield ♥ James Putnam II, Enfield

#### Delaware

Jim Borel, Wilmington ◊ Elizabeth Krushinskie, Millsboro Mark VanGessel, Georgetown

#### **District of Columbia**

Kathi Brock, Washington Teresa A. Gruber, Washington ◊ Judith M. Heimann, Washington Hans R. Herren, Washington ◊ Peter B. Hutt, Washington ♥ Mary Pat Raimondi, Washington David Schmidt, Washington ♥ Jill Schroeder, Washington ♥ Robert Young, Washington

#### Florida

Clarence B. Ammerman, Gainesville ◊ Daniel A. Botts, Maitland & Joel H. Brendemuhl, Gainesville Charles Carr, Gainesville Bobby Darst, Tavernier ◊ John F. Gerber, Gainesville ◊ Melvin G. Greeley, Mount Dora ◊ Edward A. Hanlon, Immokalee ◊ Richard L. Lower, St. Petersburg V Gail E. Mahnken, Gainesville ¥ Clyde Martin, Palmetto Donald J. McFeeters, DeLand ¥ Harry J. Mersmann, Palm Harbor ¥ Lorraine Mott, Gainesville ◊ Gilberto Olaya, Vero Beach H. H. (Jack) Van Horn, Gainesville ◊ Earl Watson, Clewiston ◊ Clayton S. Williams, Fort Myers ◊

#### Georgia

Elizabeth L. Andress, Athens ♥ Louis J. Boyd, Bogart ◊ Gale A. Buchanan, Adel ◊ David W. Dibb, Cumming ◊ William Flatt, Athens ◊ Stanley M. Fletcher, Griffin ◊ Will R. Getz, Fort Valley ♥ David A. Knauft, Athens ◊ Albert E. Pope, Alpharetta ◊ Ryan Wersal, Alpharetta

#### Hawaii

Barry M. Brennan, Honolulu Brant Cali, Kula □ ♥ James R. Carpenter, Hilo ◊ Steven J. Lupkes, Kekaha ♥

#### Idaho

John C. Foltz, Moscow ◊ Donald L. Ingle, Kendrick

#### Illinois

Hunter Hudson Adams, Dewey Aldo J. Crovetti, Lake Forest ¥ Richard L. Fredrickson, Jr., Urbana ◊ Ralph D.Grotelueschen, East Moline ◊ Steven C. Huber, Urbana K. E. Lanka, Fulton ◊ Philip A. Lofgren, Oak Park Kenneth E. Olson, Schaumburg ¥ Patrick O'Rourke, Normal Kailash S. Purohit, Des Plaines ◊ Larry Schrader, Normal Wendell L. Shauman, Kirkwood ◊ Rodrigo Tarté, Lisle V Dennis R. Thompson, Mahomet James Usry, Chicago ◊ Paul Walker, Danvers V Jack M. Widholm, Urbana 🕈 Robert Wolf, Mahomet

#### Indiana

W. Dwight Armstrong, Indianapolis Daniel Dorney, Vincennes A Larry F. Huggins, West Lafayette ◊ Eileen J. Kladivko, West Lafayette Victor L. Lechtenberg, West Lafayette ◊ Alan Mathew, West Lafayette Ken McGuffey, Indianapolis Lance J. Murrell, West Lafayette ◊ Lewis M. Naylor, Goshen William J. Prokop, Demotte ◊ Jon Schoonmaker, West Lafayette Marvin E. Schultz, Fishers Paul R. Shellenberger, Franklin V Jose Simas, Greenfield Jeff Simmons, Greenfield ◊ Gary C. Steinhardt, West Lafayette Todd Vogel, Seymour Randall L. Warden, Fort Wayne

#### lowa

Duane Acker, Atlantic ◊ Jimmie L. Andersen, Council Bluffs Paul J. Armbrecht, Lake City V David Beck, Story City Donald Beermann, Ames Donald C. Beitz, Ames ◊ Brad Bonner, Denison John M. Bonner, Vincent ◊ Elizabeth Burns-Thompson, Altoona Linda M. Chimenti, Ames ◊ Richard L. Chrisinger, Winfield ¥ Joseph Cordray, Ames Rick Cruse, Ames Paula Davis, Johnston Walter Fehr, Ames ◊ Cornelia B. Flora, Ames ◊ Dan Gogerty, Ames G. William Griffel, Jr., Fort Dodge ♥ John R. Hagie, Clarion ◊ Colleen Hamilton, Ames Bill L. Harriott, Council Bluffs ◊ M. Peter Hoffman, Ames ¥ Maynard Hogberg, Ames 🕈

CAST initiated a Loyal Member Program to honor its long-time Individual Members.

Palmer Holden, Iowa City ¥ Douglas L. Karlen, Ames V Dennis R. and Betty Keeney, Ames ◊ Marvin C. Koeper, Rhodes ◊ William E. Kuhn, Urbandale ◊ Kenneth L. Larson, Ames ◊ Yinghong Li, Johnston Frank A. Loeffel, Des Moines ◊ Tom E. Loynachan, Ames ¥ Clyde Martin, Maquoketa ◊ R. L. McConnell, Grimes ◊ Jean McGuire, Maxwell Owen J. Newlin, Des Moines ◊ Christopher Nuss, Des Moines Gary Osweiler, Ames Micheal D. K. Owen, Ames ¥ Fredric Owens, Johnston John Pesek, Ames ◊ Craig J. Rowles, Carroll Noel G. Rudie, Indianola V John E. Sawyer, Ames Richard Sloan, Rowley Wendy Srnic, Johnston Sue L. Sullivan-Twilley, Urbandale ◊ M. A. Tabatabai, Ames Phillip B. Thien, Des Moines • Bruce Towne, Gowrie Jerry L. Wille, Ames Wendy K. Wintersteen, Ames Jeffrey Wolt, Ames ¥

#### Kansas

Philip Barnes, Wamego Sridevi Betha, Manhattan David Brachtenbach, Manhattan Forrest Glen Chumley, Manhattan Ognacio Ciampitti, Manhattan Randy DeGreeff, Manhattan J. Anita Dille, Manhattan Andrew Dillon Manhattan N. Alfred Dutrow, McPherson ¥ Andrew Esser, Manhattan Amar Godar, Manhattan George E. Ham, Manhattan ◊ Jerry L. Heath, Lenexa Cade Hewitt, Manhattan Mithila Jugulam, Manhattan Curtis L. Kastner, Manhattan V M. B. Kirkham, Manhattan V R. Gary and Betty Lortscher, Bern ◊ Kindsey Niehues, Manhattan Douglas and Cathy Nord, Larned Adewale Osipitan, Manhattan Dallas E. Peterson, Manhattan V Gerry L. Posler, Manhattan ◊ Robert D. Rowland, Olathe ◊ Dan Senestraro, Johnson Andi Shore, Manhattan Phillip Stahlman, Hays ◊ Curtis Thompson, Manhattan Vijaya Varanas, Manhattan David A. Whitney, Manhattan

#### Kentucky

Thomas C. Bridges, Lexington ♥ Richard D. Coffey, Princeton ♥ Gary L. Cromwell, Lexington ♥ Dennis B. Egli, Lexington ♥ Wilbur W. Frye, Frankfort ◊ Benjamin W. Harmon, Olive Hill Virgil W. Hays, Lexington ◊ Merlin Lindemann, Nicholasville James R. Martin, Princeton ♥ Douglas Overhults, Princeton

#### Louisiana

M. W. (Wink) Alison, Winnsboro ♥ Cecil Brooking, Jr., Ferriday Brad L. Inman, Covington Bruce F. Jenny, Baton Rouge ♥ Kenneth W. McMillin, Baton Rouge ◊ W. Allen Nipper, Addis

#### Maine

Mary Camire, Brewer Maxwell L. McCormack, Jr., Thorndike Bruce R. Stillings, Falmouth David E. Yarborough, Orono ♥

#### Maryland

Murray Bakst, Beltsville V. Allan Bandel, Glenwood ¥ James A. Duke, Fulton ◊ Bernadette Dunham, Rockville A Bronda F. Harrison, College Park Ronald David Myers, Gambrills Richard D. Reynnells, Laurel V Russell Reynnells, Laurel Ronald L. Ritter, Laurel V Jane F. Robens, Bethesda ◊ David S. Ross, Laurel V Nathaniel L. Tablante, College Park Alan Tasker, Silver Spring V Elymar V. Vea, Crownsville ¥ Lester R. Vough, Brookeville Nickolas G. Zimmermann, Adelphi

#### Massachusetts

Prasanta C. Bhowmik, Amherst ◊ John M. Gerber, Amherst ◊ Paul J. Peters, Brimfield Randall G. Prostak, Amherst

#### Michigan

John C. Baker, East Lansing Max E. Benne, Sturgis ♥ J. Roy Black, East Lansing Catherine W. Ernst, East Lansing Russell Freed, East Lansing ♥ Harold D. Hafs, Davison ◊ James L. Herbert, Lansing ♥ Lee W. Jacobs, East Lansing ◊ Dean Krauskopf, Parma Donald Penner, East Lansing ♥ R. Wayne Skaggs, St. Joseph ◊ J. William and Carolyn Thomas, East

Lansing ◊

#### Minnesota

Daniel Borgen, Golden Valley A Michael Brumm, N. Mankato ¥ Francis Busta, Roseville ◊ Vernon Cardwell, St. Paul ◊ H. H. Cheng, St. Paul ◊ Charles J. Clanton, St. Paul David Craigmile, Boyd Jerry Fruin, St. Paul Burle G. Gengenbach, St. Paul ¥ William F. Hueg, St. Paul ◊ Larry Jacobson, St. Paul Kevin A. Janni, St. Paul ◊ Alan Krysan, Lakeville Gordon C. Marten, Roseville ¥ Larry Meadows, St. Paul Cynthia K. Moen, Windom ¥ R. Vance Morey, Roseville William S. Niehaus, Moorhead ◊ Leroy Petersen, Kerkhoven Mary Raeth-Knight, St. Paul Duane P. Rathmann, Waseca Howard Rines, Shoreview ¥ Joseph W. Rust, Grand Rapids ¥ Eric Spandl, St. Paul Mark Wall, Eden Prairie Scott Webster, Northfield ¥ Mark Wrucke, Farmington

#### Mississippi

Richard Bailey, Starkville Roy G. Creech, Starkville ◊ Lyle E. Nelson, Starkville ▲ David R. Shaw, Mississippi State

#### Missouri

Brett H. Bussler, St. Louis V Will D. Carpenter, Chesterfield ◊ Harold D. Cleberg, Kansas City ◊ Mario De Figueiredo, Chesterfield Robert T. Fraley, St. Louis ◊ Gary F. Hartnell, Chesterfield Richard E. Joost, Chesterfield Chris Knight, St. Charles ◊ Bill Miller, Gray Summit • Douglas Randall, Columbia Thomas P. Redick, Clayton ◊ Ken Schneeberger, Columbia Thad W. Simons, St. Charles ◊ R. Phillip Upchurch, Chesterfield ◊ Marc Vanacht, St. Louis John Vicini, St. Louis

#### Montana

Jeff Jacobsen, Bozeman Robert Short, Laurel ◊ B. Staigmiller, Absarokee ◊

#### Nebraska

Gary Brewer, Lincoln Chris R. Calkins, Lincoln V Charles Francis, Lincoln DeLynn Hay, Waverly Gary W. Hergert, Scottsbluff Lloyd L. Lipska, Seward Martin A. Massengale, Lincoln ◊ Z. B. Mayo, Lincoln V Fred W. Roeth, Lincoln ◊ William G. Schmutz, Omaha Michele Schoeneberger, Lincoln Joan S. Schrader, Ashland Larry D. Schulze, Eagle ¥ Charles A. Shapiro, Concord ◊ David P. Shelton, Concord Robert C. Sorensen, Lincoln V Leroy V. Svec, Seward ¥ Raymond Ward, Kearney ◊ Ted R. Warfield, Kearney ◊

#### Nevada

Stanley Johnson, Reno ▲ Warren M. Schwecke, Mesquite ◊

#### **New Jersey**

C. Andrew Beagle, South Plainfield ♥ Kenneth R. Cummings, Stockton Zane Helsel, Ewing Melvin R. Henninger, East Windsor ♥ Larry S. Katz, New Brunswick ♥ John Meade, East Brunswick ◊ Donald Schaffner, Freehold

#### **New Mexico**

Robert Hagevoort, Clovis Stephen H. Thomas, Las Cruces 🕈

#### **New York**

Dale E. Bauman, Ithaca ♥ Gary Bergstrom, Ithaca ♥ Catherine Bertini, Syracuse ◊ Karyn Bischoff, Lansing Keith Fairbank, Ashville ◊ Dale D. Fisher, Binghamton Russell R. Hahn, Ithaca ◊ Marvin Pritts, Ithaca Joe M. Regenstein, Ithaca Pedro A. Sanchez, Palisades ◊ Norman Scott, Ithaca Michael L. Thonney, Ithaca ♥

#### North Carolina

Don V. Allemann, Greensboro ◊ Markus Andres, Chapel Hill Garth W. Boyd, Wilmington ◊ Wayne Buhler, Raleigh Beth Carroll, Greensboro Harold Coble, Cary ◊ Carl R. Crozier, Plymouth Dirk Drost, Greensboro ▲

#### KEY

- Lifetime Member
- Millennium Club
- President's Club
- ▲ Friends of CAST Individual Member (includes retired and student)
- Loyalty Member
   (≥10 years of annual giving)

List as of December 31, 2014

E. James Dunphy, Raleigh ¥ Robert E. Holm, Holly Springs ¥ Leland R. House, Bakersville ◊ Lee-Ann Jaykus, Durham David Jordon, Raleigh David R. Lineback, Southport ◊ Charles McFatrich, Chapel Hill Carroll Moseley, Greensboro Ishwar Murarka, Raleigh ◊ George C. Naderman, Jr., Cary Patricia F. O'Leary, Raleigh Katharine B. Perry, West End ◊ Odis Wayne Robison, Raleigh ◊ Joseph F. Schuh, Raleigh Sally Shaver, Cary Ronald E. Sneed, Raleigh ¥ Charles D. Sopher, Washington ◊ Charles W. Stuber, Raleigh ¥ Turner B. Sutton, Windsor Gerald C. Weigel, Wake Forest ¥ Richard F. Wilson, Raleigh ¥ Mulumebet Worku, Greensboro A. Douglas Worsham, Scottville ¥

#### **North Dakota**

David Borlaug, Bismark ◊ Alan Dexter, Fargo ◊ Hiram M. Drache, Fargo Kirk Howatt, Fargo Brian Jenks, Minot Rodney G. Lym, Fargo Calvin G. Messersmith, Fargo ◊ James L. Ozbun, Dickinson ◊ Thomas Peters, Fargo ◊ James A. Staricka, Williston ♥ Anthony Thilmony, Valley City ♥

#### Ohio

Mark Armfelt, Gambier Mark A. Bennett, Columbus Keith I. Brown, Wooster Larry E. Davis, Cincinnati Daniel Gingerich, Lebanon K. Fred Gingerich II, Ashland Robert J. Gustafson, Worthington Robert W. Harriman, Delaware Stanley W. Joehlin, Curtice ◊ Michael P. Kelty, Dublin ◊ Jeffrey Lakritz, Columbus John H. Litchfield, Worthington ♥ Phil Lowe, Beverly Gabe Middleton, Orrville Lowell Midla, Marysville ◊ Eric K. Nelson, Marysville ◊ Don Sanders, Urbana Gene E. Schram, Whitehouse ♥ Eric Shaver, Berlin Luther G. Tweeten, Columbus ◊ Ellen Yoakam, Ashland Tommy L. Zimmerman, Wooster ♥

#### Oklahoma

Billy R. Clay, Stillwater ♥ William C. Edwards, Stillwater David M. Engle, Stillwater ♥ John Fenderson, Stillwater ♥ Drew L. Kershen, Norman ◊ Don S. Murray, Stillwater ◊ Jim L. Rainey, Edmond ◊ Ned S. Raun, Tulsa ◊

#### Oregon

B. Krishen Bhat, Corvallis ♥
W. James Clawson, Dallas ♥
Stella M. Coakley, Corvallis
Thayne R. Dutson, Corvallis ◊
Russell S. Karow, Corvallis
Benjamin J. Mason, Grants Pass ◊
James E. Oldfield, Corvallis ◊
Loydee S. Stonebrink, Rickreall ◊
J. Lowell Young, Corvallis ◊
William C. Young III, Corvallis ♥

#### Pennsylvania

Duncan Allison, Kennett Square J. Russell Bishop, Lansdale ♥ Linda G. Carter, Kennett Square David Galligan, Kennett Square Robert E. Graves, University Park ◊ Verdean E. Keyser, Boswell ◊ John R. Lake, Harrisburg David G. Lutz, New Holland Harold G. Marshall, Bellfonte ◊ Gregory P. Martin, Elizabethtown ♥ Robert M. Smith, State College ◊ George A. Somkuti, Lansdale ◊ Ronald Stotish, Ivyland Kurt M. Walker, Somerset ♥ Paul J. Wangsness, State College ♥

#### South Dakota

David Casper, Brookings Erin Cortus, Brookings Elaine E. Grings, Brookings ♥ Roy and Jacqueline Holland, Spearfish ◊ David J. Schingoethe, Brookings

#### Tennessee

Michael W. Cook, Memphis □ Frank J. Delfino, Columbia ♥ Norman Goldenberg, Memphis ▲ ♥ David E. Harmon, Morristown ◊ Larry G. Heatherly, Seymour Richard L. Large, Memphis ◊ Joseph P. Sutton, Jackson Kay Trigiano, Knoxville Troy Wakefield, Jr., Nashville ◊ Dennis R. West, Knoxville ♥

#### Texas

David D. Baltensperger, College Station Bryan Brokaw, Abilene ¥ Neville P. Clarke, Brvan V Charles Cobb, Hereford Noel Andy Cole, Amarillo ¥ Carl E. Coppock, San Antonio 🕈 Jackson Dzakuma, The Woodlands Gary L. Eilrich, Willis ▲ Cady R. Engler, College Station ◊ Paul F. Engler, Amarillo ◊ Jade Haberman, College Station C. Ross Hamilton, Flower Mound A Paul G. Harms, College Station V Edward A. Hiler, Runaway Bay V Terry Howell, Lago Vista Robert W. Lee, Amarillo ¥ A. Bruce Maunder, Lubbock ◊ Tom McDonald, Dalhart ◊ Paul D. Ohlenbusch, Georgetown Randy E. Rosiere, Stephenville ¥ Edward C. A. Runge, College Station ◊ Jeffrey W. Savell, College Station Wilson Scaling, Henrietta Stephen W. Searcy, College Station L. R. Sprott, College Station ¥ Bob Stallman, Columbus A Sean Thompson, College Station David Waggoner, Hillsboro John Walker, San Angelo Neil F. Walter, Oglesby Mark Walton, Leander Jerry Young, Nacogdoches Robert G. Zimbelman, Georgetown ◊

#### Utah

#### Allen J. Young, Logan 🕈

#### Vermont

Kent Henderson, Saint Albans Emily Lyons, South Royalton Julie Smith, Burlington

#### Virginia

Naerin Baek, Blacksburg John A. Becker, Arlington Mahlon A. Burnette III, Great Falls ◊ Richard Crowder, Alexandria Jeffrey F. Derr, Virginia Beach Joseph D. Eifert, Blacksburg Robert Evans, Harrisonburg Joseph P. Fontenot, Blacksburg Barbara Glenn, Arlington Alan Grant, Blacksburg Arlene Hamburg, Arlington Candi Kelly, Blacksburg ◊ Robert Maybury, Falls Church Thomas W. Orme, Purcellville ◊ Ronald Pearson, Blacksburg ◊ J. Richard Storey, Williamsburg ◊ Ann Marie Thro, Arlington Don Vondriska, Richmond ◊ Paul Whatling, Arlington Cynthia M. Wood, Blacksburg

#### Washington

Charles Antholt, Lummi Island Rick Boydston, Prosser ♥ David W. Evans, Prosser ◊ Larry K. Hiller, Pullman ◊ Joe K. Hillers, Coupeville ♥ Harvey A. Holt, Seattle Drew Lyon, Pullman ♥ Bernalyn McGaughey, Lakewood ◊ John P. McNamara, Pullman ◊ Dan Murphy, Everett Christina Tama-Sweet, Vancouver Tom Young, Walla Walla ◊

#### West Virginia

Gary H. Heichel, Martinsburg V

#### Wisconsin

Larry L. Borchert, Cottage Grove ◊ Thomas Kennedy, Westport Jay Mattison, Verona J. Mark Powell, Madison Dwayne A. Rohweder, Middleton ♥ Charles G. Schwab, Boscobel ♥ Triveni P. Shukla, Mukwonago ◊ Leo M. Walsh, Madison ◊

#### Wyoming

Michael Espy, Savery Colin Kaltenbach, Laramie Alvin L. Young, Cheyenne

Among the CAST supporters who are no longer with us, CAST lost two good friends this past year – Dr. Bob Sweet, a valued member of the CAST Board, and Dr. Scott Hurd, a respected CAST Task Force Chair.

#### INTERNATIONAL

#### Australia

Jerome Franckowiak, Warwick, Queensland

#### Brazil

Ricardo Balardin, Santa Maria

#### Canada

David Armitage, Cambridge, ON Timothy M. Ballard, Aldergrove, BC Leslie Ballentine, Toronto, ON Stan Benda, Toronto, ON Tim Blackwell, Elora, ON Charles Gracey, Ancaster, ON Robert Hall, Guelph, ON ◊ David Hume, Guelph, ON Paul Lague, Baie d'Urfe, QC ♥ Michael McGee, Calgary, AB Diane McLean, Carleton Place, ON Lorna Michael-Butler, North Saanich, BC ◊ John Mitchell, Hamilton, ON ◊ Arnold B. Pierce, Calgary, AB ♥ John Vanderstoep, Surrey, BC ♥

China

Leon Gorris, Changning District, Shanghai ◊

#### Costa Rica

Jorge M. Sanchez, Heredia

#### Croatia

Jasmina Lukac Havranek, Zagreb ◊

#### Japan

Tetsuhisa Goto, Kamiina-gun, Nagano-ken ♥

#### Mexico

Francisco Mayorga Castaneda, Zapopan, Jalisco Francisco Mayorga, Jr., Guadalajara

#### **Social Media**

Social media continues to buzz. The CAST Twitter account has 4,548 followers, with new people joining daily. CAST has an active Pinterest account that has accumulated 514 followers since its creation during the summer of 2012. CAST's Facebook page has recently grown to 619 likes.

The CAST blog is nearing the 66,500 hit mark, with approximately 1,800 per month. Reprints of the CAST blog have been in several magazines (e.g., *Our Iowa, Woodlands & Prairies*) and newspapers (*The Des Moines Register* and *Ames Tribune*)—and reprinted on several other blogs. CAST's website has received more than 233,520 visits with viewers from all U.S. states and more than 168 countries.

Blog (cast-science.blogspot.com) Facebook (facebook.com, search for CAST) Pinterest (pinterest.com/castagscience) SchoolTube/YouTube (schooltube.com/user/CAST; youtube.com/user/CASTagScience) Twitter (twitter.com/CASTagScience) Website (cast-science.org)



#### **CAST Offers New Editing Services**

CAST initiated a new offering to ag professionals in 2014—editing services. With many years of experience behind them, the editing staff at CAST can give publications, websites, books, news-letters, and other forms of printed communication the polish they need to promote an organization and attest to its credibility.

Grammar and style issues become even more important when executives are writing company documents or experts are composing scientific research papers. No matter how accomplished a writer might be, proofreading is a challenge, and proper formatting is a key to successful publications. With this in mind, CAST editors now offer their editorial services to ag-related businesses, societies, and other organizations and private individuals to enhance their communications.

As with most new endeavors, CAST's editing services started slowly—but they picked up speed throughout the year via both advertising and word of mouth. Good editing is a valuable commodity!

### Mark Kujawa, Bangkok, AP♥

#### **United Kingdom**

Nigeria

Thailand

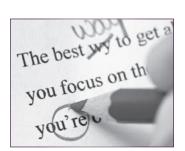
Akin Adesina, Abuja ◊

Kevin Moran, Harrogate, North Yorkshire

#### 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
- Student Member \$25/calendar year

Join online today @ www.cast-science.org.



### **Sustaining Members 2014**

#### **Member Societies**

American Association of Avian Pathologists American Association of Bovine Practitioners American Bar Association, Section of Environment, Energy, and Natural Resources-Agricultural Management American Dairy Science Association American Meat Science Association American Meteorological Society, Committee on Agricultural and Forest Meteorology American Society for Nutrition American Society of Agricultural and Biological Engineers American Society of Animal Science American Society of Plant Biologists American Veterinary Medical Association Aquatic Plant Management Society Council of Entomology Department Administrators Crop Science Society of America North Central Weed Science Society Northeastern Weed Science Society Poultry Science Association Society for In Vitro Biology Weed Science Society of America Western Society of Weed Science

#### **Associate Societies**

American Association of Veterinary Laboratory Diagnosticians Association of American Veterinary Medical Colleges Midwest Poultry Federation Ohio Dairy Vets Philadelphia Society for Promoting Agriculture

#### **Ex Officio Members**

Agricultural Institute of Canada National Coalition for Food and Agricultural Research

#### Companies and Cooperatives

Bayer CropScience Campbell Scientific, Inc. Cobb-Vantress Coca-Cola Company Compliance Services International Dow AgroSciences, LLC DPI Global DuPont Pioneer Elanco Animal Health Feed Energy Company GROWMARK, Inc. Hoard's Dairyman Magazine ISK Biosciences Corp. Merck Animal Health Monsanto

Morning Star Company Nutra-Flo Company Potash Corporation Riceland Foods Foundation Syngenta Crop Protection, Inc. Van Diest Supply Company Winfield Solutions, a Land O'Lakes Company Zeigler Brothers, Inc.

#### **Nonprofit Organizations**

Agribusiness Association of Iowa American Farm Bureau Federation American Sheep Industry Association American Society of Sugar Beet Technologists Animal Agriculture Alliance Animal Health Institute Association of American Plant Food Control Officials Association of Texas Soil and Water Conservation Districts Biotechnology Industry Organization California Citrus Quality Council California Dairy Research Foundation California Farm Bureau CropLife America Farm Foundation Illinois Crop Improvement Association Indiana Crop Improvement Association, Inc. Indiana Horticultural Society Indiana Soybean Alliance Innovation Center for U.S. Dairy International Plant Nutrition Institute Iowa Beef Industry Council Iowa Farm Bureau Federation Iowa Pork Producers Association Iowa Soybean Association Mid America CropLife Association National Alfalfa & Forage Alliance National Association of Animal Breeders National Chicken Council National Corn Growers Association National Cotton Council of America National Grain and Feed Association National Pork Board National Renderers Association National Turkey Federation North Carolina Pork Council Oregon Department of Agriculture Pennsylvania Pork Producers Council Rice Research Board Southern Crop Production Association Texas Cattle Feeders Association U.S. Poultry and Egg Association, Inc. United Soybean Board United States Animal Health Association Virginia Farm Bureau Federation Wyoming Farm Bureau Federation



CAST staff members joined the United Way's Day of Caring by volunteering for the Ames Historical Society.

### **Sustaining Members 2014**

#### Subscribers

Alberta Government Library Brigham Young University-Harold B. Lee Library California Department of Pesticide Regulation Library-Registration Resource Library Canadian Agriculture Library Clark University-Kasperson Library Colorado State University Libraries Evergreen State College-Daniel J. Evans Library Iowa State University-Parks Library North Carolina State University-Hunt Library Nova Scotia Agricultural College-MacRae Library Purdue University Libraries South Dakota State University-Hilton M. Briggs Library Texas A&M University-Evans Library Texas Tech University Libraries Université Laval University of California-Berkeley Library University of California-Davis Library University of Georgia Libraries University of Guelph-McLaughlin Library University of Illinois Library University of Kentucky-William T. Young Library University of Maryland-McKeldin Library University of Minnesota Libraries University of Tennessee–John C. Hodges Library University of Wisconsin at Madison-Steenbock Memorial Library Wageningen University and Research Centre Library

#### **Educational Programs**

Iowa State University Kansas State University Mississippi State University Texas A&M University The Ohio State University University of Arkansas Division of Agriculture

#### University of California–Davis University of Florida University of Kentucky University of Nebraska University of Nevada Winfield Solutions, for support of National Association of Agricultural Educators

#### Grantors/Event Sponsors

American Farm Bureau Federation Aquatic Ecosystem Restoration Foundation Aquatic Plant Management Society **BASF Plant Science**, LLC Coca-Cola Company Council for Biotechnology Information Dow AgroSciences LLC DuPont Elanco Animal Health Florida Aquatic Plant Management Society FoodPolicy.US Gowan Company GROWMARK, Inc. Indiana Crop Improvement Association Indiana Soybean Alliance Innovation Center for U.S. Dairy MidSouth Aquatic Plant Management Society Midwest Aquatic Plant Management Society Monsanto North Central Weed Science Society Recombinetics, Inc. Responsible Industry for a Sound Environment South Carolina Aquatic Plant Management Society Syngenta University of California, Division of Agriculture and Natural Resources USDA-Agricultural Research Service USDA-Animal and Plant Health Inspection Service

#### For More Information about CAST

Council for Agricultural Science and Technology 4420 West Lincoln Way, Ames, IA 50014-3447 Phone: 515-292-2125 Fax: 515-292-4512 E-mail : cast@cast-science.org Website: www.cast-science.org Blog: www.cast-science.blogspot.com Facebook: www.facebook.com Twitter: www.twitter.com/CASTagScience Pinterest: pinterest.com/castagscience/ SchoolTube Channel: www.schooltube.com/user/CASTagScience



CAST staff: (front from left) Hailey Duff, Megan Gaul, Lauren Houska; (back from left) Melissa Sly, Colleen Hamilton, Linda Chimenti, Gale Osborne, Carol Gostele, Dan Gogerty; (inset) Collete Haag





**Mission** CAST assembles, interprets, and commnicates credible, science-based information regionally, nationally, and internationally to legislators, regulators, policymakers, the media, the private sector, and the public.

**Vision** CAST will be recognized as a credible and objective source of science-based information on agricultural issues across the urban-rural continuum-especially those issues regarding food, fiber, landscape environments, and agriculturally related natural resource, societal, and environmental concerns.

> There is no greater wisdom than timeliness. ~ Francis Bacon











