November 16, 2023

The Honorable GT Thompson
Chairman
House Committee on Agriculture
400 Cannon House Office Building
Washington, DC 20515

The Honorable Debbie Stabenow
Chairwoman
Senate Committee on Agriculture
731 Hart Senate Office Building
Washington, DC 20510

The Honorable David Scott
Ranking Member
House Committee on Agriculture
468 Cannon House Office Building
Washington, DC 20515

The Honorable John Boozman
Ranking Member
Senate Committee on Agriculture
555 Dirksen Senate Office Building
Washington, DC 20510

Dear Chairman Thompson, Chairwoman Stabenow, Ranking Member Scott, and Ranking Member Boozman:

As you work together to develop the next Farm Bill, we urge you to support transformative research at USDA by including the bipartisan, bicameral *Advancing Cutting Edge (ACE) Agriculture Act* (S.834, H.R.2385) in the next Farm Bill. The *ACE Ag Act* would reauthorize the Agriculture Advanced Research and Development Authority (AgARDA) at USDA, add an additional focus on resilience and mitigation research, and grow its authorization level to more adequately reflect the mission of advanced research programs.

AgARDA was established in the 2018 Farm Bill to support high-risk, high-reward research at USDA to address the most far-reaching challenges facing the food and agriculture system. Modeled after successful advanced research agencies like the Department of Defense's Defense Advanced Research Projects Agency (DARPA) and the Department of Energy's Advanced Research Projects Agency-Energy (ARPA-E), AgARDA was created to bring this proven model of transformative research to the USDA to maintain U.S. advantages and leadership in agriculture innovation. AgARDA was designed to help de-risk innovative technologies by funding research with significant potential benefits, but which may be too early-stage or technically challenging for private-sector investment.

Because of investments in agricultural research, the U.S. has seen unparalleled growth in agricultural production over the last 70 years and has led the world in agricultural innovation. Farmers and consumers in the U.S. and around the world benefit from increased productivity, increased efficiency, and lower rates of food insecurity. However, public funding for these innovations has fallen by one-third over the last two decades. This decline comes at the same time when global competitors like China, Brazil, and India are making significant investments in public agricultural research and development (R&D). As of 2016, China's investments in agriculture R&D were nearly double that of the U.S.[1]

1 https://www.ers.usda.gov/amber-waves/2022/june/investment-in-u-s-public-agricultural-research-and-development-has-fallen-by-a-third-over-past-two-decades-lags-major-trade-competitors/

Novel and innovative research holds the keys to unlocking new tools and ensuring a resilient food and agricultural system. Adding an emphasis on resilience and mitigation research at AgARDA will help producers meet the challenges of a changing agricultural landscape, increase production to meet the needs of a growing global population, and help U.S. agricultural products compete in shifting global markets.

A hallmark of ARPA agencies is the focus on transformative, transdisciplinary research questions that require pivotal investments in breakthrough technologies. DARPA has successfully addressed national challenges for the past 50 years by building diverse collaborations across academia, industry, and government partners to cultivate an environment that strives for transformational change. The overall budgets of DARPA, ARPA-E, and the newly created ARPA-H, which range from $450 million to $3.8 billion, are reflective of the resources needed to support the advanced research mission. ARPA research projects' budgets are large, but also laser-focused on ambitious and highly specific challenges. While AgARDA is a pilot program in its current form, the *ACE Ag Act* envisions a program similar to the other ARPAs and shows support for this concept by increasing the authorization to $100 million. This will provide the program the greatest opportunity and flexibility to support the kind of research that can have truly transformational results.

The successes of other federal high-risk, high-reward research programs have made significant contributions to the U.S. economy, such as the Internet and Global Positioning Services, and have protected and enhanced vital components of our nation's defense and energy sectors. AgARDA is an opportunity to bring this legacy of transformative innovation to USDA to secure America's food supply and give our farmers and ranchers the tools they need to meet the challenges of the 21st century. We, the undersigned organizations, companies, and institutions, ask you to support advanced and innovative research at USDA by reauthorizing AgARDA through the *ACE Ag Act* in the next Farm Bill.

Sincerely,

Agricultural & Applied Economics Association
American Association of Mycobacterial Diseases
American Association of Veterinary Medical Colleges
American Conservation Coalition Action
American Dairy Science Association
American Feed Industry Association
American Institute of Biological Sciences
American Malting Barley Association
American Phytopathological Society
American Seed Trade Association
American Society for Microbiology
American Society of Agronomy
American Society of Animal Science
American Society of Plant Biologists
American Soybean Association
American Veterinary Medical Association
Animal Health Institute

Aquatic Plant Management Society
Biotechnology Innovation Organization
Bipartisan Policy Center Action
C3 Action
Cereals & Grains Association
Citizens for Responsible Energy Solutions (CRES)
ClearPath Action
Colorado Farm Bureau
Colorado State University
Cornell College of Agriculture and Life Sciences
Council for Agricultural Science and Technology (CAST)
Crop Science Society of America
E2
Earthjustice
Ecological Society of America
Edge Dairy Farmer Cooperative
Entomological Society of America
Environmental Defense Fund
Environmental Policy Innovation Center
Evangelical Environmental Network
Eversole Associates
FASS
Food and Agriculture Climate Alliance
International Alliance for Phytobiomes Research
International Wheat Genome Sequencing Consortium
Iowa State University
Kansas State University
Meat Institute
Mycobacterial Diseases of Animals – Multistate Initiative
National Barley Improvement Committee
National Coalition for Food and Agricultural Research
National Turfgrass Federation
National Wheat Improvement Committee
North American Millers' Association
North Central Weed Science Society
Northeastern Weed Science Society
Pet Food Institute
Soil Science Society of America
Southern Weed Science Society
Spark Climate Solutions
Supporters of Agricultural Research (SoAR) Foundation
The Breakthrough Institute
The Good Food Institute
University of Florida

US Dairy Forage Research Center Stakeholder Committee
Washington State University
Weed Science Society of America
Western Society of Weed Science