

April 20, 2021

The Honorable Tammy Baldwin
Chairwoman
U.S. Senate Appropriations Subcommittee
on Agriculture, Rural Development Food
and Drug Administration and Related
Agencies
129 Dirksen Senate Office Building
Washington, DC 20510

The Honorable Sanford Bishop
Chairman
U.S. House of Representatives
Appropriations Subcommittee on
Agriculture, Rural Development, Food and
Drug Administration, and Related Agencies
2362-A Rayburn House Office Building
Washington, DC 20515

The Honorable John Hoeven
Ranking Member
U.S. Senate Appropriations Subcommittee
on Agriculture, Rural Development Food
and Drug Administration and Related
Agencies
190 Dirksen Senate Office Building
Washington, DC 20510

The Honorable Jeff Fortenberry
Ranking Member
U.S. House of Representatives
Appropriations Subcommittee on
Agriculture, Rural Development, Food and
Drug Administration, and Related Agencies
1016 Longworth House Office Building
Washington, DC 20515

Dear Chairwoman Baldwin, Chairman Bishop, Ranking Member Merkley, and Ranking Member Fortenberry:

We, the undersigned organizations, are writing to request your support for **\$10 million** in appropriations for the Agricultural Genome to Phenome Initiative. Established in the 2018 Farm Bill, AG2PI focuses on collaborative science engagement and building a community of researchers across both crops and animals that will lay the foundation for expanding our knowledge of genomes and phenomes (traits) of crops and livestock that are vital to the U.S. agriculture industry. Understanding crop and livestock phenomes has been a significant roadblock in converting what we know about genetics into useful improvements in agriculturally important species. Significant research is needed to fully characterize phenomes and how these plant and livestock traits relate to genes and environmental factors.

The Agricultural Genome to Phenome Initiative will develop the tools, resources, and knowledge needed to enable researchers to more efficiently and rapidly develop improved crops and livestock to meet global demand for U.S. agricultural products while overcoming challenges associated with a changing climate and emerging pests and pathogens. This will, in turn, provide farmers with increasingly productive and resilient crops and livestock as well as the tools and information to make better management decisions, thereby increasing farmer profitability, food security, and agricultural sustainability.

It is widely acknowledged that obtaining phenotype information is a major limiting step in converting genomic information into useful improvements in agriculturally important species. Understanding the relationships between genes and trait phenotypes will eventually allow farmers and ranchers to enhance production by identifying optimal combinations of genetics and management practices. The Agricultural Genomes to Phenomes Initiative will enable research that reveals the genetic mechanisms

responsible for phenotypes across a diverse array of agriculturally important species, and help individual farmers make better management decisions and achieve higher stable productivity.

Investments in the Agricultural Genome to Phenome Initiative will support:

- Studying agriculturally significant crops and animals in production environments to achieve sustainable and secure agricultural production.
- Ensuring development of agriculturally significant crops and animals, and agricultural practices that enable responsiveness and resilience to climate change.
- Ensuring that current gaps in existing knowledge of agricultural crop and animal genetics and phenomics are filled.
- Identifying and developing a functional understanding of relevant genes from agriculturally important animals and crops.
- Ensuring future genetic improvement of crops and animals of importance to the agriculture sector of the United States.
- Studying the relevance of diverse germplasm as a source of unique genes that may be of importance in the future.
- Enhancing genetics to reduce the economic impact of pathogens on crops and animals of importance to the agriculture sector of the United States;

We respectfully request that **\$10 million** be appropriated for the Agricultural Genome to Phenome program in fiscal year 2022 to support this important work. Please let us know if you have any questions or if we can be of any assistance as the FY 2022 appropriations process moves forward.

Sincerely,

American Association of Mycobacterial Diseases

American Dairy Coalition

American Dairy Goat Association

American Dairy Science Association

American Farm Bureau Federation

American Feed Industry Association

American Sheep Industry Association

American Society of Animal Science

American Society of Plant Biologists

American Veterinary Medical Association

Association of American Veterinary Medical Colleges

Cornell University

Crop Science Society of America

FASS

Florida Cattlemen's Association

Indiana Beef Cattle Association

Indiana Dairy Producers

Indiana State Poultry Association

Iowa Corn Growers Association

Iowa Soybean Association

Iowa State University

Michigan Agri-Business Association

Michigan Cattlemen's Association

Michigan Milk Producers Association

Michigan Pork Producers Association

Michigan Sheep Producers Association

Michigan State University, AgBioResearch

Minnesota Pork Producers Association

Mississippi Poultry Association

Mycobacterial Diseases of Animals Multistate Initiative

National Association for the Advancement of Animal Science

National Cattlemen's Beef Association

National Corn Growers Association

National Dairy Herd Improvement Association

National Grain and Feed Association

National Milk Producers Federation

National Pork Producers Council

National Turkey Federation

Nebraska Cattlemen

North Dakota Pork Council

Ohio Pork Council

Ohio State University – Department of Animal Science

Penn State University

Purdue University

Texas A&M AgriLife

University of Arizona - Division of Agriculture, Life & Veterinary Sciences, and Cooperative Extension

University of Minnesota, CFANS

University of Nebraska – Lincoln, Institute of Agriculture and Natural Resources

University of Wisconsin-Madison

US Dairy Forage Research Center Stakeholder Committee