





## American Society of Agronomy . Crop Science Society of America . Soil Science Society of America

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May 10, 2017

The Honorable Lamar Alexander Chairman, Subcommittee on Energy and Water Committee on Appropriations U.S. Senate Washington, DC 20510 The Honorable Dianne Feinstein
Ranking Member, Subcommittee on Energy
and Water
Committee on Appropriations
U.S. Senate
Washington, DC 20510

RE: FY18 Appropriations—Support for the Department of Energy, Office of Science and the Advanced Research Projects Agency – Energy (ARPA-E)

Dear Chairman Alexander and Ranking Member Feinstein:

The American Society of Agronomy (ASA), Crop Science Society of America (CSSA), and Soil Science Society of America (SSSA), represent over 18,000 scientists in academia, industry, and government, 12,500 Certified Crop Advisers (CCA), and 781 Certified Professional Soil Scientist (CPSS), as the largest coalition of professionals dedicated to the agronomic, crop and soil science disciplines in the United States.

The Nation's agricultural system must sustainably produce food and fuel despite unpredictable conditions and growing global competition. America's economic prosperity and security depend on our dedication to developing innovative, science-based solutions to meet our growing agricultural needs.

We support \$5.7 billion for the Department of Energy's (DOE) Office of Science in fiscal year 2018 appropriations.

Energy is inextricably linked to agriculture and food production. Not only do farmers produce energy crops, bolstering rural communities and sustaining America's energy independence, but on-farm energy use is tied to sustainable agricultural practices developed by agronomists and crop and soil scientists. American farmers depend on scientific advancements to sustainably achieve reliable yields while their crops efficiently use water and nutrients and effectively withstand pests and disease. The DOE Office of Science uses the latest physical, computational, and biological technologies to understand the principles of plant and microbial systems important to bioenergy and environmental applications.

Within the DOE Office of Science, we specifically support:

**Biological and Environmental Research (BER).** The BER program produces advanced environmental and biological knowledge that supports national security through improved energy production, international scientific leadership, and research that improves the quality of life for all Americans. BER supports these vital missions through competitive and peer-reviewed research at national laboratories, universities and private institutions.

## We also support \$305 million for ARPA-E.

The Advanced Research Projects Agency – Energy invests in clean energy science, such as the sustainable development of biofuels. Farmers rely on investments in biofuel crop research for seeds, tools, and technologies that keep their crops healthy and the market profitable. However, plant breeders and geneticists have been hampered by the speed at which they can evaluate and, thus, improve plant lines. In fact, the current, state-of-the-art technology for evaluating crops often includes a painstakingly slow, manual field assessment by a student with a yardstick. ARPA-E is leading the development of high-throughput plant phenotyping, a leap-frog technology that propels the U.S. to the world leader in this area, enabling the rapid selection of characteristics like yield, speed of growth, drought tolerance, and pest resistance.

Energy science research is an essential component of America's energy independence. A strong commitment to federally funded energy research will boost the Nation's capacity for innovation, agricultural productivity, and economic prosperity.

Thank you for your consideration. For additional information or to learn more about the ASA, CSSA, and SSSA, please contact Karl Anderson, Director of Government Relations, at kanderson@sciencesocieties.org or 202-408-5382.

Sincerely,

Ellen Bergfeld, PhD, CEO American Society of Agronomy Crop Science Society of America

Soil Science Society of America

Cc:

Members of the Senate Committee on Appropriations, Subcommittee on Energy and Water Development