March 2020

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

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


Dear Chairwoman Kaptur and Ranking Member Simpson:

The American Society of Agronomy (ASA), Crop Science Society of America (CSSA), and Soil Science Society of America (SSSA) represent more than 8,000 scientists and students, 13,500 Certified Crop Advisers (CCA) and 700 Certified Professional Soil Scientists (CPSS). We are the largest coalition of scientists and professionals dedicated to the agronomic, crop, and soil sciences in the United States.

We appreciate your continued support for the U.S. Department of Energy (DOE) Office of Science and the Advanced Research Projects Agency – Energy (ARPA-E), as exemplified in the fiscal year (FY) 2020 appropriations bill.

We understand that the appropriations landscape has changed in light of the COVID-19 pandemic and that there may be an impulse to forgo increases in scientific investments in favor of immediate-term necessities. But this crisis demonstrates vividly how much we rely on science infrastructure to solve the most overwhelming challenges. Now more than ever, our researchers need sustained funding to support their research programs. Much like small businesses, research labs are an ecosystem of workers producing valuable solutions to global challenges, and a lack of funding closes those labs and sends those scientists home at a time when we need them most.

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 $7.4 billion for the Department of Energy’s (DOE) Office of Science in fiscal year 2021.

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 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 controlling plant and microbial systems important to bioenergy and environmental applications.

Within the DOE Office of Science, we specifically support:

**Basic Energy Sciences (BES).** BES is a multipurpose, scientific research effort that fosters and supports fundamental research to expand the scientific foundations for new and improved energy technologies and for understanding and mitigating the environmental impacts of energy use. The research disciplines that the BES program supports include chemistry, soil, mineralogy, and geosciences. These subjects influence virtually every aspect of energy production, conversion, transmission, storage, efficiency, and waste mitigation.

**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.

Additionally, ASA, CSSA, and SSSA support at least **$450 million for ARPA-E** in fiscal year 2021.

The Advanced Research Projects Agency – Energy (ARPA-E) 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. Biofuel farming also has the potential to be carbon-neutral or even carbon-negative – putting atmospheric carbon back into the soil. This is a win for the farmers, who benefit from richer, more productive soil, and for the planet. So far, however, that potential has yet to be realized. Programs like ARPA-E’s SMARTFARM (Systems for Monitoring and Analytics for Renewable Transportation Fuel from Agricultural Resources and Management) aim to bring carbon-negative farming within reach for biofuels producers, increasing the value of their crop through on-farm, low-cost sensors and other technologies.

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,

Nicholas J. Goeser, CEO
Cc:
Members of the House Committee on Appropriations, Subcommittee on Energy and Water Development