



American Society of Plant Biologists

Cultivating a better future through plant biology research

Fiscal Year 2021 Funding Priorities for Plant Biology

The American Society of Plant Biologists (ASPB) urges robust funding at federal research agencies in FY 2021 to support and spur revolutionary breakthroughs in producing nutritious foods, sustainable energy, new medicines and medical treatments, and protecting our environment, as well as advancing our fundamental understanding of plant biology.

ASPB recognizes the tight fiscal environment facing the nation, especially as we combat the global coronavirus pandemic, and is deeply appreciative of congressional support for federal research agencies. Robust investments in the federal agencies, as detailed below, are vital to ensuring America's ability to meet critical challenges, now more than ever. These challenges include: increasing crop production and yield to feed the growing world population, medicinal treatments, new sources of energy, training the next generation of scientists and engineers, and improving science education. These investments will contribute to the already substantial economic impact of the agriculture industry, which accounts for nearly 5.4 percent (\$1.053 trillion) of the U.S. Gross Domestic Product (GDP) and 22 million jobs.¹

- **National Science Foundation (NSF):** ASPB supports **\$9 billion** for the NSF in FY 2021 and encourages the greatest possible support for the **Directorate of Biological Sciences (BIO)**. This includes the **Plant Genome Research Program (PGRP)**, which not only furthers fundamental knowledge, but also helps to enhance agricultural productivity, grow nutritious foods, and mitigate the impacts of devastating plant diseases. Sustained funding growth over multiple years for BIO will be critical to address many challenges of the 21st century.
- **Department of Energy (DOE):** ASPB supports **\$7.4 billion** for DOE's **Office of Science** in FY 2021, with proportional increases for the **Basic Energy Sciences** and **Biological and Environmental Research** programs. These programs both support dynamic research at the interface of plant biology and other scientific disciplines. ASPB also supports **\$450 million** for the **Advanced Research Projects Agency–Energy (ARPA-E)** in FY 2021. ARPA-E has proven to be a valuable program that advances high-impact energy technologies, including biotechnology and synthetic biology, which are important to the plant science community.
- **U.S. Department of Agriculture (USDA):** ASPB supports a funding level of **\$500 million** for the **Agriculture and Food Research Initiative (AFRI)**. AFRI administers competitive funding for innovative research addressing issues including food security, global health, and renewable energy, which are critical in maintaining global economic competitiveness in U.S. agriculture. ASPB also supports a funding level of **\$1.789 billion** for the **Agricultural Research Service (ARS)** and robust funding for new Farm Bill programs like **Genome to Phenome** and **Agriculture Advanced Research and Development Authority (AGARDA)** that have the power to transform agricultural research.
- **National Institutes of Health (NIH):** ASPB supports robust funding for **NIH** and advocates for increased support for plant science research within NIH's Centers and Institutes to continue the development of lifesaving cures like the ZMapp antibody used to combat the Ebola virus, a medical breakthrough made possible by plant science research.

The American Society of Plant Biologists (ASPB) is a professional scientific society, headquartered in Rockville, Maryland, that is devoted to the advancement of plant science worldwide. With a membership of professional plant biology researchers, educators, graduate students, and postdoctoral scientists, ASPB's mission is to promote the growth and development of plant biology, to encourage and disseminate plant biology research, and to promote the interests and growth of plant scientists in general. For more information, please visit www.aspb.org or contact ASPB's Chief Executive Officer Crispin Taylor at taylor@aspb.org.

¹ <https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/ag-and-food-sectors-and-the-economy/>