

May 6, 2022

The Honorable Charles E. Schumer Senate Majority Leader Washington, D.C. 20510

The Honorable Mitch McConnell Senate Minority Leader Washington, D.C. 20510

The Honorable Maria Cantwell Chair Senate Commerce, Science, Transportation Committee Washington, D.C. 20510

The Honorable Eddie Bernice Johnson Chair House Science, Space, and Technology Washington, D.C. 20515

Representing Over 115,000 Researchers

6120 Executive Blvd., Suite 230, Rockville, MD 20852 | faseb.org

The Honorable Nancy Pelosi Speaker of the House Washington, D.C. 20515

The Honorable Kevin McCarthy House Minority Leader Washington, D.C. 20515

The Honorable Roger Wicker Ranking Member Senate Commerce, Science, Transportation Committee Washington, D.C. 20510

The Honorable Frank Lucas Ranking Member House Science, Space, and Technology Washington, D.C. 20515

Dear Leaders Schumer and McConnell, Speaker Pelosi, Minority Leader McCarthy, Chair Cantwell and Ranking Member Wicker, Chair Johnson and Ranking Member Lucas:

On behalf of the 115,000 researchers of the Federation of American Societies for Experimental Biology (FASEB) from its 28 member societies, I am writing in strong support for the inclusion of certain provisions in the final US competitiveness and innovation bill as conferenced (Bipartisan Innovation Act). These provisions will allow for the expansion of talented individuals to enter into scientific and research careers. Additionally, they will provide the necessary infrastructure and support at federal agencies to develop new knowledge and explore ideas that spur U.S. innovation, increase the size of the economy, and assist in securing our national security.

Specifically, FASEB supports the America COMPETES Act (H.R. 4521) amendments to the Immigration and Nationality Act that would exempt holders of STEM doctorates from caps on the number of people to whom the U.S. can grant permanent residency and extend the cap exemption to "health professions" and to master's degree holders in certain fields deemed critical to U.S. interests. Additionally, STEM students would be allowed to claim "dual intent" status giving them the opportunity to declare their interest in pursuing a career in the U.S. after graduation rather than returning to their home country first.

FASEB favors the inclusion of the Department of Energy Science for the Future Act language within the America COMPETES Act that authorizes a \$50 billion investment in the DOE Office of Science and a

Full members: The American Physiological Society

 American Society for Investigative Pathology
 American Society for Investigative Pathology
 American Society for Nutrition
 The American Association of Immunologists
 American Association for Anatomy
 Society for

 Developmental Biology
 Association of Biomolecular Resource Facilities
 The American Society for Bone and Mineral Research
 American Society for Clinical Investigation
 Society for the Study of Reproduction
 The Endocrine Society
 American College of Sports Medicine
 Genetics Society of America
 The Histochemical Society
 Society for Redox Biology and Medicine
 Society For Experimental Biology and Medicine
 Society for Leukocyte Biology
 American Federation for Medical Research
 Environmental Mutagenesis and Genomics Society
 Shock Society
 Associate members: The American Society for Birth Defects Research & Prevention

seven percent annual increase for all six Office of Science core research programs over the next five years, supporting a balanced portfolio of university and national lab programs. DOE SC is foundational to advancing major research initiatives and training a robust scientific workforce. This funding trajectory is also supported within the Energy Sciences Coalition of which FASEB is one of its 100+ members.

Another provision FASEB supports is infrastructure investments as discussed in the House-passed and Senate-introduced Restore and Modernize Our National Laboratories Act (H.R. 4514, S.2232). Investments under these bills would augment the targeted annual funding levels pursuant to the DOE Science for the Future Act for the Science Laboratories Infrastructure Account to support construction and upgrades at the 10 national labs operated by the Department of Energy Office of Science.

According to the <u>testimony</u> of Dr. Geraldine Richmond, Under Secretary for Science and Innovation, U.S. Department of Energy, before the Senate Energy and Natural Resources Committee on March 1, 2022, the DOE National Laboratories are approaching 80 years of services. The research facilities—including general research laboratories, specialized research centers, accelerators, light sources, high-performance computers, and two nuclear reactors—are supported by general-purpose infrastructure and a large network of utilities. The 10 Office of Science-stewarded laboratories alone comprise an infrastructure portfolio worth nearly \$22 billion, consisting of more than 1,600 buildings, and other supporting infrastructure assets on more than 18,000 acres of land. Nearly, two-thirds of this support infrastructure, including utility systems, is rated as "substandard" or "inadequate." There are also current deferred maintenance costs totaling \$1 billion. This results in unplanned outages, expensive repairs, increased risks to safety, and overall inefficiencies impacting the ability to maximize contributions to science and society.

The conferenced bill should also include provisions to support Department of Energy workforce development efforts to increase diversity, equity, and inclusion of highly skilled STEM professionals as well as expanded partnerships with minority-serving institutions, emerging research institutions, and scientific societies. FASEB joins the Energy Sciences Coalition's efforts to grow existing programs, such as the Graduate Student and the Science Undergraduate Laboratory Internship programs. These are necessary to meet the growing needs for a highly-trained STEM workforce. This also includes growth in university research programs as vehicles to train and develop faculty and students for an advanced science and technology workforce.

FASEB supports the Office of Science collaborating with the National Science Foundation as stated in the America COMPETES Act to codify and leverage the National Science Foundation Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (NSF INCLUDES) National Network. This would broaden the participation of historically underrepresented populations in STEM education programs and careers by expanding the number of students, early-career researchers, and faculty from underrepresented groups pursuing and attaining skills or undergraduate and graduate degrees in science, technology, engineering, and mathematics fields relevant to the Department's mission.

Authorizing increased funding for NSF is another key goal that should be achieved in the conferenced bill. The Senate-passed U.S. Innovation and Competition Act (USICA, S. 1260) trajectory is more assertive and would authorize doubling NSF funding over a period of 5 years from \$10.8 billion to \$23.1 billion. FASEB strongly endorses this provision.

Additionally, FASEB is in favor of supporting emerging technology that will be part of advancements in biological science as well as other scientific disciplines. USICA authorizes \$16.9 billion over 5 years to support programs across the Department of Energy that advance the development and commercialization of key technologies in biotechnology, quantum information science, artificial intelligence, and advanced energy storage devices. Funding would be allocated across DOE (including the Office of Science) to complement fundamental research investments and use-inspired research and to expand the expertise and capabilities of the 17 DOE national laboratories and corresponding university-led programs to further support these new industries.

FASEB encourages the conferees to remove legislative provisions that would restrict, pause, or alter federally funded research projects that focus on gain of function research of concern or specific pathogens. We join the American Society for Microbiology in its belief that this is overly prescriptive and interferes with the National Science Advisory Board for Biosecurity's (NSABB) evaluation of and forthcoming recommendations on enhanced potential pandemic pathogen research (EPPP) and dual use research of concern (DURC). NSABB has the requisite scientific expertise to formulate the most effective policies for the future. Its process of inclusion of public and stakeholder input is a critical component to this evaluation. Through collaboration with NSABB, Congress can strike the right balance between national security and public health without harming the future work on pandemic pathogens, or the research of microbes to address current and future threats.

In conclusion, FASEB has previously commented on U.S. competitiveness issues in our <u>July 2021 letter to</u> <u>Congress</u> as the National Science Foundation for the Future Act (H.R. 2225), now Title III of America COMPETES Act, and USICA were moving through the legislative process.

Thank you for your consideration of our requests.

Sincerely,

Patricia Morris

Patricia L. Morris, MS, PhD FASEB President