



Recommendations for the Biden Administration

The Federation of American Societies for Experimental Biology (FASEB) is ready to work with the Biden administration to promote the advancement of science and encourage innovation. Robust support for science and technology will strengthen America's global leadership and enable us to overcome many of the economic and national security challenges facing the nation. FASEB is available as a resource to President Biden and encourages the appointment of scientists and engineers of the highest caliber to critical research and technology positions within the administration.

About FASEB

FASEB is the nation's largest coalition of biological researchers, [representing 29 scientific societies](#) and over 130,000 individual scientists. Founded in 1912, the Federation is widely recognized as the policy voice of biological and biomedical researchers. FASEB focuses on issues that affect scientists and engineers and works with the representatives of our member societies to develop and promote policies to advance research.

FASEB Areas of Expertise

The breadth of [FASEB's membership](#) allows us to draw on the knowledge of scientists across the nation to provide guidance on topics of national concern including:

- Federal funding for research
- Training and career opportunities affecting the scientific workforce
- Access to and humane use of animals in research and education
- Oversight of research activities
- Maximizing shared research resources

FASEB Policy Recommendations

Ensure Sustained Funding Levels for Research – A multi-year strategy of sustained federal investment in biological and biomedical research will ensure the most efficient use of research resources. To maximize long-term planning and scientific progress, all stakeholders – funding agencies, institutions, technology-driven companies, and researchers – need stable, predictable research budgets. After a decade of strict budget caps and operating under the threat of automatic spending cuts, lawmakers face no overall limits on defense and non-defense discretionary spending for fiscal year 2022, making it a prime opportunity to significantly increase investment in the federal research agencies.

Increase Investments in Science and Innovation – In the face of growing international economic competition, we must increase funding for research that drives innovation and promotes economic growth. The U.S. is still leads R&D spending globally, but other nations such as China, Japan, and Germany are rapidly catching up.¹

FASEB encourages the Biden Administration to submit budget proposals to Congress that provide predictable and sustained funding increases for the National Institutes of Health (NIH), National Science Foundation (NSF), Department of Energy Office of Science, the Agriculture and Food Research Initiative administered by the Department of Agriculture, and the Veterans Administration Medical and Prosthetic Research Program. Our nation and the world are confronting daunting public health threats, especially given a changing global climate. More research will be needed to address increased risks posed by infectious diseases and greater exposure to environmental pollutants. As the scientific community and the federal government continue efforts to develop and manufacture a COVID-19 vaccine, it is worth remembering that current successes come from the efforts of hundreds of researchers over the last century and a half. Federal funding for basic research helped uncover what causes disease, how our immune system fights such illnesses, and fueled the science underlying recent breakthroughs, including innovative HIV, malaria, and Ebola vaccines that are showing promise in clinical tests.

Minimize Budgetary Uncertainty – The uncertainties associated with delayed appropriations bills and continuing resolutions make it difficult for agencies to fulfill their responsibilities and missions. When agency budgets are not finalized until well into the fiscal year, agencies that operate under an annual budget cycle must make spending decisions in a compressed timeframe. A more predictable budget process, multi-year appropriations, and more flexible spending authority would allow research agencies to optimize expenditures and use funds more efficiently.²

Emphasize Investigator Initiated Research – Our nation’s scientists make transformative discoveries when they have sufficient resources at their disposal and the freedom to use their talent and creativity to pursue the most challenging scientific questions. To fully realize the creativity of the scientific community, federal agencies should maximize the amount of funding dedicated to investigator-initiated research.

Continue the Commitment to Merit Review of Research Grants – FASEB strongly believes that the current merit review system is the best way to ensure proper stewardship of federal resources and must remain the core mechanism for distributing federal research funding. Investments in investigator-initiated, merit-reviewed research ensure that federal taxpayers’ dollars support the best science and take advantage of promising scientific opportunities.

Develop and Sustain the Research Workforce – We need highly skilled individuals and the best minds from around the world to create and use the technologies of the future. However, many of our leading research and educational institutions are under dire

¹ “New UIS Data for SDG 9.5 on Research and Development,” accessed at <http://uis.unesco.org/en/news/new-uis-data-sdg-9-5-research-and-development>

² “Perils of Complacency,” accessed at <https://www.amacad.org/publication/perils-of-complacency/section/8>

financial pressure, and are having difficulty recruiting medical, engineering, and other science and technology professionals to fill positions that support activities like biomedical research.³ At a time when the scientific opportunities are greater than ever, we need to educate a new and diverse generation of scientists with fresh insights and ideas. Federal agencies must maintain their commitment to research training.

Manage the Response to the COVID-19 Pandemic – COVID-19 has exacerbated existing problems in the research training pipeline and highlighted the urgency of stabilizing and expanding the research infrastructure.⁴ The fallout from COVID-19 has resulted in the shuttering of many laboratories, restricted access to facilities and equipment, disrupted supply chains, and created additional uncertainty for trainees and early career scientists instrumental to academic, industry, and government basic science and clinical research.⁵ COVID-19 has also severely affected research outputs.⁶ To protect prior investments in basic and translational research and continue to develop the research workforce, supplemental appropriations will be needed for NIH, NSF, and other federal agencies. NIH recently released an ambitious Strategic Plan for COVID-19 Research focused on advancing fundamental knowledge, detection and diagnosis, treatment, and prevention. NIH will need additional funding to fully implement the Strategic Plan

In addition, many laboratories are having trouble obtaining adequate quantities of supplies needed to conduct COVID-19 testing due to supply chain interruptions. We urge the Biden Administration to include efforts to increase the manufacturing of COVID-19 testing supplies as a high priority and ensure that information about the availability of supplies is shared with the laboratory community.

Reduce Regulatory Burden – The number of regulations affecting the conduct of research has increased dramatically, increasing financial burdens on a system with limited resources and hindering the ability of individual investigators to focus on their scientific work. FASEB encourages and supports implementation of regulatory solutions that significantly reduce administrative burden while maintaining accountability, rigor, and transparency in the research enterprise.

Support the Use of Animals in Research and Education – Research using animal models remains critical in understanding the fundamental processes of life and makes an essential contribution to human and animal health. FASEB supports the proper care and humane treatment of research animals but opposes any initiatives to ban or further restrict animal research.

Promote Diversity, Equity, and Inclusion – FASEB encourages the Biden Administration to prioritize promoting diversity, equity, and inclusion in identifying personnel for key positions within your cabinet. Similarly, FASEB urges the administration to ensure that

³ “Biomedical research,” accessed at <https://www.gao.gov/products/GAO-20-531R>

⁴ “Covid hurts early career researchers,” accessed at <https://eos.org/articles/the-coronavirus-hurts-some-of-sciences-most-vulnerable>

⁵ “CRS report on impact of Covid,” accessed at <https://crsreports.congress.gov/product/pdf/R/R46309>

⁶ “Research outputs severely impacted during the COVID-19 pandemic,” accessed at https://www.cogr.edu/sites/default/files/Research_COVID_August2020_COGR_FINAL.pdf

nominees for senior positions within the Federal science agencies are also representative of the diversity seen in the broader research community.

Engage Stakeholders in Policy Discussions on Public Access to Peer-Reviewed Publications – As the major sponsor of research activities conducted in the U.S. and beyond, Federal agency policies have a significant impact on individual scientists, research organizations, and publishers. The Biden Administration should take additional care to engage all stakeholders in setting policies pertaining to scientific publishing – the lynchpin for so many activities related to appropriate stewardship of federal funds. Similarly, these discussions should examine the impact of U.S. policies on international collaborations and the downstream effects on scientific progress and integrity.

Key FASEB Contacts

- Frank Krause, CAE, Executive Director/CEO – (fkrause@faseb.org or 301.634.7290)
- Jennifer Zeitzer, Director, Office of Public Affairs – (jzeitzer@faseb.org or 301.634.7128)
- Yvette R. Seger, PhD, Director of Science Policy – (yseger@faseb.org or 301.634.7124)

FASEB Resources

The following resources are available on the [FASEB website](#):

- [NIH Research Funding Trends Slides](#) – compilation and analysis of data on NIH appropriations, grants, and application success rates from fiscal years 1995 – 2019
- [State/District Factsheets](#) – highlight federal funding for NIH, NSF, USDA, and DOE by state and congressional district
- [Maximizing Shared Research Resources: Recommendations from FASEB](#) – report detailing findings and key areas for improvement from a survey of shared research resource users and providers
- [Sustaining Discovery in Biological and Medical Sciences](#) – report on major challenges facing the biological and medical research enterprise and methods to alleviate them
- [Animal Research: Addressing Misconceptions and Other FAQ's Factsheet](#) – affirms the essential contribution of animals in research aimed at improving the health of both humans and animals
- [Animal Research Saves Lives and Cures Diseases Part I: Canines, Rabbits, and Guinea Pigs Factsheet](#) – examines the use of canines, rabbits, and guinea pigs in research and its effect on human and animal health:
- [Animal Research Saves Lives and Cures Diseases Part II: Felines, Pigs, and Goats](#) – examines the use of felines, pigs, and goats in research and its effect on human and animal health

- [Animal Research Saves Lives and Cures Diseases Part III: Nonhuman Primates, Sheep, and Llama](#) – examines the use of nonhuman primates, sheep, and llama in research and its effect on human and animal health
- [Humanized Mouse Models: Using Human Cells to Conquer Disease Factsheet](#) - highlights key breakthroughs for infectious disease research, serving as key preclinical tools for a wide variety of translational studies
- [Vaccines: Essential Weapons in the Fight Against Disease](#) – explores the basic science discoveries that led to the understanding of the human immune system and strategies to develop safe and effective vaccines

Further information, comprehensive science policy materials, and our policy positions on biomedical research issues are available [here](#).