

# SCIENCE-BASED DECISIONS FOR SOCIETY

# PUBLIC POLICY OFFICE 2020 ANNUAL REPORT

March 11, 2021



www.aibs.org



# **DIRECTOR'S MESSAGE**

The American Institute of Biological Sciences advances the biological sciences for the benefit of all science and society. Through our public policy initiatives, we engage with policymakers to ensure that the decisions they make are responsive to the needs of the biological sciences community and based on sound science. We simultaneously share policy analysis and insights with the scientific community to help them understand and influence decisions that shape biological research and education.

The scope of the challenges facing society is immense—unprecedented biodiversity loss, the climate crisis, and threats to public health, food security and availability. Importantly, 2020 saw the emergence of a deadly pandemic with enormous implications for the U.S. research enterprise. Responsible public policy promoting investments in biological research and education enable the new discoveries and the development of the skilled workforce required to solve these problems while simultaneously promoting economic growth through the expansion of the bioeconomy.

In 2020, AIBS worked with our partner organizations to secure timely economic aid for the research community, including for nonprofit scientific organizations. Furthermore, we fought to secure new funding for federal science programs at the National Science Foundation and the Department of the Interior. We will continue to advocate for additional relief for the research community to cope with ongoing COVID-19 related disruptions.

AIBS has led efforts that have provided a foundation for new investments, particularly in biodiversity-related and biodiversity-enabled research. Through the Biodiversity Collections Network (BCoN), we launched the Extended Specimen Network – a community-informed initiative that provides a framework for stimulating new research and education in the coming decade. We reminded policymakers that biological collections can be critical to

better understand important societal problems, such as zoonoses like SARS-CoV-2, and called for significant new investments to be made in the next decade to support collections-enabled research and education.

Our efforts are not limited to advocacy for funding. We also worked to help inform White House initiatives to enhance research rigor and integrity in the American research environment, to promote efforts to address systemic racism in academia, to oppose political interference with federally funded coronavirus research and data, to fend off policies targeting international students, and to oppose efforts to block funding for important biomedical research using fetal tissue.

In 2020, AIBS sustained its commitment to early career scientists by recognizing graduate student leaders with the Emerging Public Policy Leadership Award. We continued to provide scientists — from early career to senior scientists and program leaders — with science policy and communications training, which we converted to a virtual format during the pandemic. We will continue to offer these programs in 2021 as we work to further increase the capacity of the biological sciences community to shape public opinion and inform policy.

This report details the work AIBS continues to do in partnership with our members and other organizations to advocate for biology. We invite any individual or organization that values scientific research and science-informed decision-making to join with us as we continue to promote an increased understanding and appreciation of biology.

Jyotsna Pandey
Public Policy Director



# **KEY ACCOMPLISHMENTS**

- Helped 89 scientists become advocates for science.
- Secured pandemic-related economic relief for non-profit scientific societies and organizations under the CARES Act.
- Secured reversal of a guidance by the U.S. Immigration and Customs Enforcement (ICE) requiring international students to leave the U.S. if they did not participate in in-person instruction during the fall 2020 semester.
- Participated in 57 meetings to engage policymakers.
- Successfully converted all professional development programs to online versions.
- Provided professional development training to 255 scientists.
- Provided congressional testimony calling for increased federal investments in science.
- Called on the Office of Science and Technology Policy and the National Science Foundation to make sustained investments to support biodiversity research and education over the next decade.
- Secured inclusion of AIBS recommendations in a congressional report on the climate crisis.
- Helped secure an increase in the number of awards made under the National Science Foundation's Graduate Research Fellowship Program.
- Provided recommendations to the White House on strengthening the American research environment.
- Endorsed legislation to provide \$26 billion in emergency relief funding for federal science agencies.
- Highlighted to NSF the important work scientific associations, including AIBS, led during the COVID-19 pandemic.
- Supported call to study systemic racism in academic research.
- Opposed political interference with a federally funded research grant to study coronavirus at the National Institutes of Health.
- Opposed Administration's policy restricting funding for research using human fetal tissue.
- Expressed opposition to a proposed rule by the Environmental Protection Agency to limit the use of scientific studies in the regulatory rulemaking process.





# SCIENCE POLICY

AIBS made significant contributions to research and science education policy in 2020. Our efforts focused on promoting federal investments in biological research and education, advocating for the responsible use of science in the policymaking process, advancing the policy interests of biodiversity–enabled and biodiversity–related research and education, and advocating for pandemic–related economic relief for the scientific community.

## Research Funding

AIBS advocates for increased federal investments in science. Each year, AIBS organizes two in-person advocacy events that focus on biological research and science education funding. As a result of the pandemic, these were canceled in 2020. However, AIBS continued to organize online advocacy campaigns focused on federal funding for science. In testimony to Congress, AIBS called for new investments in the National Science Foundation (NSF), the U.S. Geological Survey, the U.S. Fish and Wildlife Service, the Smithsonian Institution, and the Environmental Protection Agency.



#### COVID-19 Relief

In 2020, AIBS advocated for the inclusion of non-profit scientific societies and organizations in any economic recovery and resilience measures crafted by Congress in response to the COVID-19 pandemic. We led the biological sciences community in asking NSF to extend grant deadlines and automatically provide a one-year no-cost extension to existing grants to allow researchers to cope with pandemic-related disruptions to research. AIBS also responded to a congressional request for science and research related input for COVID-19 related stimulus and endorsed legislation to provide \$26 billion in emergency supplemental funding for federal science agencies.

#### Science in Policymaking

A number of actions and policies pursued by the Trump Administration in 2020 caused concern within the scientific community. AIBS worked to push back against policies that are harmful to the U.S. research community. AIBS fended off a U.S. Immigration and Customs Enforcement (ICE) policy forcing international students to leave the U.S. if they only participated in online instruction; endorsed community letters supporting the continued use of human fetal tissue in biomedical research and opposing the National Institutes of Health (NIH) Human Fetal Tissue Ethics Advisory Board's recommendation to not fund most of the recent proposals to conduct such research; expressed support for Dr. Anthony Fauci, Director of the National Institute of Allergy and Infectious Diseases (NIAID), after the White House initiated an active campaign to discredit him; opposed the Environmental Protection Agency's proposed rule barring the use of scientific studies in formulating regulations unless the underlying data are publicly available; opposed political interference at the NIH with a federally funded research grant to study coronavirus; raised concerns about a decision to bypass the Centers for Disease Control and Prevention in the collection of COVID-19 patient data in order to maintain the integrity of the data and keep public health data public; expressed concerns about an Executive Proclamation limiting immigration to the U.S.; opposed a proposal to impose new student visa restrictions; and urged revocation of the Executive Order eliminating federal employee training programs related to diversity, equity, and inclusion.

AIBS joined a group of 43 scientific societies in highlighting to NSF the important role scientific associations have played during the COVID-19 pandemic. AIBS recommendations were included in a plan released by the House Select Committee on the Climate Crisis. AIBS also provided timely input to the White House on strengthening the American research environment; endorsed a request by the House Science Committee chair that the National



Academies of Sciences, Engineering, and Medicine undertake a study to assess systemic racism in academia; urged the Food and Drug Administration to adhere to stringent scientific and medical standards while assessing the safety and efficacy of COVID-19 vaccine candidates; denounced the stigmatization of Asians over the potential origins of the SARS-CoV-2 virus; and through its membership in a science coalition laid out science policy priorities and key personnel recommendations for the Biden-Harris transition team.

#### **Biodiversity and Collections**

The Biodiversity Collections Network (BCoN), which emerged from a grant to AIBS, released a report, Extending U.S. Biodiversity Collections to Promote Research and Education, in 2019 outlining a national agenda that leverages digital data in biodiversity collections for new uses. The report calls for building an Extended Specimen Network—a community-informed research and education initiative to coordinate biodiversity data mobilization and integration. BCoN includes more than 35 organizations that are supportive of its mission.

In 2020, AIBS, Natural Science Collections Alliance, and the Society for the Preservation of Natural History Collections—the founding members of BCoN—reminded federal science policy officials at the White House Office of Science and Technology Policy and the NSF of the important role biodiversity—related and biodiversity—enabled research play in helping to understand current global health and environmental problems, as well as for identifying methods to monitor, model, forecast, and mitigate future problems, including zoonoses like SARS—CoV—2. We called for a ten—year investment of \$1 billion to support collections—enabled research and education to spur new scientific discoveries that grow our economy, improve our public health and well—being, and increase our national security.

Through BCoN, we surveyed individuals affiliated with U.S. biodiversity science collections to better understand the impacts of COVID-19 related disruptions and closures on biodiversity research and education. Findings from these surveys strengthened our efforts to advocate for the economic needs of the biodiversity collections community.

## Other Highlights

The 2020 meeting of the AIBS Council of Member Societies and Organizations, Strengthening the Bioeconomy, explored if our current research and education environment optimizes the conversion of biological information into economic benefit. The meeting delved into workforce needs and the role of professional societies in supporting and growing the bioeconomy.





# **OUTREACH AND TRAINING**

## Meetings with Lawmakers

AIBS offers scientists opportunities to meet with their elected officials in Washington, DC, and in their home state. In 2020, AIBS had to cancel these events in light of the COVID-19 pandemic but continued to engage lawmakers during online forums and meetings. We plan to offer a virtual advocacy event in 2021.

## Policy and Communications Training for Scientists

AIBS successfully converted its communications and advocacy training program to an online version and offered six workshops in 2020 that trained 89 scientists and graduate students. Our current course offerings include a science communications boot camp, an online course to improve writing skills, a training on enabling interdisciplinary and team science, and a boot camp on employment acquisition skills. Most of these programs are typically offered in Washington, DC and around the country on university campuses and at scientific meetings, and are now also offered online. In 2020, 255 scientists participated in AIBS professional development programs.



#### **Emerging Public Policy Leadership Award**

AIBS recognized two graduate students in the biological sciences for their achievements in science policy. The Emerging Public Policy Leadership Award was presented to Corinn Rutkoski, a doctoral student in integrative biology at Michigan State University in East Lansing, Michigan, and Renee Collini, a doctoral student at Mississippi State University in Biloxi, Mississippi. The 2020 award winners received online communications and advocacy training and will receive an expense-paid trip to Washington, DC to participate in meetings with their congressional delegation once it is safe to travel in the future. They also received a one-year subscription to the journal *BioScience*.

AIBS also continued to raise funds to underwrite the EPPLA program to ensure that more early career professionals may benefit from the program in the future. AIBS is more than half way to its goal of raising \$75,000.

#### **AIBS Legislative Action Center**

Grassroots activists use the AIBS Legislative Action Center to advocate for science policy. In 2020, researchers wrote to their members of Congress to ask for increased funding for the biological sciences and economic aid for the scientific community impacted by the COVID-19 pandemic. Researchers also wrote to their lawmakers about intervening to protect international students in the United States from policies targeting them. The center also offers summaries of legislation of interest to the biological sciences community and other resources for researchers to engage in the development of the nation's science policy.

The Legislative Action Center is made possible by financial contributions from the Society for the Study of Evolution and the Botanical Society of America.

## **Publications and Information Dissemination**

AIBS policy staff report on science policy developments through several outlets, including the bi-weekly AIBS Public Policy Report and the Washington Watch column in the AIBS journal *BioScience*. Start your free subscription.

## Leadership in Biology Webinars

The Public Policy Office organized two webinars for AIBS members in 2020. One webinar focused on empowering 21st century learners through biodiversity knowledge and online learning



resources and the other event provided an overview of the Nagoya Protocol—a multilateral treaty that sets up a legal framework for utilizing genetic resources. Recordings of AIBS webinars and other programs can be viewed on our YouTube channel: <a href="https://www.youtube.com/user/AIBSvideos/videos">https://www.youtube.com/user/AIBSvideos/videos</a>.

#### **Photo Contest**

The Faces of Biology Photo Contest, sponsored by AIBS, continues to draw strong participation from members of the biological sciences community. The contest encourages researchers, educators, and students to showcase biological research in its many forms and settings. The photos are used to help the public and policymakers better understand the value of biological research and education.

The winners of the 2020 contest included photos depicting a biologist working on her photographic record of insect–pollinated flowers in the Everglades (below), a graduate student measuring the molar length of the Late Pleistocene–age scimitar cat at a museum in Texas, and a group of field researchers conducting aquatic sampling at the University of California Blue Oak Ranch Reserve. The first–place winner will be featured on the cover of an upcoming issue of *BioScience* and received \$250. Learn more about the contest and past winners at <a href="https://www.aibs.org/faces-of-biology/">https://www.aibs.org/faces-of-biology/</a>.





# **GET INVOLVED**

#### If you have a minute...

- Join the AIBS Legislative Action Center (<u>www.aibs.org/policy/action.html</u>)
- Subscribe to the Public Policy Report (<u>www.aibs.org/policy/</u>)
- Follow us on Twitter (<u>@AIBSbiology</u>)

#### If you have 15 minutes...

- Read an AIBS position statement on research funding, scientific integrity, climate change, and more (<u>www.aibs.org/news/statements/index.html</u>)
- Delve into science policy by reading an editorial, Feature article, or Washington Watch column from *BioScience* (<u>academic.oup.com/bioscience</u>)
- Support science advocacy through a small donation to AIBS

## If you have 30 minutes...

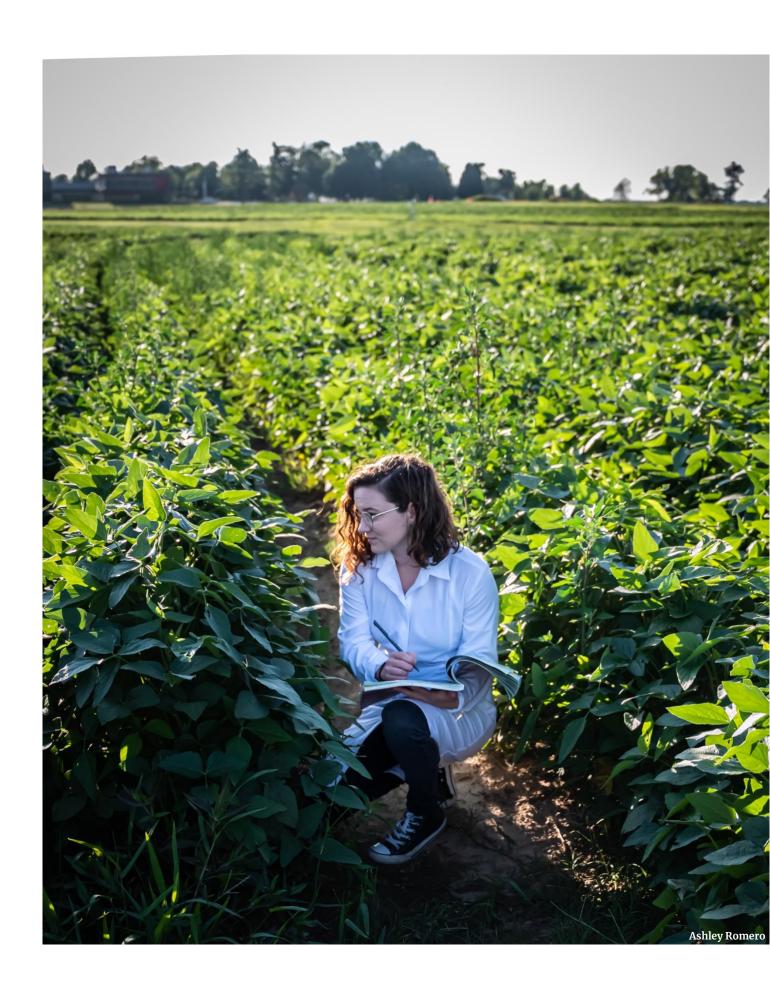
- Learn about federal investments in science and the budget process (www.aibs.org/policy/resources.html)
- Listen to a BioScience Talks podcast exploring a timely science topic (https://bioscienceaibs.libsyn.com/)

## If you have a day...

- Participate in the AIBS Congressional Visits Day in Washington, DC (www.aibs.org/policy/)
- Participate in the Biological Sciences Congressional District Visits event (www.aibs.org/policy/)
- Coordinate a professional development workshop (www.aibs.org/news/workshops/index.html)

## **Student Opportunities**

 Apply for the Emerging Public Policy Leadership Award (www.aibs.org/policy/eppla.html)





# **SUPPORTING ORGANIZATIONS**

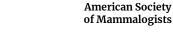
The following organizations sponsored AIBS science policy initiatives during 2020.

















Natural Science Collections Alliance





The Society for Integrative & Comparative Biology





#### How to Contribute

Financial support from individuals and organizations makes it possible for AIBS to serve the biological sciences community and to help advance a common agenda. Consider making a contribution to AIBS. Please visit this page to make a secure online donation.



# **ABOUT AIBS**

The American Institute of Biological Sciences is the national scientific organization dedicated to advancing the biological sciences to promote an increased understanding of all life. Our mission is to promote the use of scientific information to inform decision making and advance biology for the benefit of science and society.

AIBS initiatives are unified by a commitment to promoting informed decision–making. Our strategic priorities include:

- **Publications and Communications** including reliable reports, analyses, and the peer–reviewed journal *BioScience*, which is a forum for integrating the life sciences and educating the public about biological sciences.
- Scientific Peer Advisory and Review Services for research proposals and programs sponsored by funding organizations, including the federal government, state agencies, private research foundations, and other nongovernment organizations, and to educate the community about the science of peer review.
- **Community Programs** that advance the field and profession of biology while promoting and providing leadership, with a particular emphasis on public policy and advocacy, education and professional development, as well as public awareness of science.

AIBS works with any stakeholder that advances the broad field and profession of biology. Organizations partner with us on initiatives, work with us to identify and communicate matters of common concern, and help connect us to their communities for idea and information exchange — particularly regarding public policy, education, public understanding of science, and matters of professional concern.

AIBS has member societies and organizations that support our work financially. AIBS has clients from government agencies to biological societies and other nonprofits that use our expert services for a fee.





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