March 12, 2021

The Honorable Eric Lander, PhD
Science Advisor to the President
Office of Science and Technology Policy
The White House
Washington, DC 20500

Dear Eric:

On behalf of your fellow ASCB members, approximately 7,000 cell biologists in all 50 states and more than 60 nations around the world, I am writing to formally congratulate you on being nominated by President Biden to serve as Director of the Office of Science and Technology Policy (OSTP) and appointed as his Science Advisor, complete with Presidential Cabinet rank.

We were very pleased to note that you are the first biologist to serve as head of OSTP since its creation in 1976. In addition, you are the first biologist to serve as Presidential Science Advisor since Vannevar Bush provided wartime advice to President Franklin Roosevelt starting in 1941. If ever there were a time that biology should be called upon to provide presidential advice, it is now.

Leading the United States and the world out of the pandemic we currently face would be reason enough to call on a biologist. I was both impressed and pleased to read the letter then President-elect Biden sent to you when he announced your nomination. After four difficult years, it showed our community that President Biden has a very deep understanding of the many issues and challenges currently facing American science.

Many of the questions President Biden raised with you in his letter are important to the basic research community and are the same ones the ASCB has been addressing for several years. Of particular concern are the importance of basic research, immigration, federal support of science, and diversity.

It is often difficult to explain to the general public and policymakers the important role basic biomedical research plays in medical research. The world’s ultimate recovery from the COVID-19 pandemic is a perfect example of the importance of basic research and highlights the role it can play in the response to future public health emergencies and challenges.

Tony Fauci was the recipient of the ASCB’s 2020 Public Service Award. In his
recorded remarks, Dr. Fauci highlighted the important role basic research had played in the development of the mRNA vaccines. Fauci said, “Fundamental research advances clearly enabled us to hit the ground running and respond to this pandemic at an unprecedented pace.” Basic, fundamental, curiosity driven research will always be the foundation for the nimble response Fauci references. That foundation will also require a strong and diverse workforce, a sustainable and dependable source of federal funding, and effective communication to the public of the role this research plays in medical research. We certainly hope that the Biden Administration will be strong supporters of vital basic research.

For decades, the American biomedical research enterprise has been the envy of the world. Immigration policies in the United States that welcomed others from around the world allowed nations all over the globe to send their very best students to the United States to learn from the world’s best scientists, often recent immigrants themselves. Initially, many of these students stayed in the United States at the completion of their studies and continued to build our science community. Over time, however, a combination of improving research communities in other nations and restrictive federal immigration policies in the United States has made it increasingly difficult for international students and scientists to come and stay in the United States to study. Simply put, international scientists and students are finding other nations to be more welcoming.

In order for the United States to maintain its position as an international leader, it is imperative that a pro-science immigration system be enacted that welcomes international students to the U.S. to study but also provides them the opportunity to stay in our country at the conclusion of their studies.

In a 2017 white paper, “ASCB Calls to Modernize U.S. Immigration for Science,” the ASCB makes four specific recommendations for critical science-friendly changes to the U.S. immigration system. These recommendations are as valid today as they were in 2017. These changes are:

**Foreign students should receive green cards upon completion of their studies.** The current system makes it difficult for those who are trained here to stay and be productive members of our society. Too often, US-trained and -funded international students do not have the option of staying in the United States despite wanting to remain and contribute to strengthen our bioeconomy. Instead, they often end up competing against the nation that trained them. Therefore, we recommend that those international students who receive a doctorate in a scientific discipline, including biomedical research, from a U.S. teaching institution, should have the option of remaining in the United States with a green card.

**Restrictions on foreign travel by visa holders should be eased.** The international nature of science requires that researchers travel abroad. Yet very often, travel restrictions on foreign nationals hinder opportunities for their professional advancement, including attending international scientific meetings or collaborating with international colleagues. This pervasive problem not only hurts training but also impedes scientific exchange. The ASCB has heard from members that this difficulty is a major reason foreign students decided not to come to the United States or leave part way through their training and study in other nations.

**Match visa durations with training time.** Many international students first enter the United States with an F1 visa, continue on to their postdoctoral training on a J-1 visa, and eventually complete their professional training with an H-1B visa. While J-1 holders may remain in the United States for the length of their exchange program, they must often put their studies and research on hold and return to their home nation for as long as two years before applying for the H-1B visa they will need to complete their training.

**The number of H-1B visas should be based on market demands.** Despite increasing demand for H-1B visas, the number of new visas continues to be limited, with certain exceptions, to 65,000 per year. For our research labs and other scientific enterprises to remain competitive with other nations, we recommend that the number of H-1B visas increase in proportion to the demand.
A strong national biomedical research enterprise will also require a number of other important changes to national science-related federal policies. While not necessarily the purview of the OSTP, strong, long-term, predictable funding for federal agencies that support research will provide our research community, particularly students and young investigators, the confidence they need to start their careers and begin long-term basic research projects. It would also show their nation’s strong commitment to their work.

As the American research community, regardless of area of science, looks forward, the need to increase diversity stands as Job One. The focus on diversity must include the elimination of disparities in technology/STEM infrastructure (internet connectivity, public libraries/learning centers, school laboratories, and makerspaces). There is also a critical need to increase the diversity of the scientific workforce, including addressing racial disparities in NIH funding. A more diverse research workforce makes for better science. The Biden Administration can play an important role by showing leadership and developing policies that encourage diversity within the scientific community. There is also a need for policies that support diverse research portfolios at biomedical centers and within NIH Institutes. Diverse model systems, technologies, and expertise within the same space can accelerate collaboration and translation.

These are a few of the issues important to ASCB members and the basic research community. Our community is thrilled you are leading President Biden’s scientific efforts. I look forward to working with you and the rest of the OSTP staff. You can always reach out to me, but please feel free to also contact Kevin Wilson, ASCB’s Director of Public Policy and Media Relations, at kwilson@ascb.org.

Sincerely,

Ruth Lehmann, PhD
President
American Society for Cell Biology