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SMALL BUSINESS AND ENTREPRENEURSHIP COMMITTEE MEMBER

The Honorable Donald Trump President of the United States of America The White House 1600 Pennsylvania Avenue, NW Washington, DC 20500

Dear Mr. President,

I am writing to urge you to prioritize science and technology innovation in your administration by selecting a Science Advisor and building up and harnessing the Office of Science and Technology Policy (OSTP). OSTP's role in the executive branch is to provide the Executive Office of the President with advice on the scientific, engineering, and technological aspects of the economy, national security, homeland security, health, foreign relations, and the environment. It also coordinates interagency science and technology policy efforts, assists the Office of Management and Budget with an annual review and analysis of federal research and development investment, and serves as a source of scientific and technological analysis and judgment for you and members of the cabinet with respect to major policies, plans, and programs of the federal government. Currently, nine out of ten key OSTP staff positions remain vacant. Filling these positions and ensuring a robust workforce is in place at OSTP would be a start to help keeping the U.S. at the forefront of scientific advancement.

I believe OSTP's role is more important than ever. I remain quite concerned that, when it comes to science, America is falling behind its major competitors. China, for example, is ramping up its science and technology innovation efforts significantly. According to the U.S. National Science Board<sup>1</sup>, China's expenditure on scientific research and development (R&D) is growing faster than any other country. If current trends continue, China is expected to surpass the U.S. in R&D expenditures by the end of this year. Additionally, as a result of large government investments in higher education over the last 20 years, China has become the world's largest producer of science and engineering doctoral degrees, a designation that the U.S. held until 2007. I urge you to consider this when formulating your budget request for federal R&D in coming years to ensure we are investing in our nation's scientists and STEM workforce.

U.S. leadership in science and technological innovation did not happen by accident, but it is also not guaranteed. The U.S. began its rise to scientific dominance in the 20<sup>th</sup> century, partly by recruiting brilliant scientists from other countries. During World War II, Nobel Prize-winning German physicist Albert Einstein immigrated to the U.S. because the Nazis would not allow him, as a Jewish scientist, to continue his work. Similarly, Enrico Fermi, another Nobel Prize-winning

<sup>&</sup>lt;sup>1</sup> Science and Engineering Indicators 2018 (NSB-2018-1)

physicist, came to the U.S. from Italy to escape Benito Mussolini's fascist government. In fact, more than 1,600 German scientists, engineers, and technicians were recruited in post-Nazi Germany and brought to the U.S. for government employment between 1945 and 1959. These immigrant scientists were key assets in helping build America into a scientific powerhouse.

Today, China is building its scientific portfolio in a similar manner, by offering incentives for foreign scientists to work in China. Not only are they rapidly increasing their expenditure on R&D funding, they are also creating a more enticing research environment for scientists, including those from the U.S. Many American scientists feel that their work is more valued in China than it is in the U.S. and have ultimately decided to pursue a career there. If this trend continues, it would be devastating to our country's scientific future and put our proud scientific legacy at risk.

To mitigate this trend and ensure that the U.S. can compete with China in science and technology innovation, I urge you to strongly prioritize science and technology innovation and invest in OSTP by filling vacancies in key positions, ensuring that your administration has access to science and technology advice.

Sincerely,

United States Senator