## Written Testimony of **Prof. Steven Chu**

Professor of Physics and Professor of Molecular and Cellular Physiology Stanford University, Former U.S. Secretary of Energy 2009 - 2013

## Before the Committee on Oversight and Reform Subcommittee on Civil Rights and Civil Liberties United States House of Representatives

At a Roundtable Entitled "Potential racial profiling of Chinese-American scientists by the U.S. government"

Presented June 30, 2021

Chairman Raskin, Chairwoman Chu, Members of the Subcommittee, and Members of CAPAC, thank you for the opportunity to appear before you today.

My name is Steven Chu. I am the William R. Kenan Professor of Physics and Professor of Molecular and Cellular Physiology at Stanford University. I am the co-recipient of the 1997 Nobel Prize in Physics, and was the U.S. Secretary of Energy in the Obama Administration from January 2009 until the end of April 2013.

Chinese immigrants have added immensely to our scientific and technological excellence. This includes six first-generation Chinese-American scientists who received Nobel Prizes in Physics or Chemistry, and two second-generation scientists. First or second generation Americans were instrumental in founding 44 of the top 100 Fortune 500 companies listed in 2018, including the Chinese founders of Yahoo, Nivdia, YouTube, DoorDash, Old Navy, Peloton and Zoom.

My parents were born in China, and came to the US as MIT graduate students during WWII. My two brothers and I were born in the US, and after the People's Republic of China was founded in 1949, my parents remained in the U.S. My father was a Professor of Chemical Engineering at Polytechnic University in Brooklyn for two decades, but felt racial bias despite the fact that he consulted with the Redstone Arsenal, consulted at the DOE Argonne National Lab, and worked at North American Rockwell during the development of the Minuteman III Missile, which still remains part of the American nuclear arsenal.

My father's oldest sister, Edith Chu received her Ph.D. from the University of Michigan before becoming a chemistry professor at Peking University. In "The Study of Change: Chemistry in China, 1840 -1949," James Reardon-Anderson referred to my aunt "as the most significant female Chinese chemist of [this] era." However, as a woman and Chinese immigrant, she could only get a job in 1949 at a small women's college in Los Angeles that trained high school teachers. Despite this humble position, she was able to secure NIH funding and publish papers for decades in the US.

I have never felt any racial bias in my professional career, but I am very disheartened to see how easy it is to stir animosity and distrust against Asian-Americans such as the unjust persecution of my fellow roundtable panelists, and MIT professor Gang Chen and University of Tennessee Professor Anming Hu.

China has emerged as a major economic competitor, and the unprincipled theft of intellectual property by Chinese individuals, companies and the government is very real. However, this very legitimate concern has spilled over into distrust of Asian Americans, who like my parents, have made the United States their home.

Many of my Chinese-American faculty colleagues feel that they are under increased and unjustified scrutiny by the U.S. government. The Department of Justice's "China Initiative" and statements by U.S. funding agencies is creating an atmosphere of fear and intimidation. As an example, part of a September 2020 Department of Energy order stated that prior approval is required before the acceptance of an honorary degrees from Chinese Universities even though the honor carries no financial renumeration, is not a reward of past interactions nor carries any future obligations.

I do not believe these actions are in the best interests of the United States. We should be able deal with unethical behavior of individuals, companies and countries without endangering our ability to attract and retain the world's most talented science students and professionals.

The 2019 JASON report "Fundamental Research Security," commissioned by the National Science Foundation reported as of 2017, 40% of Ph.D. students in science, health, and engineering fields were foreign, and China alone accounts for 34% of this total. For decades, a large majority of these U.S. trained Ph.D. graduates stayed because we were at the forefront of many areas of science. In many important technologies such as artificial intelligence, new materials, batteries, and biotechnology, foreign students have played an essential role in keeping the United States competitive.

Today, the global competition to attract and retain the best scientific talent has intensified. We cannot assume the best sciencists will still come to the U.S. or if they come, they will want to stay. We are in an international competition to attract the scientific and engineering talent that has been a pillar of our economic prosperity.

I believe that scientific creativity flourishes best in free and open society where observations and experiments remain the ultimate arbitrator of scientific truth. In the U.S. legal system there are checks and balances that ultimately rely on sound evidence and enlightened judgment to uphold the rule of law and protect the innocent. In so doing, we will honor the words of Abraham Lincoln in his First Inaugural address when he appealed to "the better angels of our nature."

Thank you for your attention.