



U.S. SENATE COMMITTEE ON
COMMERCE, SCIENCE, & TRANSPORTATION

U.S. Senator Maria Cantwell

**U.S. Senate Committee on Commerce, Science, and Transportation
Nomination Hearing for Dr. Arati Prabhakar to be Director of the Office of Science and
Technology Policy**

July 20, 2022

Opening Statement
[VIDEO](#)

Senator Cantwell: I want to thank our colleagues and welcome everyone today. Today we will consider the nomination of Dr. Arati Prabhakar to be the Director of the Office of Science and Technology, please if you would join us at the table.

Dr. Prabhakar, I welcome you and your family, and I'm sure you'll have a chance to introduce them. The position to which you have been nominated, is charged with advising the President on a broad range of scientific and technological policies to address national problems.

We are at a critical moment when science and innovation has never been more important to our nation's health and economic competitiveness. And for the first time in our history, President Biden has elevated this position to a cabinet-level post underscoring its significance in the Administration's commitment to ensuring that our nation continues to be on the cutting-edge of new developments that can improve the lives of all Americans.

Your credentials and accomplishments and your personal story set you apart as a true trailblazer. You are an engineer, applied physicist, pioneer and skilled manager, and you have led two federal research and development agencies and worked with startups, large companies, universities, government labs, and nonprofits across a wide variety of sectors to create powerful new solutions for our critical challenges.

Under Dr. Prabhakar's leadership, the Defense Advanced Research Projects Agency prototype, a system for [detecting] nuclear and radiological material before a terrorist can build a bomb, develop tools to find human trafficking networks in deep and dark webs, and enabled complex military systems to work together even when they are not originally designed to do so.

She created a new office to spur novel bio technologies, which kickstart the development of rapid response mRNA vaccine platform making possible the fastest safest and effective vaccine development in the world in response to COVID-19.

At 34, Dr. Prabhakar became the first woman to lead in the National Institute of Standards and Technology. And while there, she took both the Manufacturing Extension Partnership and the Advanced Technological Partner Program to a national scale to boost competitiveness and in our small and medium-sized manufacturing base.

She spent years in Silicon Valley helping to translate R&D into deployment, a big subject around here, how to move more translational science. Then in 2019, she founded a nonprofit to develop solutions to challenges of climate and health and to open access for every person to have opportunities in the sciences.

We are simultaneously facing our challenges on a response from a global pandemic, experiencing daily effects of our challenging and changing climate, and we are on the cusp of discoveries that we need to meet the challenges facing our nation.

Science has never been more important and Dr. Prabhakar is absolutely, I believe, the right person to lead this agency. She's exactly the kind of inspirational leader we need to make progress on the growing need to have more women participating in science and across technical workforce needs.

I'm also confident she's the right person to work with us on implementing USICA, the US Innovation and Competition Act. While the United States is a leader in scientific and technological innovation, we have fallen short of consistently recruiting, retaining, and promoting women and diverse individuals in the STEM field.

In my state, Washington has a thriving technology, aerospace, and biotechnology sectors and space sectors. Our success as a state would not be possible without those contributions of women in our science and engineering fields. But in order to continue that success, we need to have even more women in science. We need more diversity in science. So addressing the gender, racial, and ethnic disparities in STEM needs to be a national priority.

USICA also requires the Office of Science and Technology Policy to develop policy guidelines to ensure that federal research agencies improve outreach to minority serving institutions and improve their research and competitiveness. It requires efforts to reduce sex-based and sexual harassment involving recipients of federal research awards. USICA requires the director to establish an interagency working group to ensure that coordination among federal agencies and activities and key technology areas, which are vital to the US, continue to see leadership by the United States on a global basis. These are areas like artificial intelligence, quantum science, cybersecurity, biotechnology, and other leading-edge technologies.

And so these agencies are going to have to submit to Congress, a comprehensive national science and technology strategy. So that's a lot of work to do. But we're up to the task and you certainly, Dr. Prabhakar, are up to the task. So [I] look forward to hearing your opening statement and the question and answer period with our colleagues. I will now turn to my colleague, Senator Wicker, for his opening remarks.

Question and Answer

[VIDEO](#)

Senator Cantwell: Dr. Prabhakar, I wanted to, you know, this elevation of OSTP to the cabinet level gives a unique opportunity for a scientist to play a larger role in shaping the public policies of the nation. And we live in a technology driven economy and so we need to have people, in my mind, all aspects of our government who...I'm a little down on the CEOs of companies who on so aren't science based, you know, they don't know what the next engineering evolution is going to be. They try to run it on a Wall Street basis and I guarantee you, that's not a recipe for

success. There's just so much transformation happening. If you don't have a scientist or an engineer at the top of the ranks, you're not going to see the next move.

So how do you sit at the cabinet level, and see the next move and communicate that across government?

And let me give you an example. I'm very interested in what we do next on cybersecurity. I feel like the amount of attacks are just escalating. It's, it's really a way of intimidation, if nothing else by foreign governments. And the consequences could be devastating to our economy. And yet, probably every Committee in the Congress has had a hearing on cybersecurity.

So how do you play a role? What do you think that we should do to get a more whole of government response on cybersecurity? And what can the Office of Science and Technology Policy do at the cabinet level to assure that that happens?

Dr. Prabhakar: Madam Chair, thank you for this question, because I think it's that's a question that's been very much on my mind, as I've thought about what this role will be, if I'm confirmed.

I had the great honor of being in the Oval Office with the President to talk about this position and to have him say to me that the reason he had made this position a cabinet level role was because he viewed the role of science and technology in our country and in the future, to be so vitally important that he thought it needed to be elevated. And that just moved and delighted me because I see that in everything that we're doing.

In my private sector experience, I very much had the experience that you're describing about managing to Wall Street, which is very different than managing into the future and driving a future that we really want to create.

The reason I think that that connection, of science and technology at the cabinet level can actually be very effective is because science and technology opens doors, but by itself it can't do anything. And its implementation, its acceptance, its adoption, it's the way science and technology changes the way we operate, the way our incentives are established, the way our organizations work, that's when change really happens.

And I think cybersecurity is in many ways a perfect example because when I think about the challenge of cybersecurity, we have this growing attack surface it for decades now. It has felt as if the problem is getting worse faster than we can keep up with it. And when I think about that, I see two complementary facets of dealing with it. One will always be the research that gives us better methods and more automated, more effective methods to be more secure. But without the other half, which is the implementation, we're simply not going to get there. And how many times have you seen a report of a cybersecurity problem where when you peel it back, that organization should have patched something, or they should have had a different procedure in place? It's not that they didn't know, it's that they didn't have sufficient incentives, or they weren't worrying about it as much as they should have. And so these implementation issues are where I think that's where the rubber meets the road for science and technology and my hope is, and what I would work towards, if I'm confirmed in this position, is to use that cabinet position to link science and technology to the other aspects of government that so often are where a lot of the important implementations.

Senator Cantwell: So do you think that's like a roadmap up, do you think that's a plan? I was a big fan of a very geeky report done by then Secretary Moniz called the Quadrennial Review.

Dr. Prabhakar: Yes, wonderful report.

Senator Cantwell: And that kind of report says, this is where we are as a nation, these are the things that we should go and implement, as it related to energy. And basically, it was talking about the transformation that was happening, that we no longer had the same structure even. We didn't even have the same structure to deliver what we previously had.

So I think that in my mind, we have a lot of great efforts going on in cybersecurity, but it's not as cohesive as a street strategic plan, or certainly not a not a constant review. So you're saying you think that OSTP could play that role?

Dr. Prabhakar: Yes, I think those reports can sometimes be extremely impactful, the one you described is a great example. And then I think you also have to couple it with the direct persuasion and the finding of ways to implement and that's sometimes, as you know, that's a very human enterprise. And I think that's something that my hope is the cabinet position would give me an opportunity to be more effective than science and technology has been in the past on that side of it.

Senator Cantwell: Thank you.