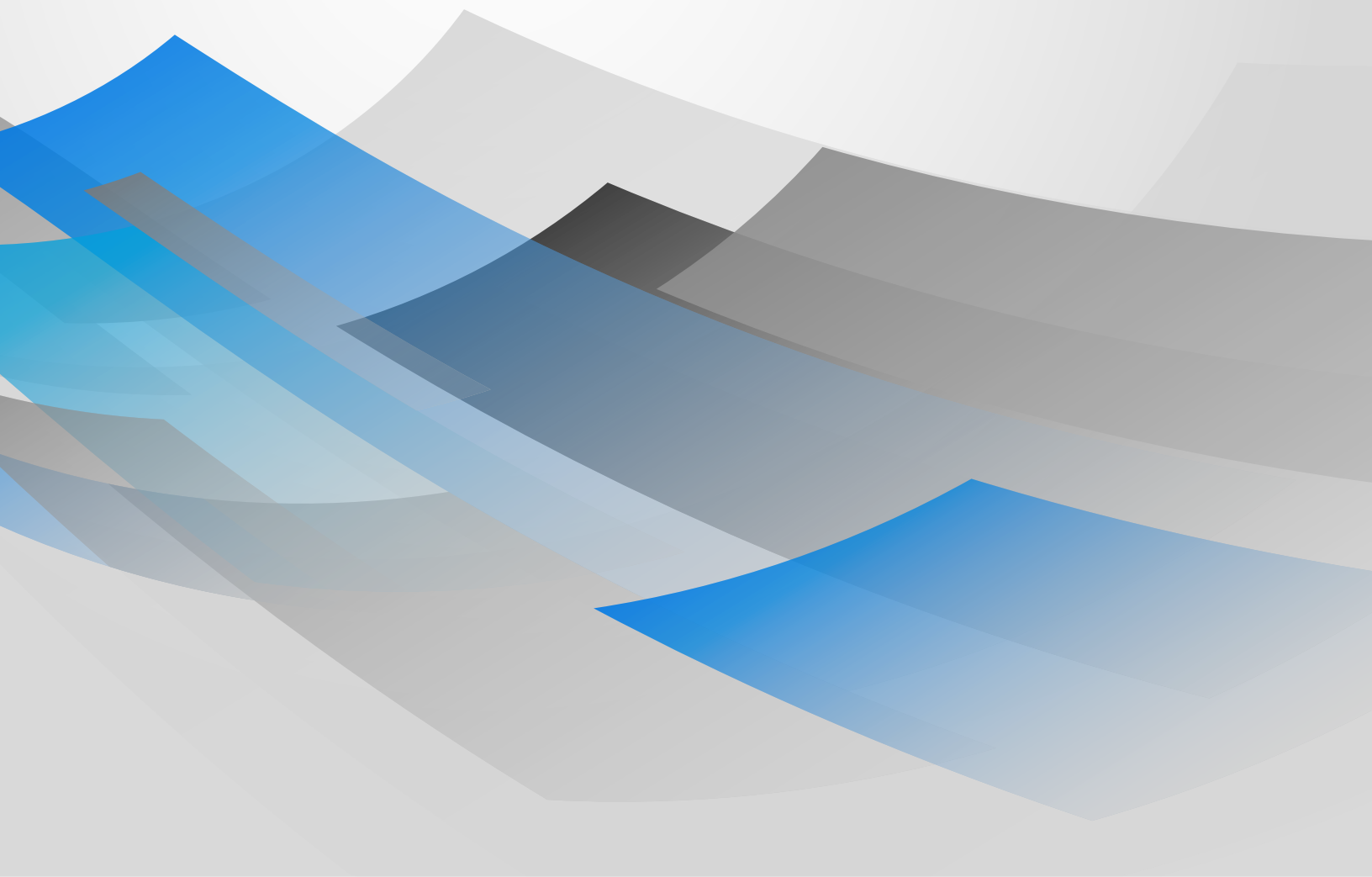


Research Security Policies & Their Impacts: Key Results of APS Member Survey



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New data from a September 2021 survey by the American Physical Society of more than 3,200 physics professionals and students shows that the US federal government's current approach to addressing research security concerns is weakening, not strengthening, the US scientific enterprise. The following survey results highlight the urgent need for a new approach that thoughtfully protects our nation against evident security risks, welcomes international talent and promotes beneficial international collaborations.

Impact on collaborations

Nearly one in five physics professionals in the United States (non-student APS members) have either chosen – or been directed – to withdraw from opportunities to engage in professional activities with colleagues based outside the United States due to current research security guidelines.

I previously had fundamental scientific collaborations with Chinese partners, who had previously been post-docs in the U.S. and subsequently returned to independent academic positions at Chinese universities. However, the current security guidelines make me wary of continuing such collaborations and, as a consequence, I have halted such collaborations out of an abundance of caution.

– US citizen physics professional

Impact on workforce

More than 43% of international physics graduate students and early career scientists – i.e., PhD graduates with fewer than five years of experience – perceive that the United States is an unwelcoming country for international students and scholars.

Moreover, at least 40% of international early career scientists who chose to come to the United States to study and/or work believe that the US government's current response to research security concerns makes their decision to stay in the United States long term less likely or much less likely.

New approach required

Less than 25% of physics professionals in the United States that are familiar with research security policies (non-student APS members) agreed that the US federal government's current response to research security concerns appropriately balances US security and the research requirements for open science.

I am very concerned about the future health of the American research enterprise if researchers continue to be prosecuted for standard interactions with foreign colleagues and international graduate students find more welcoming countries for their education.

– Physics department chair
at US institution

