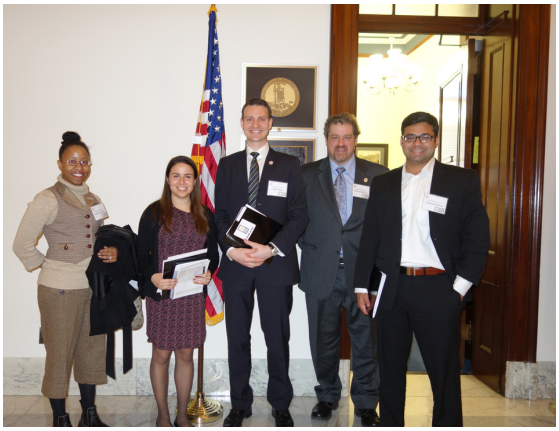
THE NATIONAL PHOTONICS INITIATIVE

Created as an umbrella organization to identify and advance areas of optics and photonics critical to maintaining U.S. competitiveness and national security, the National Photonics Initiative has been impacting public policy for a decade.

In 1998, the National Research Council released a report, "Harnessing Light: Optical Science and Engineering for the 21st Century," that presented a comprehensive view of the potential impact of optics and photonics on important industries. In response, several economies – including Germany, China, and the European Union – developed their already strong optics and photonics sectors. The United States, however, did not, leaving it behind.

Opportunities in fields like solar power, high-efficiency lighting, genome mapping, high-tech manufacturing, nuclear threat identification, cancer detection, and new fiber optics vital to supporting the Internet's growth offered the potential for even greater societal impact over the next few decades. Investment in photonics was essential to growing our economy, protecting and improving lives, and positioning the United States as a global technology leader.



In 2012, the National Research Council released a sequel to "Harnessing Light" that called for the creation of a National Photonics Initiative (NPI) to increase collaboration and coordination among US industry, government and academia to advance areas of photonics critical to regaining US competitiveness. This follow-up report, titled "Optics and Photonics: Essential Technologies for our Nation," urged collaborative action.

Soon after, leading optics and photonics societies Optica (formerly OSA) and SPIE, alongside the American Physical Society, IEEE Photonics Society, and Laser Institute of America, formed the NPI to advocate on behalf of the optics and photonics community.

Over the past 10 years, the NPI has brought together experts from industry, academia and government to help guide US funding and investment in five key photonics-driven fields:

- Advanced Manufacturing
- Communications & IT
- Defense & National Security
- Energy
- Health & Medicine

NPI PRIORITIES

Key Priorities
Past & Present

The NPI works with the community to advocate for select priorities. Our work has successfully influenced public policy over the past decade.

PRIORITIES	TIMELINE
Congressional Visits	Ongoing
Congressional Optics and Photonics Caucus	2021-Present
National Quantum Initiative	2017-Present
Education/Workforce Development	2012-Present
R&D Funding	2012-Present
CHIPS and Science Act	2021-2022
High Intensity Lasers	2018-2022
Cancer Moonshot	2015-2018 On Watch
Brain Initiative	2014-2016
AIM Photonics	2013-2015

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Contact Us

Jennifer O'Bryan, SPIE,
jennifero@spie.org
David Lang, Optica,
dlang@optica.org
www.lightourfuture.org