Congress of the United States
Washington, DC 20515

May 30, 2014

President Barack Obama
The White House
1600 Pennsylvania Avenue, NW
Washington, D.C. 20500

The Honorable Chuck Hagel
Secretary of Defense
1300 Defense Pentagon
Washington, D.C. 20301

Dear President Obama and Secretary Hagel,

As you consider the next National Network of Manufacturing Innovation (NNMI), we strongly urge you to consider an institute focused on optics and photonics; the science and application of light.

While our districts are geographically distinct, they are similar in that optics and photonics are essential to the livelihood of our communities – these technologies create middle class jobs and drive our local economies. Historically, the United States has been the world leader in deploying optics and photonics research to power cutting edge technologies, but global competition has put this leadership position at risk causing a substantial loss of global market share to overseas competitors and costing thousands of U.S. jobs. Recently, Germany committed $1.3 billion to photonics research and development (R&D) over 10 years; China funded programs targeting photonics supply chains; and the European Commission directed over $2 billion to photonics-related R&D over the next seven years while designating photonics as one of only five key technologies to enable future prosperity.

In 2012, the National Research Council issued the report *Optics and Photonics: Essential Technologies for Our Nation* that called for increased collaboration and coordination among industry, government and academia to identify and further advance areas of photonics critical to regaining American competitiveness and maintaining national security. Heeding this call, the Committee on Science of the National Science and Technology Council put together an interagency committee to examine optics and photonics investments across federal agencies. The Fast-Track Action Committee on Optics and Photonics (FTAC-OP) recently released its report, *Building a Brighter Future with Optics and Photonics*, which outlined opportunities for federal investment and interagency cooperation in basic and early applied research in optics and photonics.

New opportunities in optics and photonics-driven fields — including remote imaging, solar power, touch screen sensors, high-efficiency lighting, genome characterization and high-tech manufacturing, — offer even greater potential to enhance our quality of life, safeguard our health and security and drive economic growth, job creation and global competitiveness.

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An NNMI in optics and photonics would create an environment that promotes research, development, and commercialization by bringing together researchers and innovators in academic institutions, small and large companies and government laboratories. By taking a leadership role in the formation of such an NNMI, the U.S. government would not only stimulate economic growth and jobs, but also launch a new frontier of opportunities for innovation.

Sincerely,

Louise M. Slaughter · Paul Tonko · John L. Mica

Raúl M. Grijalva · Elizabeth Esty · Ron Barber · Chris Gibson