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Congress of the United States
U.S. House of Representatives
Washington, DC 20515

COMMITTEE ON TRANSPORTATION AND
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SUBCOMMITTEE ON AVIATION,
VICE RANKING MEMBER

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AND ENVIRONMENT

COMMITTEE ON HOMELAND SECURITY

SUBCOMMITTEE ON COUNTERTERRORISM
AND INTELLIGENCE

May 18, 2026

The Honorable Tom Cole
Chairman
House Committee on Appropriations
H-307 The Capitol
Washington, D.C. 20510

The Honorable Rosa DeLauro
Ranking Member
House Committee on Appropriations
1016 Longworth House Office Building
Washington, D.C. 20510

Dear Chairman Cole and Ranking Member DeLauro:

I am requesting \$1,000,000 in funding for the Hackensack Medical Research and Innovative Technology Project in Fiscal Year 2027. The entity to receive funding for this project is Hackensack Meridian School of Medicine located at 123 Metro Boulevard, Nutley, NJ 07110.

Funding for the Hackensack Medical Research and Innovative Technology Project would be used to purchase two next-generation instruments that are critical for developing innovative therapies and diagnostics for cancer, autoimmune diseases, as well as providing and developing international scientific and technical quantitative metrics and metrology data to advance research and industry. The technology equipment devices combine molecular-level interactions and imaging with the power of artificial intelligence to greatly improve analysis and enhance decision-making for advancing therapies in the discovery and development pipelines. There are currently no entities within the entire state of New Jersey that have these two technological devices, resulting in a lack of research and innovation in the state.

The first technological device that would be procured through the project measures ‘cell avidity’—or how strongly cells interact with each other or with treatments like antibodies and small molecule drugs. This innovative technology helps researchers analyze and understand what is driving immune responses, cancer growth, and therapeutic response. Access to this automated, high-throughput testing and artificial intelligence to improve imaging and analysis allows researchers and doctors to identify the most effective treatments faster and more reliably than traditional and outdated tests and methodologies. The second technological device is an integrated optical imaging platform that allows researchers the ability to observe and record research for how individual proteins interact in real time, helping researchers and scientists understand unique elements of diseases and how specific treatments affect cells. By defining cancer and drug dynamics, researchers can better identify promising or unique cancer targets and speed the development of advanced, patient specific therapies.

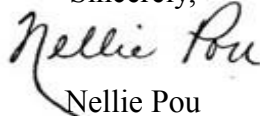
In funding this project, researchers will be able to retrieve high-resolution, reproducible measurements of cell avidity, molecular binding forces, and real-time interaction data that will directly contribute to the development of standardized, quantitative metrics for characterizing therapeutic interactions. By enabling rigorous, traceable measurement of cell-cell and protein-protein interactions at the single-molecule level, the project will not only strengthen national infrastructure for reliable biological measurement but support the creation of validated protocols that enhance reproducibility across laboratories.

The project is an appropriate use of taxpayer funds because it will increase public health, advance the precision of measurement science, quantitative biophysical metrology, and AI-enabled analytical standards in biomedical research. The project will allow for the ability to quantitatively define immune synapse strength, antibody avidity, and drug-target interaction forces, and provide a standards-based framework essential for the rational design and optimization of next-generation precision interventions and reinforce U.S. leadership in precision technologies for the development of transformative cancer therapeutics and other advanced biomedical interventions.

The project complies with the federal nexus as it is for activities consistent with, and supportive of, NIST's mission and is also aligned with one or more of the functions and activities described in 15 U.S.C. § 272.

I certify that I have no financial interest in this project nor does anyone in my immediate family.

Sincerely,

A handwritten signature in cursive script that reads "Nellie Pou". The signature is written in black ink and is positioned above the printed name.

Nellie Pou

Member of Congress

9th Congressional District of New Jersey