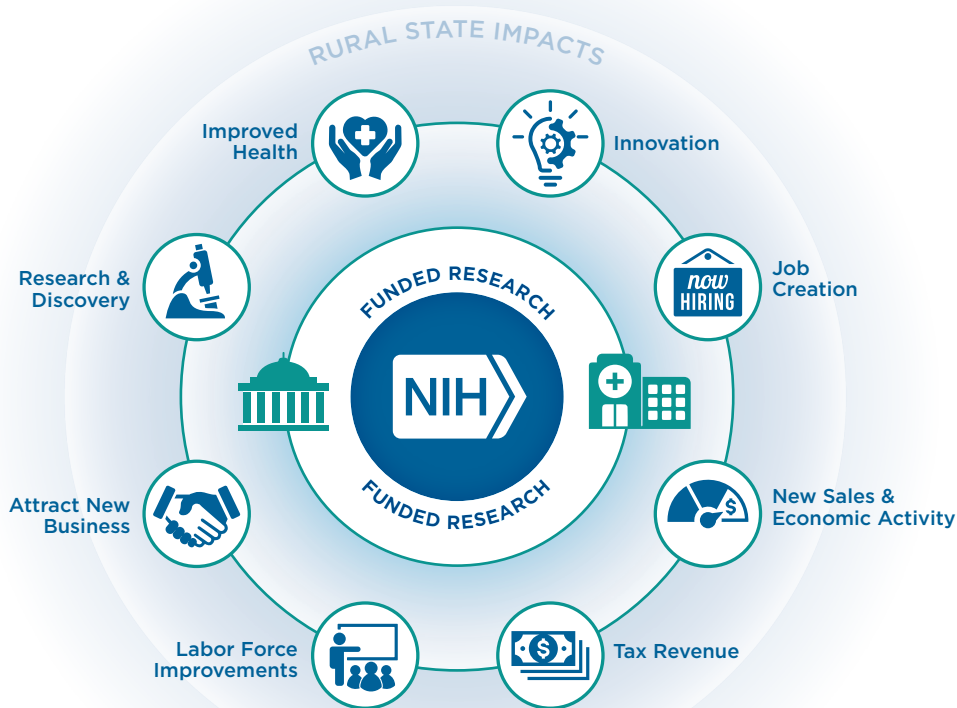


THE EXPONENTIAL IMPACT OF NIH FUNDING IN RURAL STATES

# New Hampshire

Research funding from the **National Institutes of Health (NIH)** that comes to institutions in New Hampshire has a significant impact across the state — extending far beyond the immediate recipients of that funding.



FY22

## Economic Impact of NIH Research Funding in New Hampshire

**\$122M**

NIH Research Awards

- \$289M** New Economic Activity
- 1,577** Jobs
- \$23M** Tax and Fee Revenue
- \$87M** Statewide Household Earnings

**\$1 NIH Funding = \$2.4 NH Economic Activity**

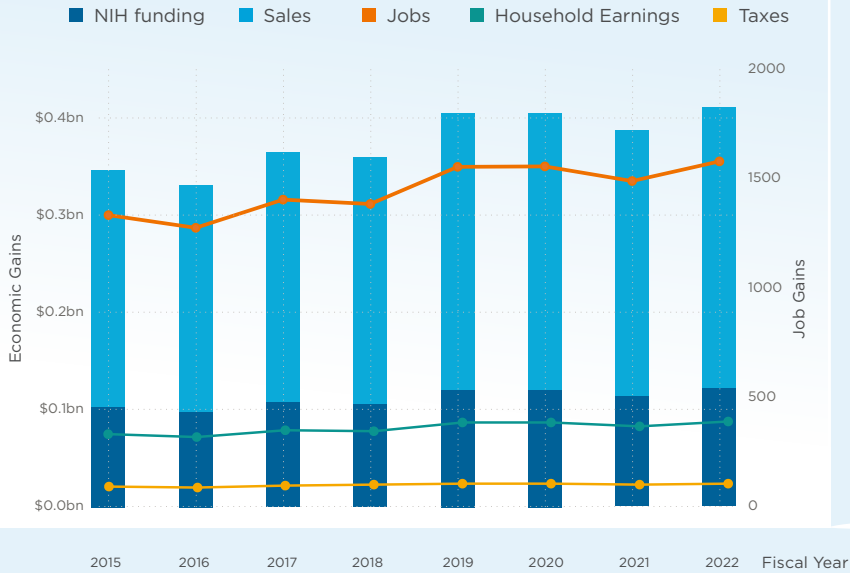
**19 ORGANIZATIONS IN NEW HAMPSHIRE RECEIVED A TOTAL OF 230 AWARDS**

Top recipients of NIH funding

- ◆ Dartmouth College
- ◆ Dartmouth-Hitchcock Clinic
- ◆ University of New Hampshire
- ◆ Celdara Medical, LLC
- ◆ Lodestone Biomedical, LLC

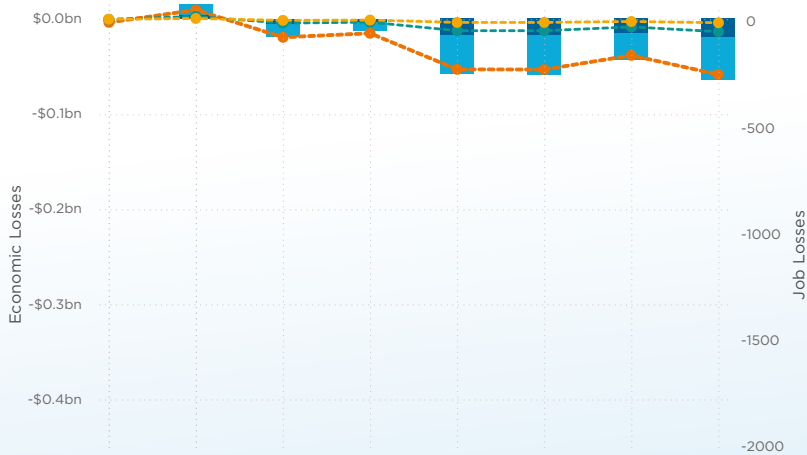


# THE IMPACT OF 7 YEARS OF NIH BUDGET INCREASES ON NEW HAMPSHIRE



From 2016–2022, New Hampshire **BENEFITTED** from a total of:

- \$794M** NIH Research Awards
- \$1.876B** New Economic Activity (sales)
- 10,227** Jobs
- \$567M** Statewide Household Earnings
- \$153M** Tax and Fee Revenue



If the NIH budget had stayed flat at FY15 levels from 2016–2022, the cumulative impact to New Hampshire would have been the **LOSS** of:

- \$73M** NIH Research Awards
- \$165M** New Economic Activity (sales)
- 905** Jobs
- \$49M** Statewide Household Earnings
- \$14M** Tax and Fee Revenue

View data tables

## Public Health Considerations

### Improving Health

New Hampshire potentially has a lot to gain from NIH-funded medical research that results in improved treatment of disease. Improved health can also help ease the fiscal burden of spending on public health programs.



- 37%** NH enrollment in Medicare and Medicaid
- 6%** NH GDP spent on public health programs



- 41%** Rest of U.S. enrollment in Medicare and Medicaid
- 6%** Rest of U.S. spending on public health programs

### HOW NEW HAMPSHIRE RANKS COMPARED TO OTHER STATES



#### Life Expectancy

- 45th** lowest life expectancy
- 41st** highest infant mortality

#### Chronic Conditions

- 20th** for cardiovascular disease
- 47th** for diabetes
- 41st** for obesity

#### Deaths

- 30th** for Alzheimer's disease
- 31st** for cancer
- 39th** for heart disease
- 22nd** for opioid overdose
- 25th** for suicide



Congress has increased the NIH budget each year since 2016, which has had a significant, positive impact on New Hampshire's economy and prevented the negative economic impacts that flat funding would have caused.

## Boosting the Labor Force

### NIH-funded research boosts an important sector of the labor force

**Jobs in the R&D sector in New Hampshire pay 1.9X more than jobs in other sectors.** Moreover, the R&D sector has seen far greater growth over the last seven years than other sectors in the state — **46% vs 5%**. These facts, combined with strong pay growth help attract highly skilled workers and businesses to the state.

### NIH research-funded jobs are helping to improve the labor force in New Hampshire

Average Pay 2022			Employment Growth 2016-2022		Average Pay Growth 2016-2022	
R&D	All Sectors	Ratio	R&D	All Sectors	R&D	All Sectors
\$144,053	\$73,966	1.9	46	5	20	36

## Biomedical Innovation in New Hampshire

### UNH DEVELOPING ROBOTS TO HELP CARE FOR PEOPLE WITH ALZHEIMER'S DISEASE AND DEMENTIA

A recent five-year grant from the National Institute on Aging, part of the NIH, is spurring the development of social assistive robots to aid in the care of individuals with Alzheimer's disease and related dementia in the comfort of their own homes.

**“Caring for aging adults, especially those dealing with progressive Alzheimer's and dementia, can place a high burden on family caregivers who cannot be with their care recipients 24/7,”** said Sajay Arthanat, professor of occupational therapy. **“The ultimate goal of this research is to help support those caregivers while keeping their family member healthy and active at home.”**

The NIH grant will enable Arthanat and his co-principal investigator, Momotaz Begum, assistant professor of computer science to advance the capabilities of their

prototype robot and eventually test it in home settings. This would include compatibility with commercial devices already found in homes, like motion control cameras and sensors, to keep older adults safe and in line with their health care.

For example, if a patient does not take their medication on time, a sensor strategically placed by their pill bottle would track the lack of movement — indicating the patient didn't take their medicine — and would alert the assistive robot. The robot would then initiate a vocal reminder to the patient. If, after a few attempts, the patient does not respond by taking their medicine, the robot would alert a remote human caregiver who would be able to intervene. [Learn more](#)

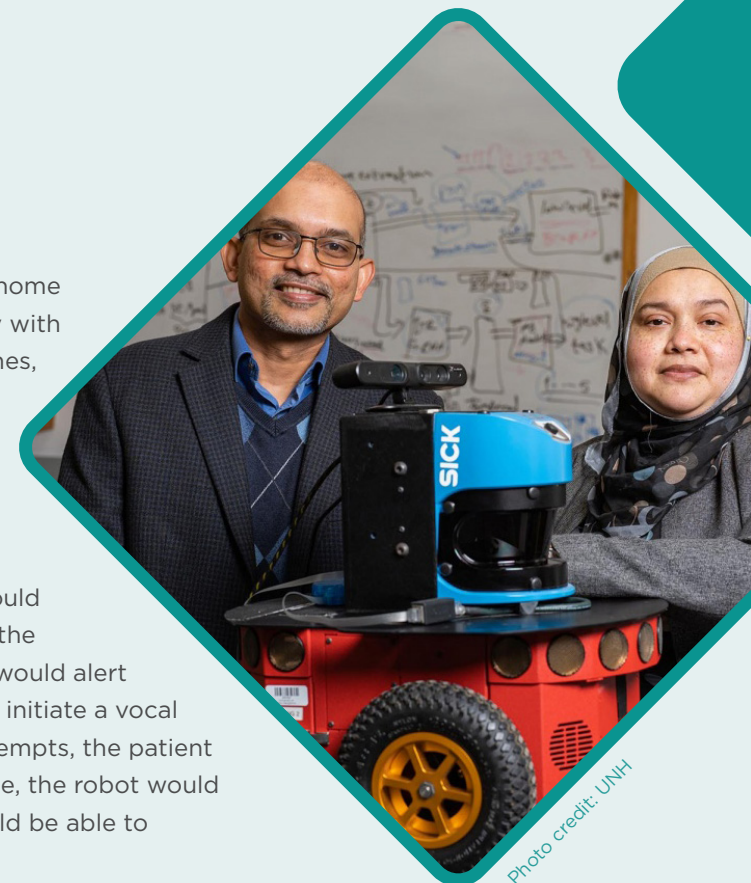


Photo credit: UNH



## NEW CENTER WILL ADVANCE DELIVERY OF RURAL HEALTH CARE

A five-year NIH award to investigators at Dartmouth Health will fund a new Center for Rural Health Care Delivery Science and support faculty research to advance the understanding of healthcare delivery in a rural setting. The award is part of the **Centers of Biomedical Research Excellent** (COBRE) program.

“Dartmouth Health is one of the most rural academic health systems in the U.S.,” said Mark A. Creager, MD. “We are grateful for the funding to establish a Center for Rural Health Care Delivery Science to develop a multidisciplinary research program and provide infrastructure to support the development of a critical mass of clinician-investigators who focus on the study of healthcare in rural communities. The Center will enable us to conduct innovative and compelling research that will lead to improved healthcare for our patients and others living in rural communities.” [Learn more](#)

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The Center for Rural Health Care Delivery Science will be led by **Sandra L. Wong**, MD, MS, chair of surgery at Dartmouth Hitchcock Medical Center (DHMC) and the William N. and Bessie Allyn Professor of Surgery at Dartmouth Geisel School of Medicine, and **Mark A. Creager**, MD, emeritus director of the Heart and Vascular Center at DHMC and the Anna G. Huber Professor of Medicine at Geisel.

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## Learning How the Environment Affects the Health of Children: The New Hampshire Birth Cohort Study

Since 2009, the New Hampshire Birth Cohort Study (NHBCS) has been tracking the health of pregnant women and their children in order to learn how environmental factors, such as contaminants, affect the health and development of children. More than 2,000 mother and infant pairs from New Hampshire and Vermont are part of the study. [Learn more](#)

The NHBCS is a longitudinal cohort study funded by the National Institute of Environmental Health Sciences, part of the NIH. The study follows participants over time as they grow and develop - from early pregnancy and into childhood. Pregnancy and childhood are critical times in the life cycle when the vulnerability to environmental contaminants may be enhanced. Likewise, the potential for short- and long-term health effects of exposure to environmental contaminants also may be heightened during these times of rapid development and growth.

The data collected as part of the NHBCS is available to other researchers to support collaborations and ancillary studies. [Learn more](#)

