

THE EXPONENTIAL IMPACT OF NIH FUNDING IN RURAL STATES

# Kentucky

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

FY22

## Economic Impact of NIH Research Funding in Kentucky

**\$241M**

NIH Research Awards

- \$560M** New Economic Activity
- 3,743** Jobs
- \$49M** Tax and Fee Revenue
- \$170M** Statewide Household Earnings

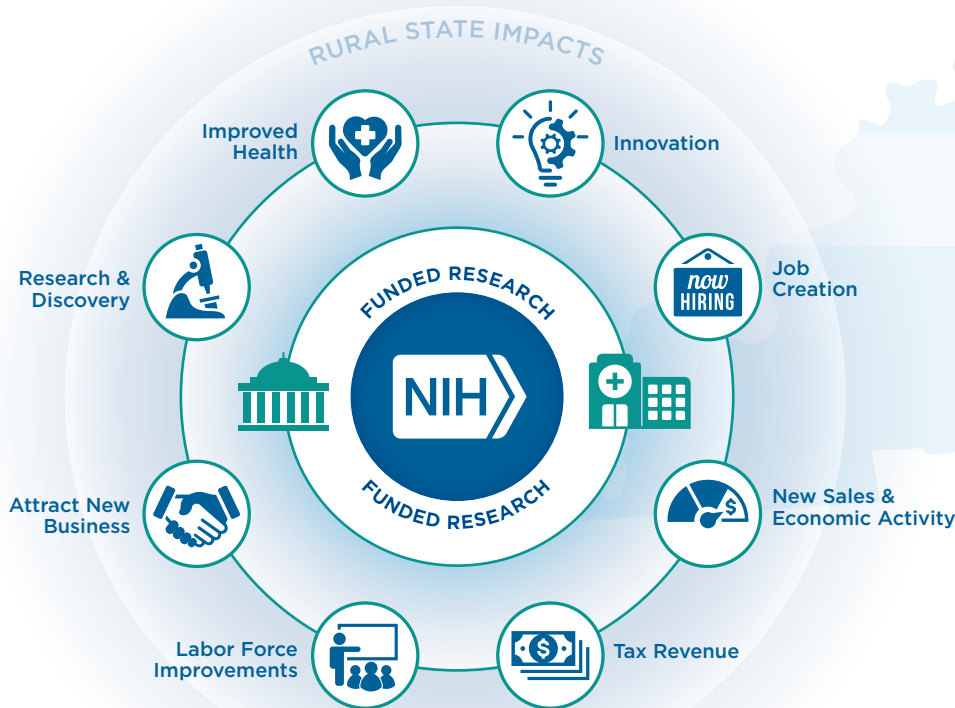
**\$1 NIH Funding = \$2.3 KY Economic Activity**



**23 ORGANIZATIONS IN KENTUCKY RECEIVED A TOTAL OF 467 AWARDS**

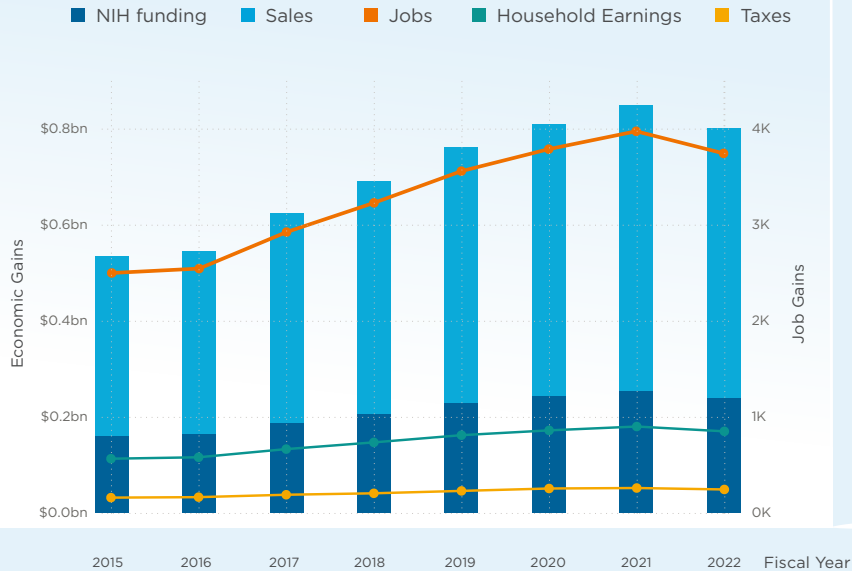
### Top recipients of NIH funding

- ◆ University of Kentucky
- ◆ University of Louisville
- ◆ Enepret, Inc.
- ◆ Naprogenix, Inc.
- ◆ Fetal Life, LLC



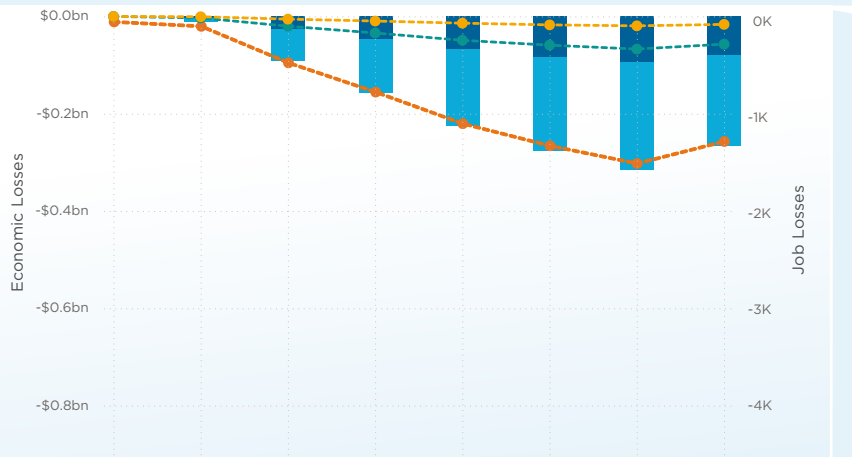


# THE IMPACT OF 7 YEARS OF NIH BUDGET INCREASES ON KENTUCKY



From 2016–2022, Kentucky **BENEFITED** from a total of:

- \$1.529B** NIH Research Awards
- \$3.552B** New Economic Activity (sales)
- 23,757** Jobs
- \$1.080B** Statewide Household Earnings
- \$310M** Tax and Fee Revenue



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

- \$402M** NIH Research Awards
- \$938M** New Economic Activity (sales)
- 6,268** Jobs
- \$289M** Statewide Household Earnings
- \$82M** Tax and Fee Revenue

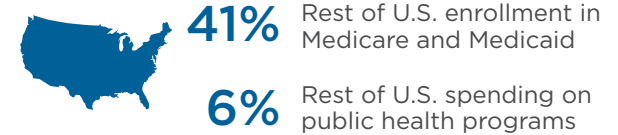
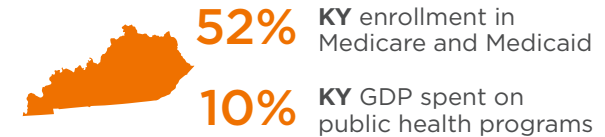
View data tables

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

## Public Health Considerations

### Improving Health

Kentuckians have 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.



### HOW KENTUCKY RANKS COMPARED TO OTHER STATES



#### Life Expectancy

- 5th** lowest life expectancy
- 13th** highest infant mortality

#### Chronic Conditions

- 3rd** for cardiovascular disease
- 10th** for diabetes
- 2nd** for obesity

#### Deaths

- 29th** for Alzheimer's disease
- 3rd** for cancer
- 8th** for heart disease
- 5th** for opioid overdose
- 17th** for suicide



## Boosting the Labor Force

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

Jobs in the R&D sector in Kentucky pay 2X 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 — **45% vs 5%**. These facts, combined with strong pay growth help attract highly skilled workers and businesses to the commonwealth.

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

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
\$114,180	\$56,027	2.0	45	5	37	28

“ I realized down through the years that the way we make progress is through these types of studies,” said Jim, a retired pediatrician who received an Alzheimer’s diagnosis in 2020. “So it’s very important.”

## Biomedical Innovation in Kentucky

### MEET JIM JACKSON

Every two weeks, Jim and Sharon Jackson travel an hour from Morehead to Lexington to help scientists better understand how to treat Alzheimer’s disease.

Jim is a study participant in a clinical trial called **AHEAD**, and the University of Kentucky is one of about 75 study sites around the country.

During regular visits, Jim, 83, gets an infusion in his left arm — in a favorite vein that’s a “pretty easy one to get.” Other times, less frequently, he gets MRIs, PET scans, memory testing. The brain scans are meant to measure the size of the brain and its changes over time. Sharon, 74, goes with him to help answer questions about his mind and note any changes over time.

During their days in Lexington, the couple tries different restaurants, trying never to eat the same place twice. They described their trips for the trial — their first — as a rewarding experience.



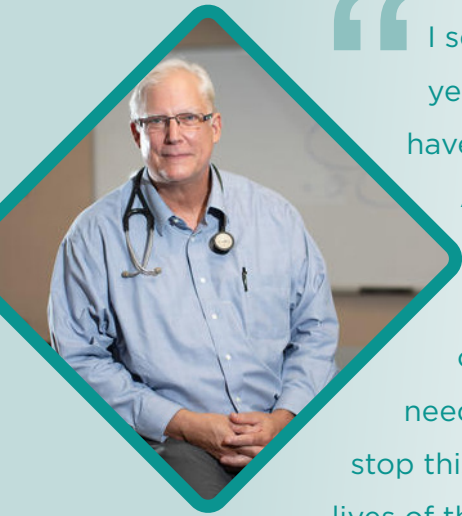


Photo credit:  
Mark Cornelison  
UK Photo.

“ I see hundreds of patients each year that are shocked that they have received the death sentence of Alzheimer’s disease. As of now, there are no cures for this fatal disease that is the sixth-leading cause of death in the U.S. We need to know if we can screen and stop this disease before it destroys the lives of those we love or takes our own lives. The **AHEAD** study is a path forward.”

**GREG JICHA, MD, PhD**

*Director of Clinical Trials at UK’s Sanders-Brown Center on Aging*

## ABOUT THE AHEAD STUDY

**WHAT:** The AHEAD study is the first-ever clinical trial to test the effect of lecanemab in people who have no cognitive symptoms of Alzheimer’s disease, but in whom biomarker tests indicate amyloid is present in the brain, known as “preclinical” Alzheimer’s disease.

Lecanemab, marketed as Leqembi, has been shown to slow the progression of Alzheimer’s and was approved by the U.S. Food and Drug Administration (FDA) in July 2023 for the treatment of Alzheimer’s disease. The AHEAD study will test whether these effects in symptomatic patients are similar to those with preclinical Alzheimer’s disease.

**WHERE:** The University of Kentucky’s Sanders-Brown Center on Aging is one of more than 100 sites worldwide participating in the AHEAD study. The study seeks to enroll 1,165 participants from North America.

**HOW:** The AHEAD study is funded by the NIH and Eisai Inc. It is being conducted by the NIH-funded Alzheimer’s Clinical Trials Consortium (ACTC), a network of leading academic Alzheimer’s research centers.

[Learn more](#)

## THERMO FISHER SCIENTIFIC EXPANDS KENTUCKY OPERATIONS



Thermo Fisher is investing **\$59 million** in the expansion and renovation of its central lab for its PPD clinical research business to

provide increased testing of pharmaceutical products. New jobs created through the project will include PhD-level scientists, analytical laboratory staff and other scientific professionals. Thermo Fisher currently employs approximately 700 people across its two sites in Kentucky. [Learn more](#)

“ Thermo Fisher’s expanding footprint and the accompanying creation of more than 200 total jobs are huge wins for Kentucky.”

*Kentucky Governor Andy Beshear  
announcing the project in October 2022*