

UNIVERSITY OF NORTH CAROLINA RESEARCH AND SPONSORED PROGRAMS REPORT TO THE PRESIDENT Fiscal Year 2024

May 2025

University of North Carolina System

Raleigh, North Carolina

#### **Executive Summary**

The annual Report to the President provides a snapshot of research and sponsored program activity across the University of North Carolina (UNC) System. In fiscal year 2024 (FY 2024) six institutions reported three consecutive years of year-over-year growth, and eleven institutions showed overall growth over the preceding three years. North Carolina State University and UNC-Chapel Hill increased research awards by over \$100 million dollars each during that period, and UNC System institutions combined increased research awards by \$318 million to a total of \$2.184 billion. Growth for all institutions was due to a steady increase in STEM and health research funding. Federal sponsors accounted for the majority of award dollars. Inter-institutional award funding slightly decreased. Awards from the North Carolina state government accounted for the largest amount of non-federal funding. License income increased at very high research doctoral institutions, driving overall UNC System research productivity.

### Introduction

The University of North Carolina System is a public, multi-campus university dedicated to the service of North Carolina and its people. It encompasses 17 diverse constituent institutions and other educational, research, and public service organizations. Each share in the System's mission to discover, create, transmit, and apply knowledge to address the needs of individuals and society. This mission is accomplished through instruction, which imparts the skills necessary for individuals to lead responsible, productive, and personally satisfying lives; through research, scholarship, and creative activities, which advance knowledge and enhance the educational process; and through public service, which contributes to the solution of societal problems and enriches quality of life in the state. In the fulfillment of this mission, the System seeks an efficient use of available resources to ensure high quality service to the citizens of the state.

While instruction is the primary responsibility of the constituent institutions, research and economic development are also essential to the UNC System's work on behalf of North Carolina. In addition to developing new discoveries and innovations, UNC System engagement in research and its related activities supports student success by providing a platform for training graduate students. It also attracts external funding, contributes to North Carolina's business climate and reputation, and enhances recruitment and retention of talented faculty and students.

### Fiscal Year 2024 Sponsored Program Funding for UNC

UNC System institutions generated a total of \$2,240,224,576 in sponsored programs funding in FY 2024 from all sources. Of that amount, inter-institutional awards distributed among UNC System institutions totaled \$56,269,402, decreasing 6% compared to FY2023. After subtracting that award subcategory, the adjusted total for FY 2024 was \$2,183,595,174, overall reflecting consistent growth and averaging 8.5% over the last three years. Federal agency funding increased 3%, accounting for 64% of the award portfolio. Table 1 contains more detailed sponsored program funding data for each UNC System institution in FY 2024.

Proposal submission levels and quality remain strong. In FY 2024, UNC System investigators requested \$9.4B in submitted proposals, a 15% increase over the previous year. The number of proposals awarded decreased from 12,547 to 11,967.

	Total Proposal Amounts	Total Award Amounts (includes ARRA and inter- institutional awards)	Inter-institutional Amounts Dollars	Adjusted Total Award Amounts (minus inter- institutional awards)		
Doctoral Institutions						
ECU	\$ 306,593,135	\$ 83,818,837	\$ 7,223,073	\$ 76,595,764		
NCA&T	\$256,592,139	\$97,451,804	\$97,451,804 \$3,716,494			
NCSU	\$2,499,374,867	\$517,044,494	\$13,297,253	\$503,747,241		
UNC-CH	\$ 5,143,504,261	\$1,211,776,055	\$ 9,542,351	\$1,202,233,704		
UNCC	\$ 372,862,401	\$57,059,431	\$ 3,769,614	\$ 53,289,817		
UNCG	\$188,664,032	\$ 65,220,903	\$ 2,106,053	\$63,114,850		
UNCW	\$ 124,540,151	\$ 31,819,884	\$ 1,302,870	\$ 30,517,014		
Master's Institutions						
ASU	\$ 178,254,829	\$25,788,773	\$2,748,517	\$ 23,040,256		
ECSU	\$2,444,243	\$13,003,056	\$273,357	\$12,729,699		
FSU	\$ 51,318,138	\$25,865,402	\$5,769,640	\$20,095,762		
NCCU	\$90,899,706	\$42,170,193	\$1,761,576	\$40,408,617		
UNCP	\$ 22,801,923	\$10,671,105	\$751,481	\$ 9,919,624		
WCU	\$27,071,768	\$6,917,233	\$467,400	\$6,449,832		
WSSU	\$ 98,474,759	\$ 26,536,901	\$375,530	\$26,161,371		
Baccalaureate Institutions						
UNCA	\$ 20,733,099	\$ 4,736,120	\$664,092	\$ 4,072,028		
Special Focus Institutions						
UNCSA	\$426,705	\$ 358,455	\$100,000	\$ 258,455		
NCSSM	\$ 1,386,972	\$ 229,265	-	\$ 229,265		
System Office						
UNCSO	\$18,923,842	\$ 19,756,664	\$ 2,400,100	\$17,356,564		
<u>Totals</u>	\$9,434,004,545	\$2,240,224,576	\$56,269,403	\$2,183,955,174		

Table 1. FY2024 Sponsored Program Activity<sup>1-2-3</sup>

<sup>1</sup> UNC fiscal year runs July 1 through June 30.

<sup>2</sup> Not all current fiscal year proposal submissions are awarded and receive funding in the same fiscal year. This can result in an institution reporting proposal dollars which exceed award dollars. Additionally, FY Total Proposed Dollars data include some non-competing renewal proposals (primarily associated with NIH funding).

<sup>3</sup> Research reporting excludes inter-institutional awards or federal formula funding for institutional support. Award totals included research and development on COVID-19. Due to sponsor coding discrepancies, federal and non-federal awards may not equal award totals.

## **Trends in Sponsored Program Activity**

Sponsored programs are research that receives funding from an external source or "sponsor." From FY 2022 to FY 2024, UNC System sponsored programs activity remained strong. Table 2 shows an 8.5% average year-to-year increase in sponsored program awards. Some highlights include UNC-Chapel Hill receiving an award for \$4M from the US Department of Health and Human Services Food and Drug Administration (FDA) to research opioid harm reduction within community pharmacies. The long-term goal is to help further inform how pharmacies can sustainably deliver opioid harm reduction in vulnerable populations by creating, refining, piloting, and scaling opioid harm reduction. Appalachian State University received \$742,643 from the USDA National Institute of Food and Agriculture (NIFA) to conduct research on soil carbon and forage production and the effects on plant growth. N.C. State University received \$400M from the USDA Agricultural Research Service (ARS) to study plant biotechnologies and applications offering tremendous potential for crop improvement to address these critical needs of the U.S. nursery/floriculture industries.

	FY2022	FY2023	FY2024	FY2022-2024 Amount Change	FY2022- 2024 Percent Change	Avg Year to Year Change	
	Doctoral Institutions						
UNC-CH	\$1,060,287,643	\$1,159,418,061	\$1,202,233,704	\$141,946,061	13.4%	6.5%	
NCSU	\$399,438,224	\$465,590,722	\$503,747,241	\$104,309,017	26.1%	12.4%	
ECU	\$77,414,107	\$77,492,142	\$76,595,764	\$(818,343)	-1.1%	5%	
NC A&T	\$92,154,640	\$143,824,281	\$93,735,310	\$1,580,670	1.7%	10.6 %	
UNCC	\$53,128,975	\$66,336,779	\$53,289,817	\$160,842	0.3%	2.6%	
UNCG	\$49,744,437	\$63,412,599	\$63,114,851	\$13,370,413	26.9%	13.5%	
UNCW	\$14,653,844	\$23,680,508	\$30,517,014	15,863,170	108.3%	45.2%	
	Master's Institutions						
ASU	\$16,270,179	\$19,249,042	\$23,040,256	\$6,770,077	41.6%	19.0%	
FSU	\$14,998,075	\$26,946,344	\$ 20,095,762	\$5,097,687	34.0%	27.1%	
NCCU	\$25,847,957	\$43,179,988	\$40,408,617	\$14,560,660	56.3%	30.3%	
UNCP	\$8,157,408	\$11,000,975	\$ 9,919,624	\$1,762,216	21.6%	12.5%	
WCU	\$6,582,493	\$6,279,502	\$ 6,449,832	\$(132,661)	-2.0%	-0.9%	
WSSU	\$17,021,584	\$17,918,299	\$ 26,161,371	\$9,139,787	53.7%	25.6%	
ECSU	\$9,361,906	\$15,011,871	\$12,729,699	3,367,793	36.0%	22.6%	
	Baccalaureate Institutions						
UNCA	\$5,168,643	\$3,284,166	\$4,072,028	\$(1,096,615)	-21.2%	-6.2%	
Special Focus Institutions							
NCSSM	\$651,000	\$166,000	\$229,265	\$(421,735)	-64.8%	-18.2%	
UNCSA	\$457,700	\$441,254	\$258,455	\$(199,245)	-43.5%	-22.5%	
System Office							
UNCSO	\$14,138,911	\$30,000,914	\$17,356,564	\$3,217,653	22.8%	35.0%	
UNC Total	\$1,865,477,72	\$2,172,483,995	\$2,183,595,174	318,117,449	17.1%	8.5%	

<sup>4</sup>UNCP FY2023 award totals were adjusted due to data reporting errors.

# Fiscal Year 2024 Sponsors

As outlined in Table 3, the UNC System competes successfully for federal government sponsored awards. For the last seven years, the National Institutes of Health (NIH) has awarded the largest amount of support overall and consistently increased award amounts annually. The National Science Foundation (NSF) continues to provide strong support for STEM research and sponsored programs in North Carolina making it the System's second largest federal sponsor and averaging 11% of total federal awards since FY2020.

		Total Federal
United States Federal Government	Award Amount	Awards
National Institutes of Health (NIH)	\$614,406,489.26	43.87%
National Science Foundation (NSF)	\$152,663,062.42	10.88%
Department of Health and Human Services (DHHS)	\$149,077,932.03	10.27%
US Department of Education (ED)	\$130,883,234.01	9.26%
US Department of Agriculture (USDA)	\$104,599,359.10	4.40%
Department of Defense (DOD)	\$67,904,492.46	6.40%
Department of Energy (DOE)	\$45,762,922.56	3.06%
Agency for International Development (USAID)	\$19,772,924.10	<1%
Department of Commerce (DOC)	\$13,702,880.21	<1%
National Aeronautics and Space Administration (NASA)	\$11,068,447.32	<1%
United States Environmental Protection Agency (EPA)	\$10,448,283.71	<1%
All Other Federal Agencies	\$10,295,762.61	<1%
US Department of the Interior (DOI)	\$10,040,182.73	<1%
Department of Homeland Security (DHS)	\$8,264,051.73	<1%
US Department of Transportation (DOT)	\$3,774,561.52	<1%
Department of Housing and Urban Development (HUD)	\$2,500,000.00	<1%
US Department of Justice (DOJ)	\$2,050,000.00	<1%
Corporation for National and Community Service (CNCS)	\$1,846,813.00	<1%
National Foundation for the Arts and Humanities (NFAH)	\$983,684.23	<1%
US Department of State (DOS)	\$598,543.61	<1%
President of the United States	\$339,763.60	<1%
US Department of Veterans Affairs (VA)	\$77,718.99	<1%
Smithsonian Institution (SI)	\$54,017.26	<1%
Council for International Exchange of Scholars	\$35,740.00	<1%
Native Village of Kotzebue	\$19,340.00	<1%
Total Federal Awards	\$1,361,170,206.46	100%

Table 3. FY2024 Federal Government Sponsored Awards<sup>5</sup>

<sup>5</sup> Unadjusted for institutional awards to capture full scope of inter-institutional collaboration.

The distribution of non-federal sponsored programs funding is outlined in Table 4. The North Carolina state government exceeded educational and research institutions in providing the largest amount of non-federal dollars to UNC System researchers. Together both sponsor types constituted nearly half of all non-federal sponsorship.

Awards from educational and research institutions decreased noticeably from a high of \$286M in FY2023, to their lowest level since FY2019 (\$147M). FY2024 funding from this sponsor type includes UNC System institutions (21%), other North Carolina (24%) and US institutions (45%), and international institutions (10%). Overall, the percentage of non-federal government awards increased approximately 3% from FY2023.

Non-Federal Government Awards by Sponsor Type	Dollar Award Amount	Percent of Non-Federal Awards
Educational and Research Institutions	\$242,425,817	28%
State Government (NC)	\$212,997,622	20%
Business and Industry	\$178,426,694	19%
Nonprofit Organization	\$112,637,371	15%
Foundation	\$91,565,099	12%
Association	\$19,903,953	3%
Local Government	\$10,714,712	1%
State Government (non-NC)	\$7,096,188	1%
Other Sponsors	\$1,599,120	<1%
Federal (non-US)	\$1,657,794	<1%
Total Awards	\$879,024,370	100%

Table 4. FY2024 Non-Federal Government Sponsored Awards<sup>6</sup>

<sup>6</sup> Unadjusted for institutional awards to capture full scope of inter-institutional collaboration.

### Fiscal Year 2024 Commercial Activity

The commercial activity in this report uses the six metrics tracked by the Association of University Technology Managers (AUTM), through its Annual Licensing Survey. While only a subset of UNC System institutions participated in the annual AUTM survey, all doctoral institutions reported on the six metrics.

Table 5 summarizes FY 2024 UNC System commercial activity (invention disclosures, U.S. patents issued, licenses or options executed, new start-up companies, and license income). In FY 2024, there were a total of 443 invention disclosures, 119 patents issued, 264 licenses or options executed, 36 start-ups created, and \$15.5M in license income generated.

### Table 5. Commercialization in FY2024

	Invention Disclosures	US Patents Issued	Licenses or Options Executed	Start-ups	License Income	
Doctoral Institutions						
ECU	61	1	20	6	\$106,877	
NCA&T	3	2	10	0	\$0	
NCSU	214	60	154	15	\$7,300,000	
UNCCH	131	46	54	8	\$7,800,000	
UNCC	36	6	5	3	\$163,949	
UNCG	7	1	4	3	\$23,798	
UNCP	1	0	0	0	\$0	
UNCW	10	2	17	0	\$137,980	
Master's Institutions						
WSSU	0	1	0	1	\$0	

License income at UNC System very high research doctoral institutions, the University of North Carolina at Chapel Hill and North Carolina State University, increased year by year. North Carolina State University saw growth across all commercialization metrics.

UNC system institutions possess a wide array of existing and emerging strengths in research and related commercial activities. In FY 2024, the state of North Carolina took a strategic step toward accelerating commercialization at UNC system universities. NC Innovation is a \$250M state-funded non-profit established in 2023, with the stated purpose of bridging the gap in research and development resources by providing "grant funding and support services to public university applied researchers working on discoveries that have commercial promise." (https://ncinnovation.org/about/)