



THE UNIVERSITY OF NORTH CAROLINA SYSTEM

UNIVERSITY OF NORTH CAROLINA
RESEARCH AND SPONSORED PROGRAMS

REPORT TO THE PRESIDENT
Fiscal Year 2023

April 2024

University of North Carolina System
Raleigh, North Carolina

Executive Summary

The annual Report to the President provides a snapshot of sponsored program activity across the University of North Carolina System. For fiscal year 2023 (FY 2023), the total award dollars increased despite the significant decrease in funding for COVID-19 research. Increases were due in part to strong collaboration between UNC System institutions which led to growth in inter-institutional award funding. Federal sponsors accounted for the majority of award the funding even as the types of non-federal sponsors and dollar amounts continue to expand. Awards from educational and research institutions accounted for the largest amount of non-federal funding. Commercialization activity increased at emerging research institutions.

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 shall seek 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 2023 Sponsored Program Funding for UNC

UNC System institutions generated a total of \$2.2B in sponsored programs funding in FY 2023 from all sources. Of that amount, inter-institutional awards distributed among UNC System institutions totaled \$59,877,668 reflecting strong research collaboration. After subtracting that award subcategory, the adjusted total for FY 2023 was \$2,172,483,995. This total indicates growth in non-federal sponsored programs funding. Federal agency funding decreased 5% accounting for 61% of the award portfolio. Table 1 contains more detailed sponsored program funding data for each UNC System institution in FY 2023.

Table 1. FY2023 Sponsored Program Activity¹⁻²⁻³

	Total Proposal Amount	Total Award Amount (includes inter-institutional awards)	Inter-institutional Award Amount	Adjusted Total Award Amount (minus inter-institutional awards)
Doctoral Institutions				
ECU	\$275,759,562	\$85,558,616	\$8,066,473	\$77,492,142
NCA&T	\$509,417,308	\$147,367,906	\$3,543,625	\$143,824,281
NCSU	\$1,573,653,177	\$475,790,224	\$10,199,502	\$465,590,722
UNC-CH	\$4,679,314,403	\$1,166,257,775	\$6,839,714	\$1,159,418,061
UNCC	\$312,588,506	\$73,243,896	\$6,907,118	\$66,336,779
UNCG	\$177,954,438	\$67,032,017	\$3,619,418	\$63,412,599
UNCW	\$97,525,530	\$25,259,786	\$1,579,278	\$23,680,508
Master's Institutions				
ASU	\$52,070,646	\$22,359,349	\$3,110,307	\$19,249,042
ECSU	\$37,806,718	\$16,446,664	\$1,434,793	\$15,011,871
FSU	\$20,628,527	\$28,765,343	\$1,818,999	\$26,946,344
NCCU	\$100,666,154	\$48,463,900	\$5,283,912	\$43,179,988
UNCP	\$34,356,399	\$12,128,367	\$1,876,844	\$10,251,523
WCU	\$23,408,914	\$7,562,670	\$1,283,168	\$6,279,502
WSSU	\$128,462,825	\$19,977,322	\$2,059,023	\$17,918,299
Baccalaureate Institutions				
UNCA	\$13,043,896	\$4,204,626	\$920,460	\$3,284,166
Special Focus Institutions				
UNCSA	\$441,254	\$441,254	-	\$441,254
NCSSM	\$504,361	\$580,574	\$414,574	\$166,000
System Office				
UNCSO	\$42,743,503	\$30,921,374	\$920,460	\$30,000,914
Totals	\$8,080,346,121	\$2,232,361,663	\$59,877,668	\$2,172,483,995

¹UNC fiscal year runs July 1 through June 30.

² Not all current fiscal year proposal submissions are funded 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).

³ When reporting research dollars, inter-institutional awards, or federal formula funding for institutional support are excluded (funding for research and development on COVID is included). Due to sponsor coding discrepancies, federal and non-federal awards may not equal award totals.

Trends in Sponsored Program Activity

From FY 2021 to FY 2023, UNC System sponsored programs activity remained strong. Despite the continued decline of pandemic-related research funding, Table 2 shows an 11% average year-to-year increase in sponsored program awards. Sustained growth in acquiring federal funding allows UNC

System institutions to make targeted use of facilities and administrative (F&A) receipts to help cover the costs of supporting the research enterprise. UNC System institutions utilize F&A receipts to maintain and upgrade research infrastructure; to invest in new research through matching funds to provide seed grants and “start-up” packages for new faculty; to support library holdings; to provide cost share funding needed to attract new research projects and jobs to the state; and to ensure compliance with federal and other regulations.

Table 2. FY2021-2023 Sponsored Program Activity

	FY2021	FY2022	FY2023	FY2021-2023 \$ Change	FY2021- 2023 % Change	Avg Year to Year Change
Doctoral Institutions						
UNC-CH	\$1,027,683,071	\$1,192,206,400	\$1,159,418,061	\$131,734,990	13%	7%
NCSU	\$375,652,139	\$399,438,224	\$465,590,722	\$89,938,538	24%	11%
ECU	\$70,774,441	\$77,414,107	\$77,492,142	\$6,717,701	9%	5%
NC A&T	\$74,816,811	\$92,154,640	\$143,824,281	\$69,007,470	92%	40%
UNCC	\$54,965,020	\$53,128,975	\$66,336,779	\$11,371,759	21%	11%
UNCG	\$45,247,353	\$49,744,437	\$63,412,599	\$18,165,246	40%	19%
UNCW	\$12,064,147	\$14,653,844	\$23,680,508	\$11,616,361	96%	42%
Master's Institutions						
ASU	\$35,264,404	\$16,270,179	\$19,249,042	\$(16,015,362)	-45%	-18%
FSU	\$12,711,202	\$14,998,075	\$26,946,344	\$14,235,142	112%	49%
NCCU	\$24,005,788	\$25,847,957	\$43,179,988	\$19,174,200	80%	37%
UNCP	\$7,337,333	\$8,157,408	\$10,251,523	\$2,914,190	40%	18%
WCU	\$6,075,384	\$6,582,493	\$6,279,502	\$204,118	3%	2%
WSSU	\$9,089,904	\$17,021,584	\$17,918,299	\$8,828,395	97%	46%
ECSU	\$8,433,098	\$9,361,906	\$15,011,871	\$6,578,773	78%	36%
Baccalaureate Institutions						
UNCA	\$4,564,845	\$5,168,643	\$3,284,166	\$(1,280,679)	-28%	-12%
Special Focus Institutions						
NCSSM	\$2,180,000	\$651,000	\$166,000	\$(2,014,000)	-92%	-72%
UNCSA	\$117,000	\$457,700	\$441,254	\$324,254	277%	144%
System Office						
UNC SO	\$10,334,059	\$14,138,911	\$30,000,914	\$19,666,855	190%	75%
UNC Total	\$1,713,083,231	\$1,865,477,725	\$2,172,483,995	\$391,167,996	27%	13%

Proposal Submissions and Quality

In FY 2023, UNC System investigators requested \$8.08B in submitted proposals. The number of awarded proposals increased from 972 to 11,913. In FY 2023, national and international collaborations with other educational and research institutions generated 2,910 high quality funded proposals.

Fiscal Year 2023 Sponsors

As outlined in Table 3, the majority of the UNC System’s research portfolio is composed of federal government sponsored awards.

Table 3. FY2023 Federal Government Sponsored Awards⁴

United States Federal Government Agency Awards	Award Amount	Percent of Total Federal Awards
National Institutes of Health (NIH)	\$571,045,575	43.14%
National Science Foundation (NSF)	\$143,920,286	10.86%
Department of Health and Human Services (DHHS)	\$133,362,474	8.48%
US Department of Education (ED)	\$126,900,961	9.45%
US Department of Agriculture (USDA)	\$94,388,025	2.00%
Department of Defense (DOD)	\$66,491,147	2.06%
Department of Commerce (DOC)	\$56,379,264	3.99%
Department of Energy (DOE)	\$39,589,277	2.99%
Agency for International Development (USAID)	\$22,857,498	1.73%
National Aeronautics and Space Administration (NASA)	\$11,017,523	<1%
United States Environmental Protection Agency (EPA)	\$10,751,394	<1%
US Department of the Interior (DOI)	\$9,982,146	<1%
Department of Homeland Security (DHS)	\$8,616,219	<1%
All Other Federal Agencies	\$7,679,954	<1%
US Department of Transportation (DOT)	\$6,551,568	<1%
US Department of Justice (DOJ)	\$4,773,354	<1%
DOE National Laboratories	\$1,699,295	<1%
Corporation for National and Community Service (CNCS)	\$1,152,466	<1%
US Department of State (DOS)	\$1,072,949	<1%
Total Awards from Federal Government	\$1,323,806,185	100.00%

⁴Unadjusted for institutional awards to capture full scope of inter-institutional collaboration.

The distribution of non-federal sponsored programs funding is outlined in Table 4. Educational and research institutions, North Carolina state government, and foundations provided the largest amount of non-federal dollars to UNC System researchers. Sponsored program awards from educational and research institutions grew by nearly \$100,000,000. Overall, the percentage of non-federal government

awards increased to 39%, up from 33% in FY 2022, showing institutions are competing successfully for a broader range of funding sources.

Table 4. FY2023 Non-Federal Government Sponsored Award⁵

Non-Federal Government Awards by Sponsor Type	Award Amount	Percent of Total Awards
Educational and Research Institutions	\$286,499,566	34%
State Government (NC)	\$224,016,600	26%
Foundation	\$115,647,737	14%
Nonprofit Organization	\$97,794,574	12%
Business and Industry	\$90,832,712	11%
Association	\$15,562,661	2%
Local Government	\$13,756,842	2%
State Government (non-NC)	\$3,708,863	<1%
Federal (non-US)	\$396,179	<1%
Other Sponsors	\$185,502	<1%
Total Non-Federal Awards	\$848,401,236	100%

⁵Unadjusted for institutional awards to capture full scope of inter-institutional collaboration.

Fiscal Year 2023 Commercial Activity

UNC System institutions possess a wide array of existing and emerging strengths in research and related commercial activities. Institutional investments supporting these activities include strategic faculty hiring, sponsored awards, and entrepreneurship programs. In addition, institutions seek to maximize research and commercial activity with existing resources.

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 participate in the annual AUTM survey, all doctoral institutions reported on the six metrics.

Table 5 summarizes FY 2023 UNC System commercial activity (invention disclosures, U.S. patents issued, licenses or options executed, new start-up companies, and license income). In FY 2023, there were a total of 437 invention disclosures, 103 patents issued, 234 licenses or options executed, 29 start-ups created, and \$13.9M in license income generated.

Data from FY 2023 showed overall consistent commercialization activity. For the third year in a row, all doctoral institutions recorded invention disclosures and license income. Emerging research institutions made some of the largest gains in commercialization activity in FY 2023. UNC Wilmington increased license income by 248% year-over-year and East Carolina University more than doubled the number of licenses or options executed in the previous year.

Table 5. Commercialization in FY2023

	Invention Disclosures	US Patents Issued	Licenses or Options Executed	Start-ups	License Income
Doctoral Institutions					
ECU	51	8	19	2	\$100,429
NCA&T	6	3	0	0	\$5,000
NCSU	190	44	141	14	\$5,600,000
UNCCH	144	44	61	6	\$7,697,663
UNCC	33	4	6	4	\$262,561
UNCG	3	0	0	3	\$22,147
UNCW	8	0	7	0	\$233,543
Master's Institutions					
ASU	2	0	0	0	0