

# **FY2014**

## **University of North Carolina**

### **Research and Sponsored Programs**

#### **Report to the President**

Friends of the University of North Carolina,

April 9, 2015

Once again, the University can take pride in an excellent year for research and sponsored programs. This annual report provides a brief snapshot the activity for FY14. Despite a challenging funding landscape, our institutions remained competitive for external support.

In total, UNC institutions reported \$1,368,018,636 in new awards in FY14. When adjusted to take into account subawards made between UNC institutions, the FY14 total was \$1,343,424,603 (page three). This represents a 9% increase over FY13 and a 34% increase over FY05 (page four). This is impressive considering that AAAS reports the amount of federal support for basic research, which accounts for the bulk of external awards, increased by 7% between FY13 and FY14 and 17% between FY05 and FY14.

Faculty, staff, students, and administrators work diligently to make this happen. As one measure of this, page five shows that the number of proposals submitted in FY 14 is the largest to date. Page six follows with an overview of the organizations that sponsor these activities across the University.

Data on select commercial indicators and activities spawned from UNC research are found on page seven from the Association of University Technology Managers Annual US Licensing Survey and institutional self-reports. The link between the University's success in research and sponsored programs and our potential for commercialization and economic impact is clear. Both sets of activities must be cultivated to keep our state and nation innovating and prospering.

I invite you to review the full report and contact me or the Research and Graduate Education Office with any questions.

Sincerely,



Christopher S. Brown  
Vice President for Research and Graduate Education

# FY14<sup>1</sup> Sponsored Program Funding for UNC

	FY14 Total Proposed <sup>2</sup>	FY14 Total Awarded <sup>3</sup>	FY14 All Inter-institutional Awarded	FY14 Adjusted Total Awarded (minus Inter-institutional awards)
<b>Doctoral Granting Institutions</b>				
ECU	\$ 179,048,417	\$ 43,023,785	\$ 6,284,340	\$ 36,739,444
NCA&TSU	\$ 192,574,407	\$ 52,751,117	\$ 1,112,039	\$ 51,640,078
NCSU	\$ 1,178,400,547	\$ 308,281,590	\$ 4,778,127	\$ 303,503,463
UNCCH	\$ 2,938,747,041	\$ 792,729,006	\$ 3,499,184	\$ 789,229,823
UNCC	\$ 230,712,469	\$ 36,145,048	\$ 2,338,418	\$ 33,886,599
UNCG	\$ 116,811,879	\$ 30,787,417	\$ 2,123,785	\$ 28,663,631
<b>Masters Institutions</b>				
ASU	\$ 28,004,842	\$ 11,360,016	\$ 1,008,068	\$ 10,351,947
FSU	\$ 44,411,182	\$ 11,482,007	\$ 418,803	\$ 11,063,204
NCCU	\$ 85,389,991	\$ 21,399,162	\$ 646,220	\$ 20,752,942
UNCP	\$ 21,306,393	\$ 5,361,559	\$ 522,425	\$ 4,839,134
UNCW	\$ 93,148,532	\$ 6,622,549	\$ 826,072	\$ 5,796,477
WCU	\$ 18,651,781	\$ 5,547,962	\$ 397,065	\$ 5,150,897
WSSU	\$ 20,912,714	\$ 8,557,802	\$ 134,339	\$ 8,423,464
<b>Baccalaureate Institutions</b>				
ECSU	\$ 14,658,641	\$ 11,512,545	\$ 243,986	\$ 11,268,559
UNCA	\$ 8,526,576	\$ 1,172,289	\$ 226,162	\$ 946,127
<b>Special Focus Institutions</b>				
NCSSM	\$ 1,210,187	\$ 201,884	\$ 35,000	\$ 166,884
UNCSA	\$ 244,921	\$ 37,421	\$ -	\$ 37,421
<b>System Office</b>				
UNC GA	\$ 14,032,931	\$ 21,044,480	\$ -	\$ 21,044,480
<b>TOTALS</b>	<b>\$ 5,186,793,451</b>	<b>\$ 1,368,018,636</b>	<b>\$ 24,594,033</b>	<b>\$ 1,343,423,603</b>

At \$1.34 billion, the adjusted total showed a 9% increase in adjusted total from the previous fiscal year. Adjusted award dollars exclude any subawards made between UNC institutions.

Adjusted annual totals increased in FY14 for twelve institutions (ECU, NCA&T, NCSU, UNC-CH, UNCC, ASU, NCCU, UNCP, WCU, ECSU, NCSSM, and UNCSA) and UNC General Administration.

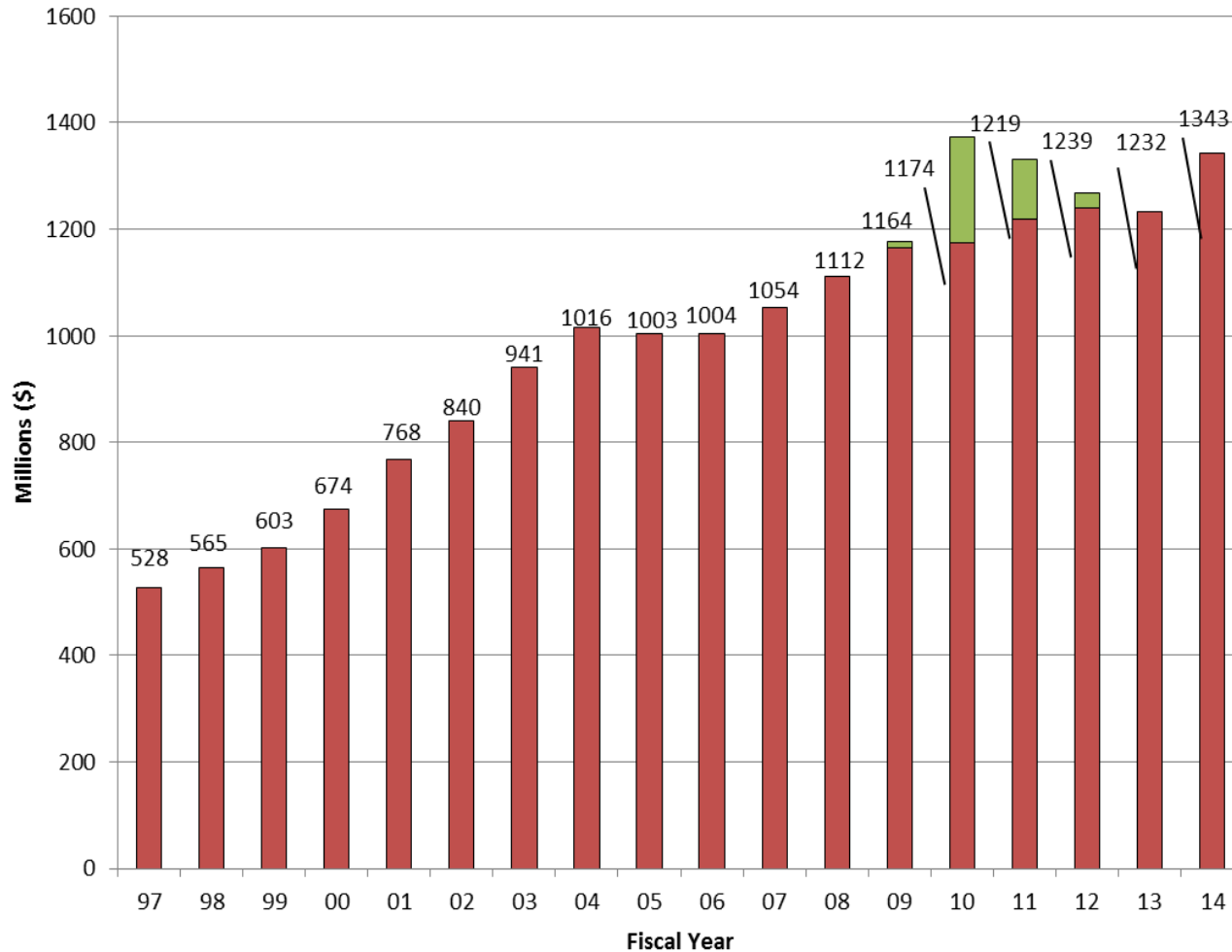
Sponsored award dollars grew in several different sectors in FY14 (see p. 6). Federal dollars were up 8%, and industry sponsored programs rose by 21%. UNC institutions also saw increased sponsored program dollars from local government, education and research organizations, state government, and non-profit sectors.

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

<sup>2</sup> Not all current fiscal year submissions are funded in the same fiscal year. Additionally, FY Total Proposed Dollars includes some non-competing renewal proposals (primarily associated with NIH funding).

<sup>3</sup> Some current fiscal year awards are prior fiscal year submissions.

# Trends in Sponsored Program Awards, FY97-FY14



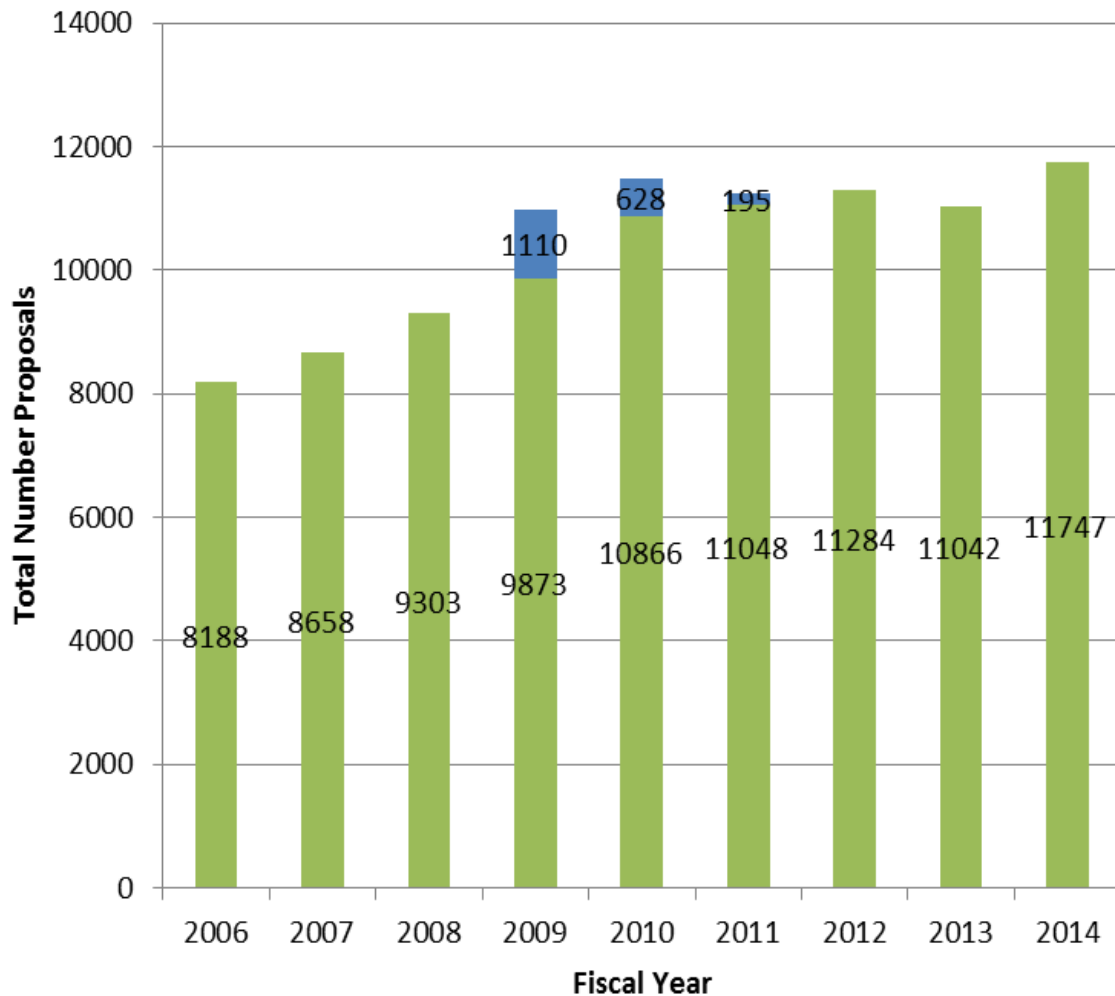
In the last 17 years, UNC sponsored program activity has more than doubled, even without the recent boost from the American Recovery and Reinvestment Act (ARRA or “stimulus,” shown in green). A significant factor in this sustained growth is the wise use of facilities and administrative (F&A) receipts to help institutions cover the costs of supporting the research enterprise. UNC institutions utilize F&A receipts to, among other things, maintain and expand research infrastructure; invest in new research through matching funds, seed grants and “start up” packages for new faculty; support library holdings; and ensure compliance with federal and other regulations.

■ ARRA (shown for years exceeding 1% of total award dollars)

■ Annual Awards

*Note: To avoid double-counting, inter-institutional subagreements are not included in Annual Awards.*

# Trends in Proposal Submissions

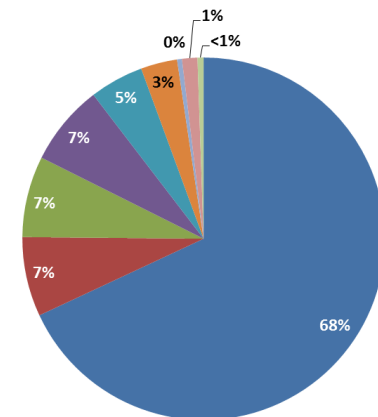


In FY14, the number of proposals submitted exceeded the previous year as well as the high water mark seen during the American Recovery and Reinvestment Act (“stimulus”) period. The growth in proposal submissions over nearly a decade underscores the important contributions made by campus research faculty, administrators and staff.

- ARRA proposals (shown for years exceeding 1% of total proposals submitted)
- Annual proposals

*Note: Inter-institutional subagreements require staff effort and are included in Annual Proposals.*

United States Federal Government		Foundations	
National Aeronautics and Space Administration	\$5,151,264	NC Foundations	\$ 16,758,017
National Foundation on the Arts and Humanities	\$582,804	All other foundations	\$ 47,808,304
National Science Foundation	\$121,609,593	<b>Total Awards from Foundations</b>	<b>\$ 64,566,321</b>
Small Business Administration	\$3,478,242		
U. S. Department of Agriculture	\$43,958,105	Commerce (Business and Industry)	
U. S. Department of Commerce	\$11,281,477	NC Business and Industry	\$ 21,750,965
U. S. Department of Defense	\$37,636,451	All other business and industry	\$ 75,432,722
U. S. Department of Education	\$80,115,699	<b>Total Awards from Commerce (Business and Industry)</b>	<b>\$ 97,183,687</b>
U. S. Department of Energy	\$21,735,947		
U. S. Department of Health and Human Services (Non-NIH)	\$45,628,380	Associations	
U. S. DHHS National Institutes of Health	\$465,939,845	NC Associations	\$ 1,972,757
U. S. Department of Homeland Security	\$9,929,064	All other associations	\$ 16,416,651
U. S. Department of Housing and Urban Development	\$825,054	<b>Total Awards from Associations</b>	<b>\$ 18,389,409</b>
U. S. Department of the Interior	\$4,897,002		
U. S. Department of Justice	\$1,176,473	Educational/Research Institutions	
U.S. Department of Labor	\$1,566,788	NC Institutions	\$ 37,371,274
U. S. Department of State	\$3,091,631	All other institutions	\$ 82,523,636
U. S. Department of Transportation	\$4,697,798	<b>Total Awards from Educational/Research Institutions</b>	<b>\$ 119,894,909</b>
U. S. Department of Veterans Affairs	\$193,676		
U. S. Environmental Protection Agency	\$7,427,416	Not-for-Profit Organizations	
U. S. International Development Cooperation Agency	\$21,716,285	NC Not-for-profit organizations	\$ 18,461,528
Corporation for National and Community Service	\$1,193,190	All other not-for-profit organizations	\$ 25,223,949
All Other Federal Agencies	\$11,511,545	<b>Total Awards from Not-for-Profit Organizations</b>	<b>\$ 43,685,477</b>
Confidential (NCSU only)	\$8,852,551		
<b>Total Awards from Federal Government</b>	<b>\$914,196,281</b>	Other Sponsors	
		Other NC sponsors	\$ 304,354
		All other US sponsors	\$ 1,983,933
		Foreign Sponsors	\$ 426,149
		All other/uncodable	\$ 4,571,328
		<b>Total Awards from Other Sponsors</b>	<b>\$ 7,285,764</b>
State Government		UNC TOTAL	
State of North Carolina	\$ 95,919,942		<b>\$ 1,368,017,636</b>
All other states	\$ 1,038,883	Interinstitutional Subagreements	\$ 24,594,033
<b>Total Awards from State Government</b>	<b>\$ 96,958,824</b>	<b>Adjusted Total</b>	<b>\$ 1,343,423,603</b>
Local Government			
NC Local Government	\$ 5,604,320		
All other local government	\$ 252,646		
<b>Total Awards from Local Government</b>	<b>\$ 5,856,965</b>		



- Federal (68%)
- Non-UNC Edu/Res Orgs (7%)
- Industry (7%)
- State (7%)
- Foundations (5%)
- Not-for-Profits (3%)
- Associations (1%)
- Local (<1%)
- Other (1%)

## FY14 Commercial Activity

	Invention Disclosures	US Patents Issued	Licenses or Options Executed	Start-ups	License Income
<b>Doctoral Granting Institutions</b>					
<b>ECU</b>	6	4	4	1	\$ 134,910.00
<b>NCA&amp;TSU</b>	6	2	1	1	\$ 2,000.00
<b>NCSU</b>	258	40	145	10	\$ 7,528,096.05
<b>UNCCH</b>	156	36	44	10	\$ 7,900,000.00
<b>UNCC</b>	26	11	10	4	\$ 236,002.00
<b>UNCG</b>	11	1	5	1	\$ 75,617.37
<b>All other Institutions (FSU/NCCU/UNCW)</b>					
	4	3	3	4	\$ 51,271.18

	Invention Disclosures	US Patents Issued	Licenses or Options Executed	Start-ups	License Income
<b>FY14 Totals</b>	467	97	212	31	\$ 15,927,896.60
<b>FY13 Totals</b>	449	85	197	30	\$ 10,735,866.79
<b>FY12 Totals</b>	532	91	149	17	\$ 8,977,264.00

UNC institutions possess a wide array of existing and emerging strengths in research and related commercial activities. Some institutions are developing inputs and activities (e.g. strategic faculty hires, sponsored awards, entrepreneurship programs) while others are focused on realizing greater outputs, outcomes or impacts from the assets already in place.<sup>1</sup>

Invention disclosures are one output and a first step in a pathway towards the realization of commercial applications from university discoveries. Outcomes can include, but are not limited to, patents issued, licenses and start-ups. Income from licensing university-generated technologies is another output that has increased steadily over the past three years.

The Association of University Technology Managers (AUTM) Annual Licensing Survey is a leading source of information on university commercial activity and indicators of potential in this area. With occasional exception, UNC's doctoral granting institutions report their activities in the annual AUTM survey. Data from all other institutions are self-reported.

<sup>1</sup> See *UNC Innovation Development and Transfer Initiative: Phase 1 Report*, February 4, 2011, at [http://old.northcarolina.edu/research/initiatives/tech\\_transfer/FINAL\\_Phase1\\_Report.pdf](http://old.northcarolina.edu/research/initiatives/tech_transfer/FINAL_Phase1_Report.pdf)