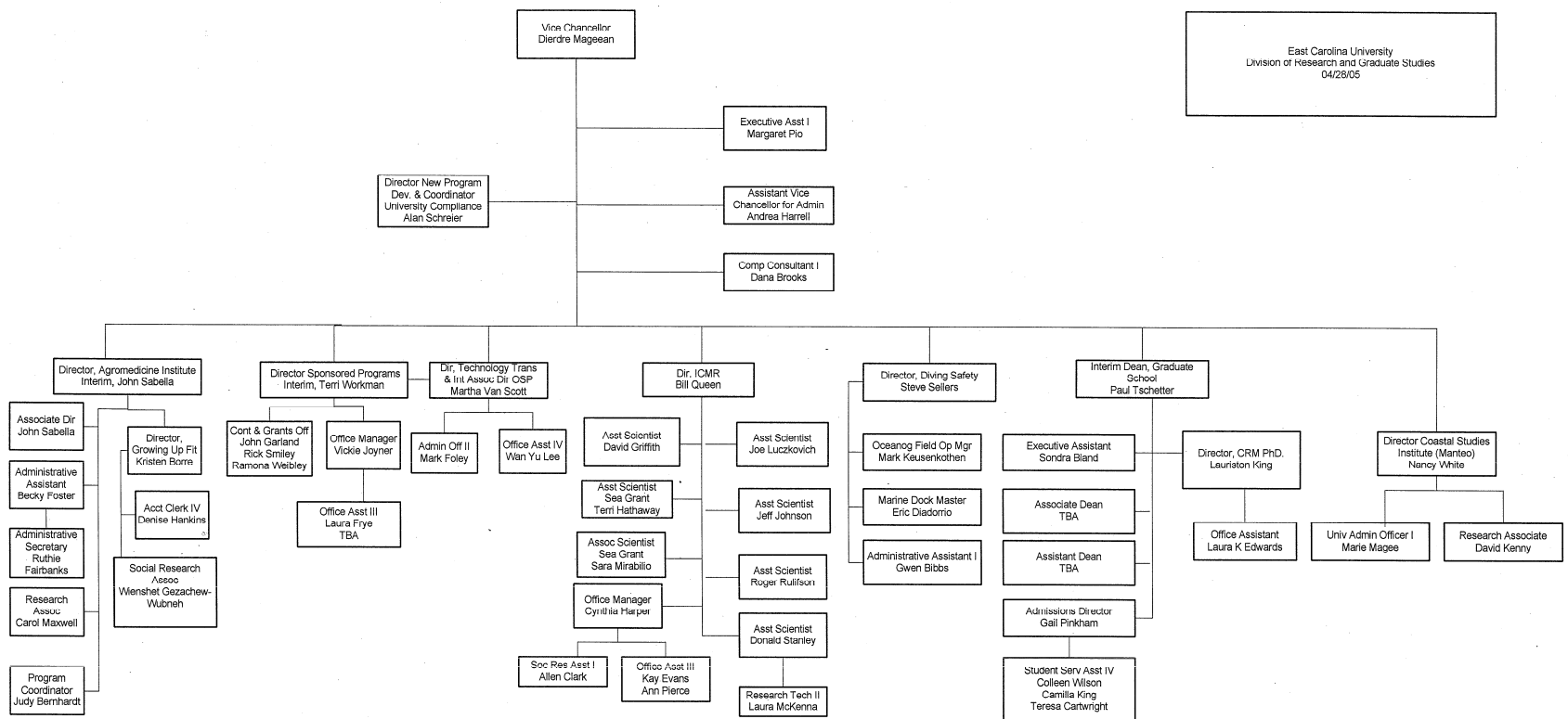


The Division of Research and Graduate Studies – Strategic Plan

Division of Research and Graduate
Studies
East Carolina University
February 28, 2007

Old Organization Chart

- Old research administration diagram



Vision

Explore, Create, Engage...

Double ECU's Research
Productivity over the Next Five
Years.

Mission

The Division of Research and Graduate Studies leads research and creative endeavors, education, economic, development, and community engagement by promoting scholarship, ethical behavior, and service, in an evolving , dynamic environment.

Five Strategic Goals

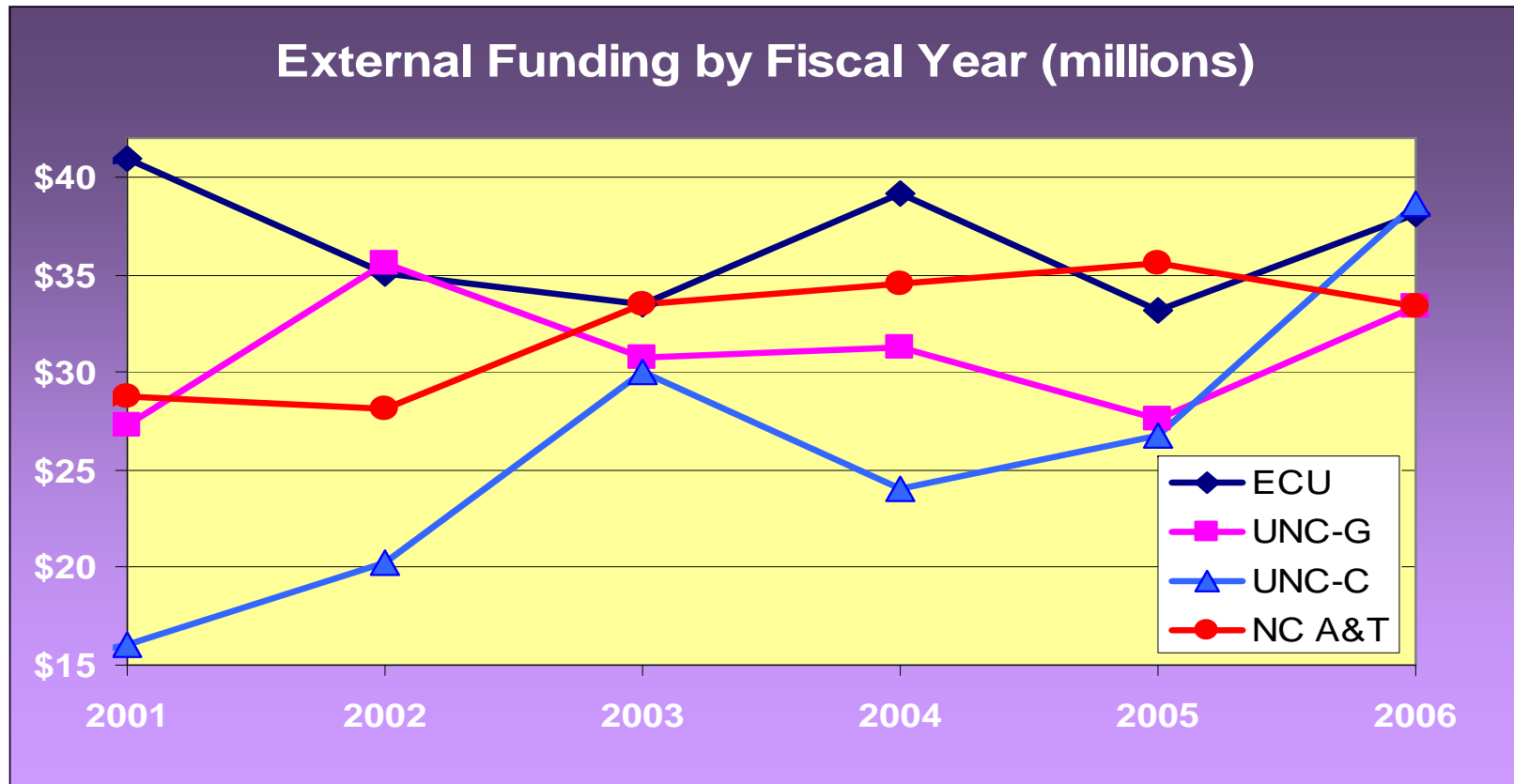
ECU will increase scholarship and creative activity over the next five years by:

1. Enhancing computing, physical and financial resources for research and graduate education
2. Improving administrative infrastructure for research and graduate education
3. Expanding research and education opportunities for faculty and students
4. Encouraging applications of research to benefit society and promote sustainable economic development
5. Stimulating interdisciplinary/collaborative research and community engagement

Why Invest in Research?

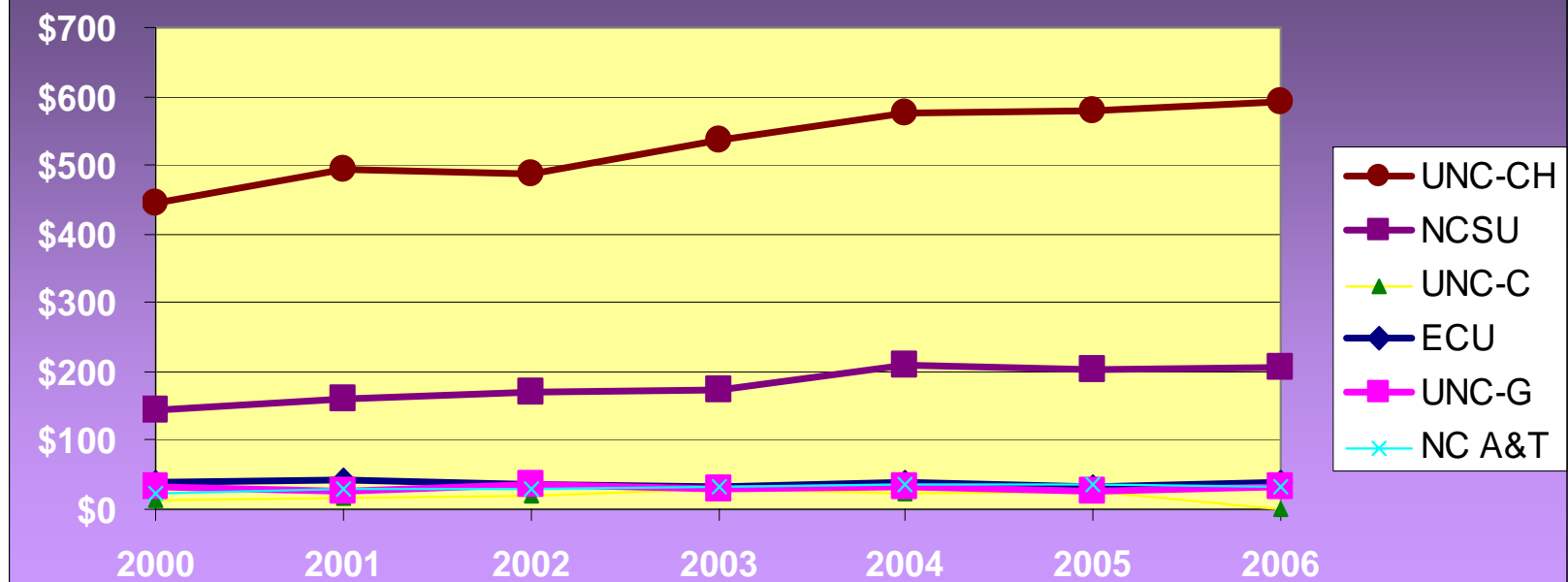
- Research is transforming the world's economy
 - In order for Eastern North Carolina to participate in this transformation ECU must be the research leader in the region
- How does ECU measure up?
 - Grants awarded compared to UNC sister institutions
 - R&D Expenditures compared to UNC-GA peers

How does ECU Compare to UNC Sister Institutions?



UNC Research Intensive vs. Research Extensive Universities

External Funding by Fiscal Year (millions)



ECU R&D Expenditures in Science & Engineering Fields, FY 1997-2004

R&D expenditures in science and engineering fields at universities and colleges, ranked by FY 2004. Includes all Federal agencies, state and local agencies, industry, institutional funds and other sources. Does not include expenditures in other fields. Source: National Science Foundation.

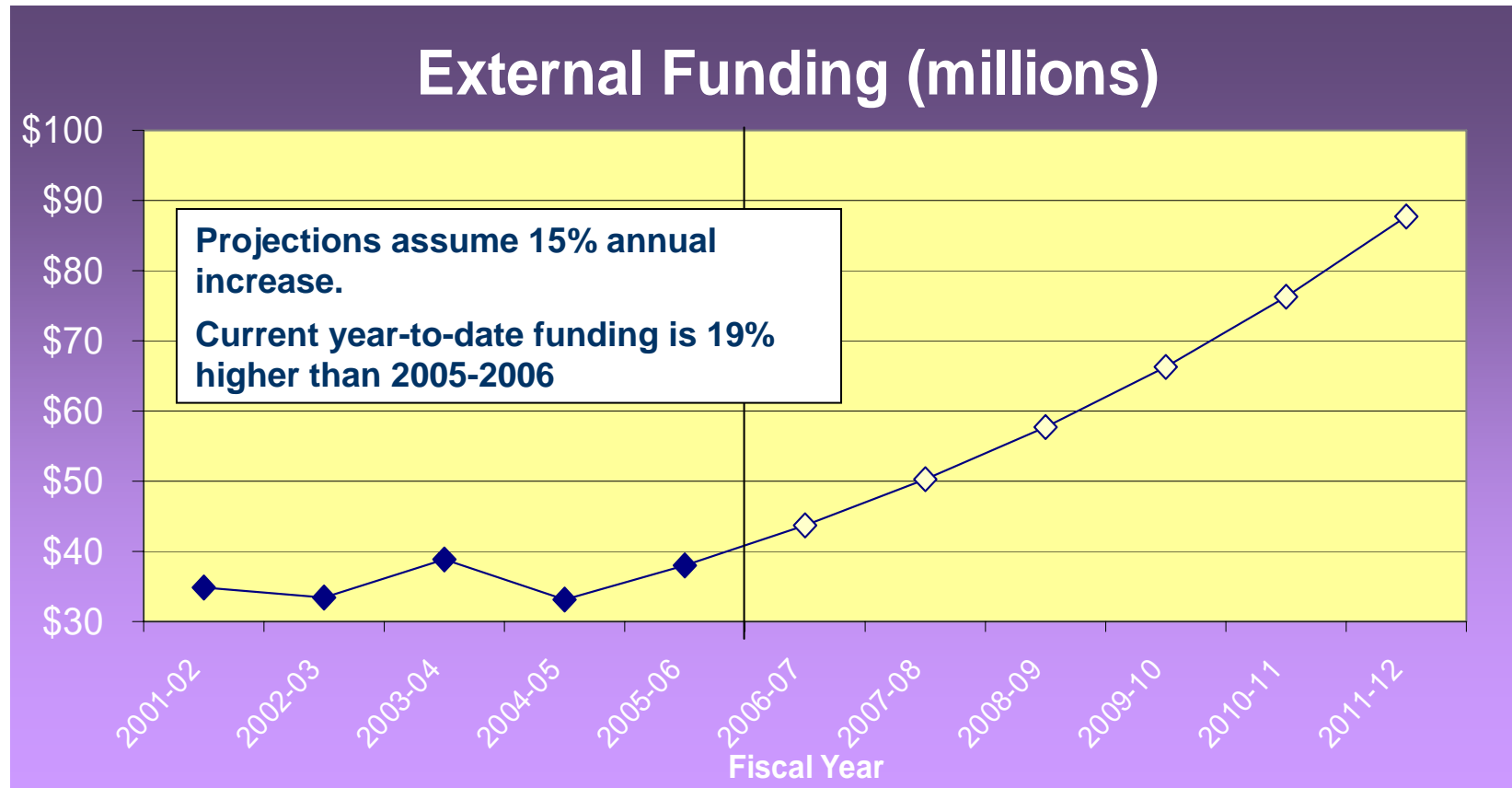
(Dollars in thousands)

Rank	Institution	1997	1998	1999	2000	2001	2002	2003	2004	% Change, 7 years
101	VA Commonwealth	78,948	80,538	79,785	88,220	99,180	109,619	126,451	132,839	168%
131	U. NV, Reno	52,703	45,476	47,939	56,248	59,229	66,721	80,553	83,552	159%
143	FL International U.	17,359	17,880	25,061	34,649	44,291	47,654	52,175	63,545	366%
150	TX Tech U.	46,645	53,126	58,488	66,263	69,918	82,785	92,515	57,592	123%
158	U. ND all campuses	20,899	16,938	16,999	17,343	19,692	33,973	41,803	49,595	237%
174	OH U. all campuses	21,008	21,469	21,437	23,767	27,146	36,601	37,527	38,704	184%
176	Wright State U. all ca	17,291	19,676	23,131	29,092	32,033	30,962	34,860	38,052	220%
181	Old Dominion U.	18,583	20,150	23,030	25,058	24,659	29,223	30,324	34,819	187%
191	U. MO-Kansas City	11,734	12,875	14,331	19,647	18,795	24,060	31,104	31,968	272%
202	U. WI Milwaukee	19,995	20,807	21,325	20,010	23,492	24,933	27,259	28,268	141%
248	Western MI U.	10,035	11,532	13,727	14,230	14,976	19,023	21,571	13,912	139%
250	East Carolina U.	6,600	7,644	9,014	8,461	10,535	11,513	12,520	13,296	201%
259	Northern IL U.	7,466	6,725	6,455	7,431	9,028	10,366	12,368	11,687	157%

Average Size of External Grants and Contracts (thousands)

Fiscal Year	Median	Mean
2001-2002	\$53.9	\$161.1
2002-2003	\$62.1	\$192.2
2003-2004	\$70.5	\$197.7
2004-2005	\$50.6	\$164.7
2005-2006	\$79.0	\$184.5

What Will it Take for ECU to Double Its External Funding?

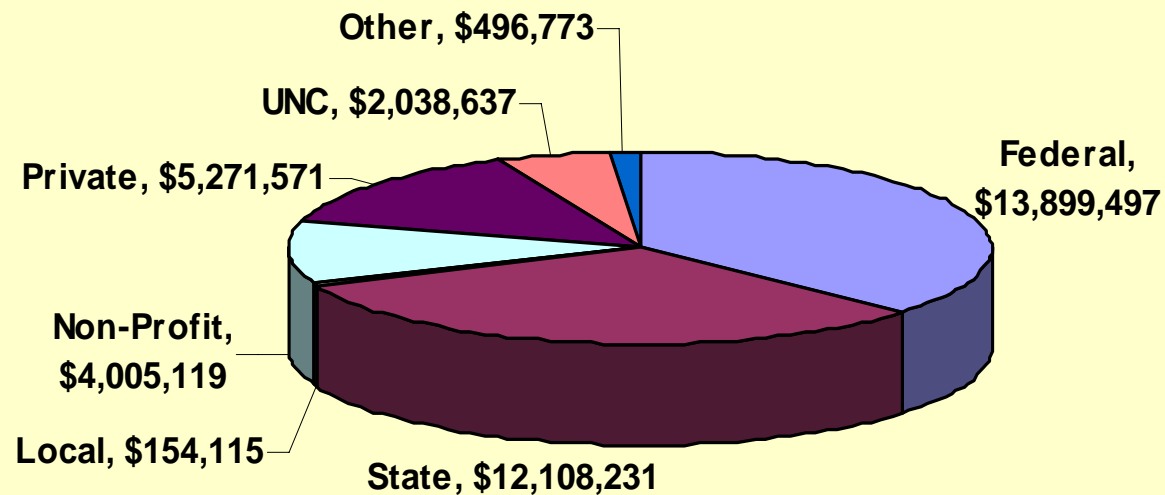


Federal R&D Budget Forecasts – CGS, February 2007

- NIH: 2.2% increase
- NSF: 7% increase
- DOE: 5% increase (Office of Science)
- NASA: 6% decrease (Basic Science)

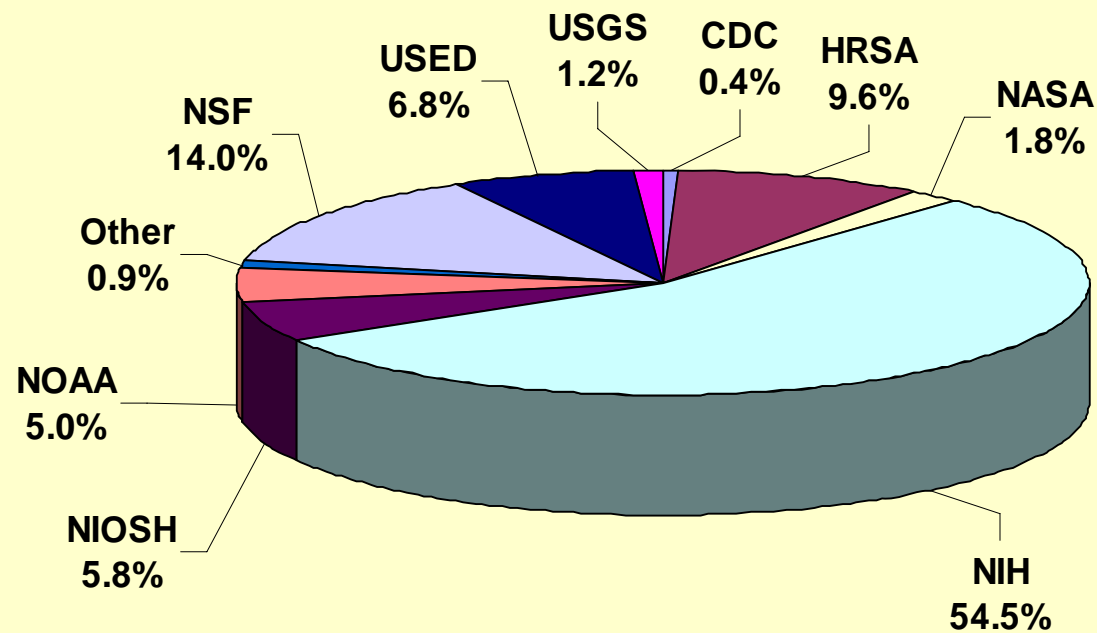
What are ECU's Sources of Funding?

Sponsored Programs by Funding Source 2005-2006



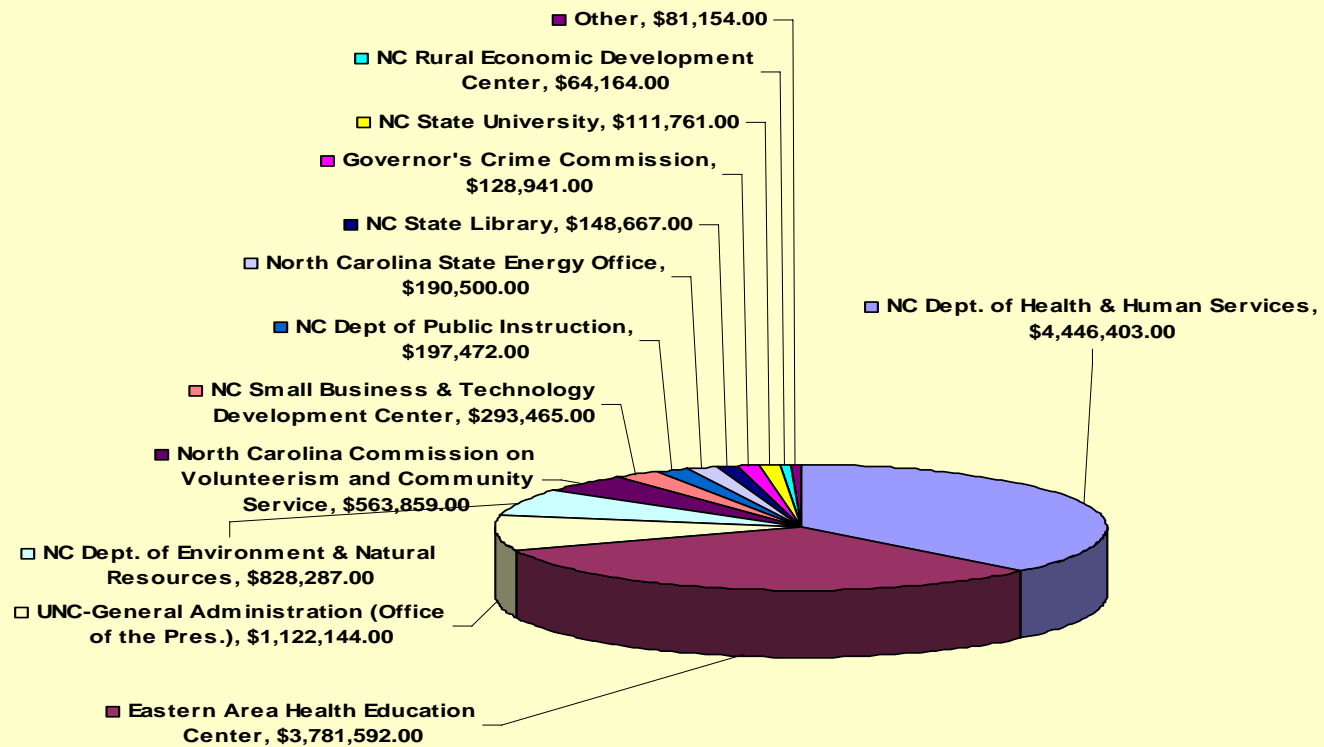
Federal Funding, By Agency

2005-06 Sponsored Programs by Funding Source

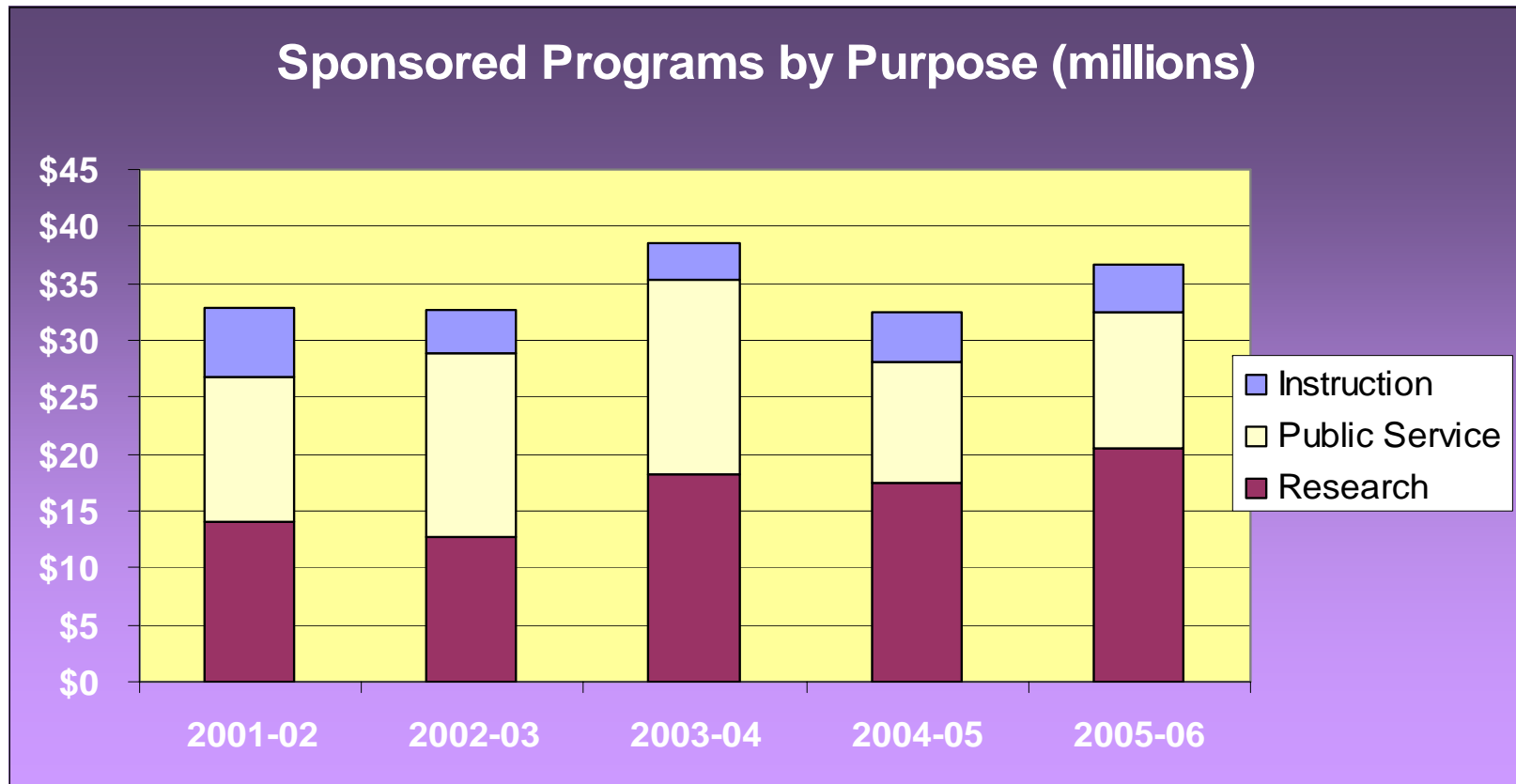


State Funding, By Agency

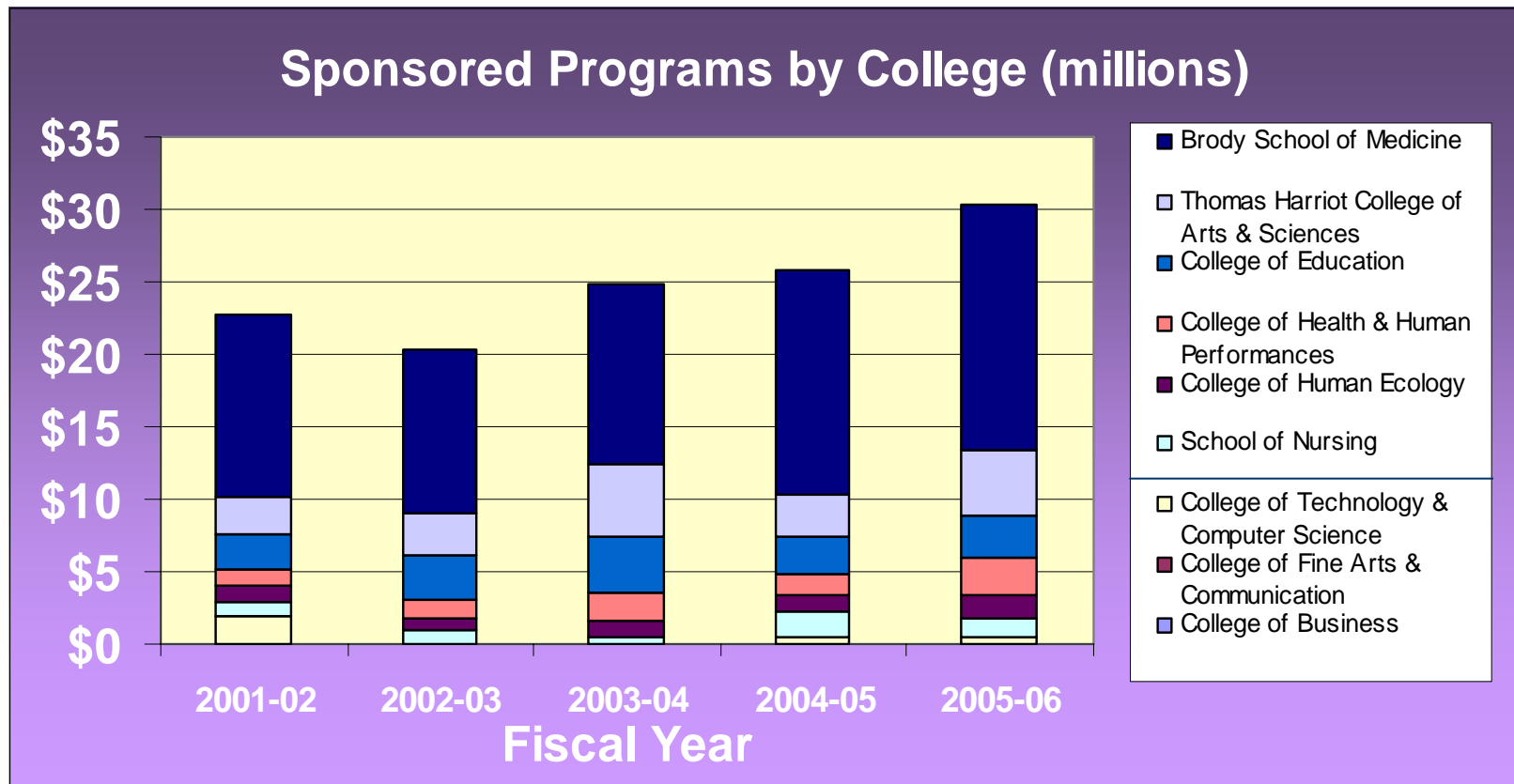
State-Funded Sponsored Programs 2005-06



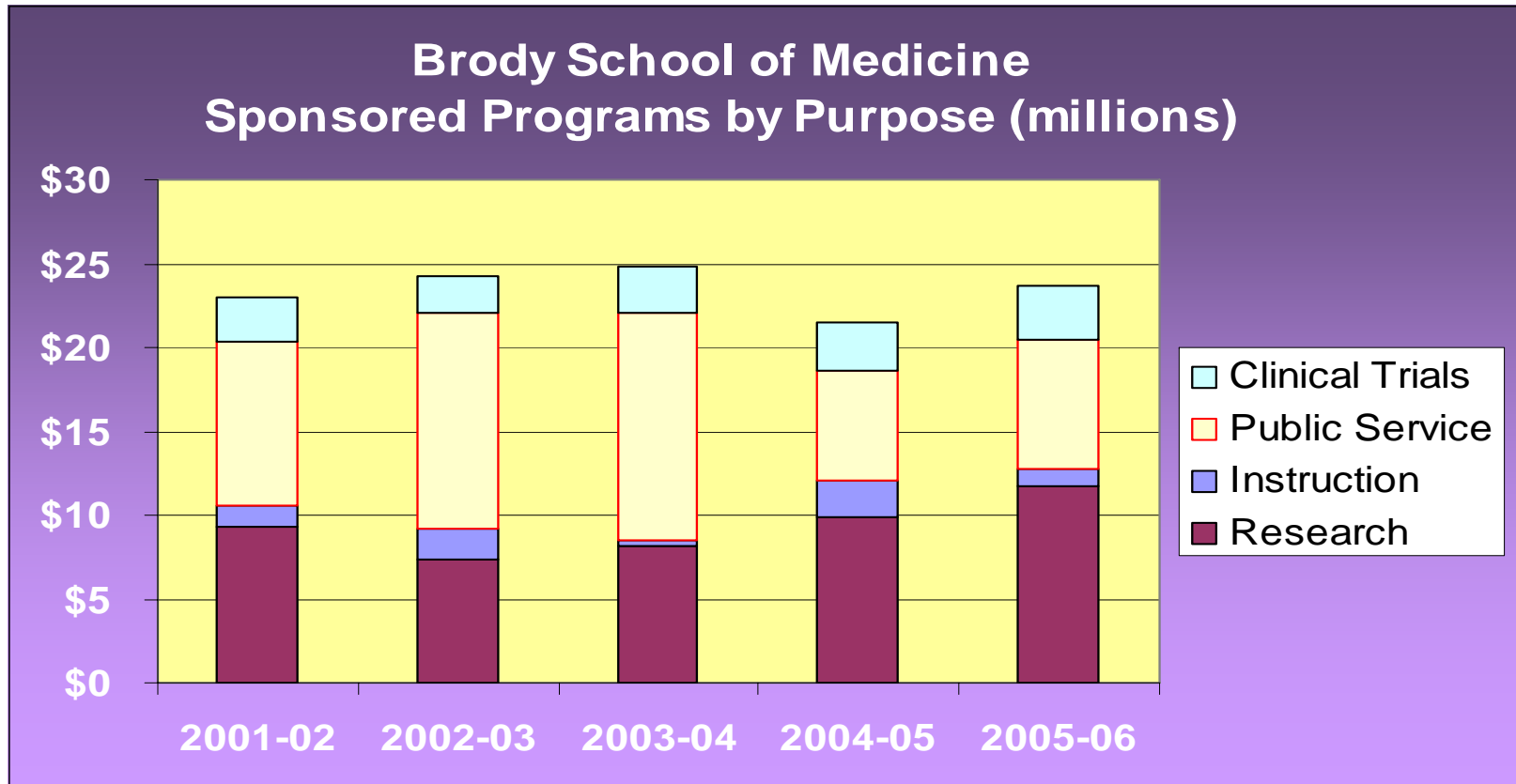
What Kind of Activities Are Supported?



How is Funding Distributed By College?



What Kind of Activities Are Supported at Brody School of Medicine?



Recent Successes

- ECU's external funding increased 15% in FY 2005-06 to \$38 million
- In the first seven months of FY 2006-07:
 - ECU's external funding increased 19% from \$12.53 million to \$19.71 million
 - Proposals submitted increased 25% to 348
- These positive trends suggest ECU's investments and the good work of our faculty are paying off!

Ambitious Goals for ECU and Eastern North Carolina

- Doubling ECU's research productivity over five years will require significant resources.
- Increase external funding to \$80+ million by 2012 (15% increase per year)
- How?
 - Increase number of externally funded faculty
 - Increase research space
 - Increase graduate enrollment, especially in Ph.D. programs

How Many Externally Funded Faculty Will Be Needed?

- Five year period FY 2001-2002 to FY 2005-2006:
 - 487 ECU Principal Investigators rec'd \$178,500,000
 - 95% of this funding was produced by 223 Principal Investigators
 - 46 unique PI's per year
- How do we reach this goal?
 - Increase number of funded investigators by 15 to 20 per year
 - Increase productivity of existing faculty
 - Hire new faculty with significant productivity potential

Differential Teaching Loads

- Typical teaching loads vary by college and unit (disconnect between teaching loads and SCH production)
- Changing the distribution of faculty teaching loads would enable research productive faculty more time for research
- Teaching and research expectations should be clearly articulated at the time of appointment and reviewed annually

Appropriate Levels of Institutional Support / Investments

- Start-up packages
- Research Development Awards
- Planning grants for centers and institutes
- Faculty Senate Research / Creative Activity awards
- Are we providing too much, especially summer salary?
- Financial reward for summer teaching is often greater than the financial reward for research
 - Funding agencies tend to limit amount of funds they are willing to allocate to summer salary

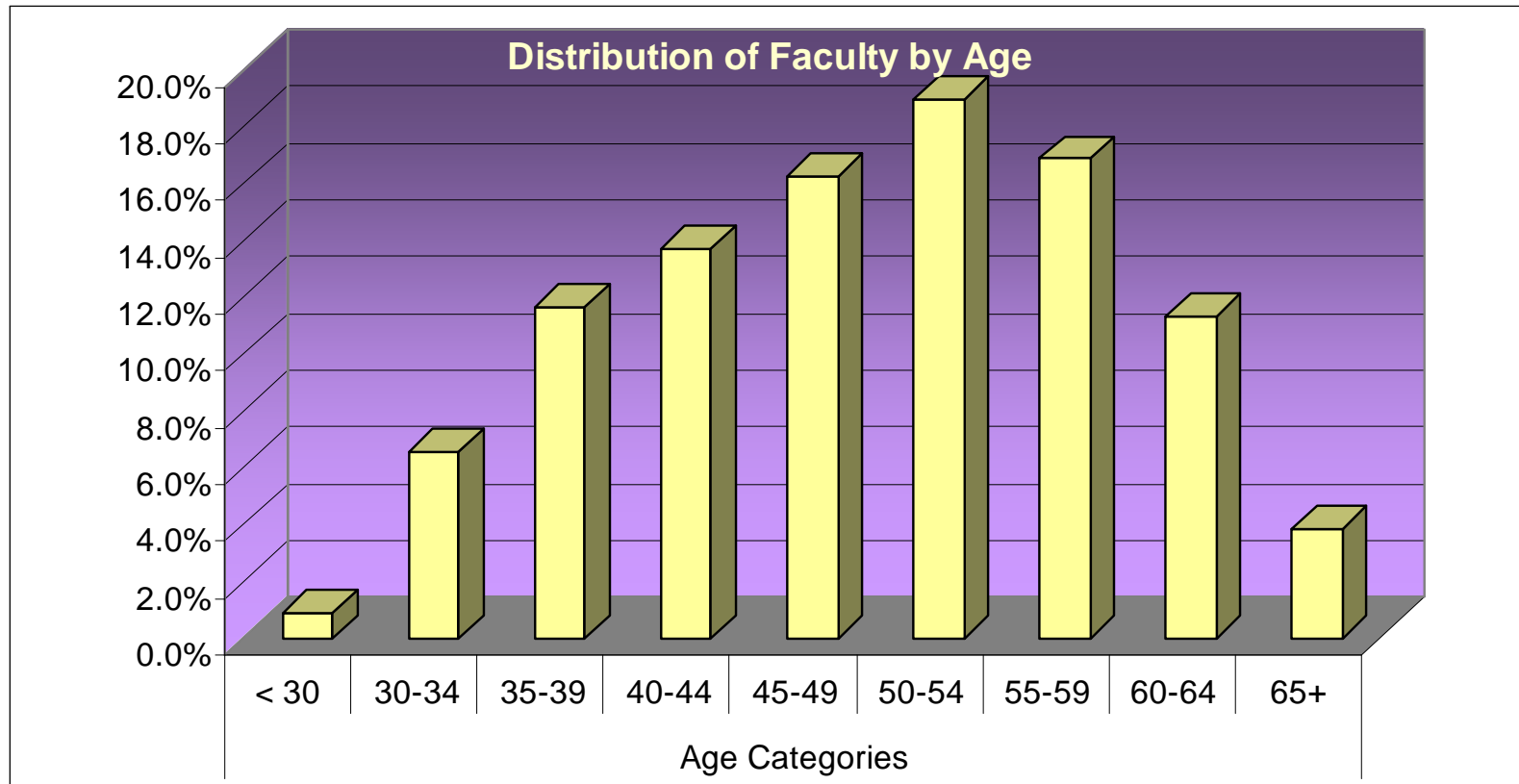
Cluster hires

- Examples
 - Chemistry: X-ray crystallography, \$3 million (proposed)
 - Hematology-oncology: Adam Asch team, \$8 - \$10 million (includes \$5 million from PCMH)
- Recent success at UNC-C (photonics) and Wake Forest (Tissue regeneration)

Faculty Age Distribution By College

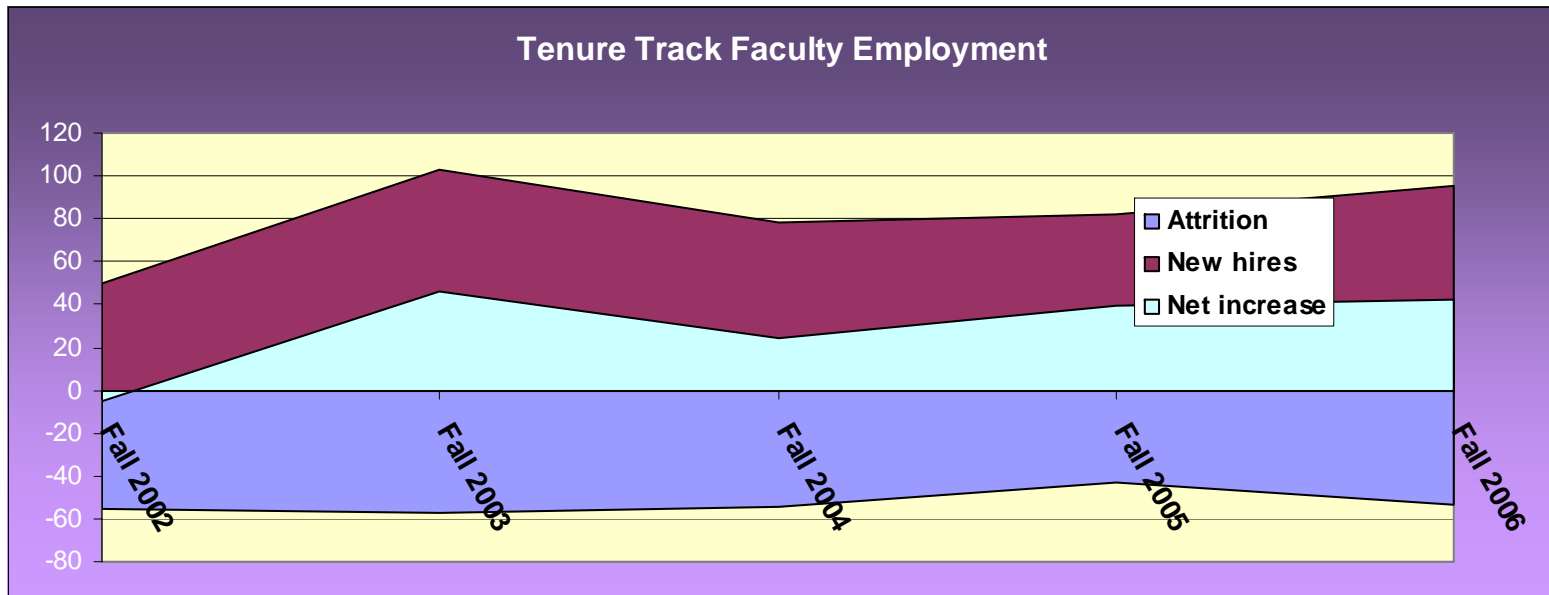
2006	N	Mean	Median	STD	Min	Max
Brody School of Medicine	220	50.20	51	9.02	31	76
College of Business	70	48.60	48	10.10	27	68
College of Education	101	50.76	53	9.93	28	71
College of Fine Arts and Communication	121	48.20	49	9.87	30	71
College of Health and Human Performance	49	47.98	49	9.30	26	63
College of Human Ecology	59	47.31	47	9.81	30	68
College of Technology and Computer Science	43	48.30	47	9.30	32	67
Joyner Library	25	44.00	45	10.09	24	64
Laupus Library	7	49.00	53	8.19	34	59
School of Allied Health Sciences	44	51.16	52.5	9.91	30	72
School of Nursing	31	56.19	56	4.72	46	64
Thomas Harriot College of Arts and Sciences	287	48.64	48	10.43	28	72

Distribution of Faculty by Age, Five Year Average, Fall 2002 to Fall 2007



Faculty Recruiting Trends

	Fall 2002	Fall 2003	Fall 2004	Fall 2005	Fall 2006
Attrition	-55	-57	-54	-43	-53
New hires	50	103	78	82	95
Net increase	-5	46	24	39	42



Strategic Areas of Focus

- The university will continue its investments in the following established strategic priorities:
 - Metabolic disorders, obesity, diabetes, and bioenergetics
 - Cardiovascular disease
 - Coastal science and policy
 - Agromedicine research
 - Cancer research
- The university has identified the following new strategic opportunities for future investment and development:
 - Health disparities and public health
 - Sustainable tourism
- The university will also retain reserve capacity to invest in emerging research opportunities as they present themselves.

Most Important Characteristics of a Quality Research University

	Rank			
	Business & Industry	National News Media	Academic Leaders Total	President / Chancellor
High Quality Research Facilities	1	1	2	1
Nationally Recognized Faculty	5	5	1	2
Leaders in Funded Research	18	11	4	3
National Centers of Excellence	7	8	6	4
Recruits Top Graduate Students	6	2	3	5
Faculty Wins National Awards	15	6	5	6
Federally Funded Research Centers	22	15	7	7
Top Ranked Students	10	4	8	8
Engaged Students	3	9	9	9
Conducts a Balance of Basic & Applied Research	8	3	10	10

Goals – physical research space

- Provide more physical space for ECU's research enterprise
 - By 2008, complete the design and up-fitting of empty research space in the Science and Technology Building. $8000 \text{ ft}^2 \times \$280 / \text{ft}^2 = \$2.2 \text{ million}$
 - By 2008, complete plans for the renovation of research space in the Brody School of Medicine (labs are 30 yr old)
 - In 2007-2008 begin advanced planning for the construction of two new research buildings (45,000 ft²) with an emphasis on promoting interdisciplinary research
 - Adjacent research incubator / research park?

Graduate Assistantship Support

- Competitive assistantships
- In-state and out-of-state tuition remissions
 - ECU compared to sister UNC institutions
 - UNC-G, UNC-C
- Health insurance
- Fellowships and scholarships

Increase Stipends

- To raise the avg. full-time masters assist. from \$7,500 to \$10,000 would cost about \$400,000
- To raise the avg. full-time masters assist. from \$7,500 to \$15,000 would cost about \$1,700,000
- To raise the avg. full-time doctoral assist. from \$7,500 to \$15,000 would cost about \$60,000
- To raise the avg. full-time doctoral assist. from \$7,500 to \$20,000 would cost about \$200,000

Create University Graduate Fellowships

- Masters $\$15k + 10,300 = 25k \times 5 = \$125,000$
- Ph.D. $\$20k + 10,300 = 30k \times 10 = \underline{\$300,000}$

\$425,000

Visits to campus 25,000

\$450,000

From F&A

Five Strategic Goals

ECU will increase scholarship and creative activity over the next five years by:

1. Enhancing computing, physical and financial resources for research and graduate education
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Charting a New Course...



Going Where Others Fear to Tread...



**East Carolina - Research and Graduate Studies
" GOING WHERE OTHERS FEAR TO TREAD "**