

**Vision OHIO
Research and Creative Activity Implementation Team
Final Report**

I. Introduction

This report documents the work of the Vision OHIO Research and Creative Activity Implementation Team (RCAIT), which worked during academic year 2005-06 to define Research and Creative Activity recommendations that would:

- Enhance the national prominence of Ohio University in Research and Creative Activity, and
- Improve University infrastructure and remove barriers in order to facilitate Research and Creative Activity.

It is important to stress that the RCAIT considered all areas of creative activity and scholarship. These areas included research and sponsored programs that may be externally funded, as well as creative activity pursuits that may not receive external funding.

a. Charge to the Team

The Vision OHIO Research and Creative Activity Implementation Team (RCAIT) received its charge from Provost Kathy Krendl. The RCAIT charge stated that the team will:

- Review goals and metrics related to realizing the Research and Creative Activity goals identified in Vision OHIO.
- Review best practices related to Research and Creative Activity efforts at other educational institutions, our peer institutions in particular.
- Identify barriers and propose solutions to realizing Research and Creative Activity goals.
- Outline a timeline for realizing each goal.
- Outline processes for realizing each goal.
- Identify the groups responsible for realizing each goal (who “owns” each goal).
- Coordinate with other implementation teams as necessary.
- Communicate with the University community on a regular basis as the team's work progresses.
- Host focus groups and open forum discussions to identify barriers and solutions to Research and Creative Activity efforts at Ohio University.
- Identify interest groups on campus related to Research and Creative Activity issues and communicate with and actively seek input and feedback from them.
- Develop a prioritized budget for implementing the proposed solutions or goals.

b. Membership with position and department

The RCAIT team consisted of the following members:

James Rankin, co-chair, director, Avionics Engineering Center
Mark Weinberg, co-chair, director, Voinovich Center, professor of political science
David Bayless, director, Ohio Coal Research Center, professor of mechanical engineering
Jack Blazyk, associate dean for research, College of Medicine, professor of biochemistry
Jeff Fantine, director, Central/SE ABLE Resource Center, director, Center for Study and Development of Literacy and Language

Norman J.W. Goda, associate professor of history
M. Brooke Hallowell, associate professor of hearing, speech and language sciences, associate dean for sponsored programs, College of Health and Human Services, director of the School of Hearing, Speech and Language Sciences
Timothy G. Heckman, associate professor of psychology
Jennifer V. Hines, associate professor of chemistry and biochemistry
W. Stephen Howard, professor of telecommunications
Robert E Lazuka, professor and director, School of Art
Roxanne Malé-Brune, projects coordinator, Office of Vice President for Research
Gayle F. Mitchell, professor and chair, Civil Engineering, director, Ohio Research Institute for Transportation and the Environment
Karen Riggs, director, Game Research and Immersive Design Lab; associate professor of telecommunications
Edwin Rowland, associate professor of microbiology
Christopher Simpson, associate professor of family medicine
Greg Shepherd, dean, College of Communication
Sergio E. Ulloa, professor of physics & astronomy
Timothy S. Vickers, assistant director, Center for Teaching Excellence
Lonnie Welch, director, Center for Intelligent, Distributed, & Dependable Software, Stuckey professor of electrical engineering and computer science
David Wight, director, Edison Biotechnology Institute
Arlie Woodrum, associate professor of educational studies
Sarah E. Wyatt, assistant professor of environmental and plant biology

Team Support

Stephanie A Howe, associate director for human capital and operations, Voinovich Center
Gary M Schumacher, professor of psychology
Hugh Sherman, professor and chair, Management Systems; associate dean of students, College of Business; associate director, Voinovich Center

c. Process Overview

The RCAIT met biweekly during the 2006 academic year. The team functioned primarily as a “committee of the whole” and utilized only two subcommittees. One of these developed a list of “Research Peer Institutions” and surveyed those institutions to understand their growth history and their research infrastructure. Part of its report may be found in Appendix B. The second subcommittee identified barriers and infrastructure issues for Research and Scholarly Activity. A separate report is not listed for this subcommittee as many of its issues were included in the recommendations.

The committee reviewed several University reports that related to Research and Creative Activity. These reports identified University strengths as well as infrastructure issues. The reports reviewed were:

- Research input from the Council for Research, Scholarship, and Creative Activity (CRSCA),
- Department and unit responses to Vision OHIO, and
- Deans’ Research Enhancement Working Group Final Report.

The RCAIT did not conduct any focus groups. RCAIT initially identified eight focus groups related to Research and Creative Activity. The focus groups were:

- Externally Funded Research and Creative Activity faculty - 2
- Nationally Prominent Research and Creative Activity faculty -2
- Potentially Prominent Research and Creative Activity faculty -2
- Center and Institute Directors
- Associate Deans for Research

Because of limitations on the number of focus groups that could be facilitated, the RCAIT decided not to conduct focus groups since group compositions were already well-represented on RCAIT.

II. Recommendations

The RCAIT developed five recommendations to enhance national prominence and to improve operational efficiencies.

- Recommendation 1: Increase faculty and staff time for research and creative activity efforts.
- Recommendation 2: Pursue targeted growth strategies and commensurate support for increasing research and creative activity efforts.
- Recommendation 3: Develop policies that support the facilitation of research and creative activity efforts and enhance national prominence.
- Recommendation 4: Improve and expand facilities for research and creative activity efforts.
- Recommendation 5: Improve processes and procedures of research and creative activity support functions.

a. Summary of Action Plans

Each of the five recommendations is supported by action plans. Each action plan has been evaluated for priority, responsible persons/organizations, timeline, metrics, processes, and needed resources.

The priority, timeline, and needed resources for each action plan are based on qualitative descriptors.

- Action plans fall into four priority areas (very high, high, medium, and low).
- Timeline: The timeline defines the time period in which the action plan should be implemented.

Short-term:	Immediately to 1 year
Mid-term:	2-5 years
Long-term:	5-10 years
- Resources: The financial resources needed to accomplish the action plan are defined in qualitative terms.

Low:	No cost - \$100,000
Medium:	\$100,000-\$1M
High:	Greater than \$1M

In addition, to developing the action plans, the RCAIT identified the highest-priority action plans. The very high-priority action plans are listed below by category:

Enhancing National Prominence
2A. Invest in existing academic and research strengths.
2B. Invest in centers and institutes to capitalize on their demonstrated successes and potential growth areas
2C. Increase human resources through targeted faculty and professional (research) staff hires.
4A. Provide quality space and facilities for research and creative activities through improvements, maintenance, and construction.
Operational Efficiencies
1A. Implement differential workload strategies.
3A. Maintain current indirect cost returns to faculty, principal investigators, centers, and institutes.
4A. Provide quality space and facilities for research and creative activities through: improvements, maintenance, and construction.
5A & 5B. Improve research infrastructure (including grants and the Office of Research and sponsored program (ORSP).

b. Description of Action Plans

The action plans for each recommendation are listed in the following five tables.

Recommendation 1: Increase faculty and staff time for research and creative activity efforts.

Action Plan	Priority	Responsible Persons	Timeline	Metrics	Processes	Resources Needed
1A. Implement differential workload strategies.	Very High	Provost, Deans, Dept. Chairs/ School Directors, Faculty	Short-term	Policy	College and Department/ School Workload policies	Time; Staffing
1B. Increase the number of funded graduate students.	High	Dept. Chairs/ School Directors	Immediate	Number of positions; Increased instructional resources for student	Funding for RAs/TAs/GAs	Low to Med \$\$
1C. Increase teaching resources to faculty.	High	Deans; Dept. Chairs/School Directors	Immediate	Classroom contact hours	Hire additional instructors and faculty.	Job openings; Funding for new jobs
1D. Move to semesters.	High	All academic	Mid-term	Catalog; coordinate with SIS changes	Revamp curriculum and calendar.	Med to High \$\$, printing; time
1E. Improve administrative support services to faculty and staff in the areas of: <ul style="list-style-type: none"> • research project coordination, • research support, • grant-writing and proposal preparation, • grant and contract management. 	Med	VP-Research; VP-Finance & Administration	Short-term	Number of positions; More grant proposals submitted / funded	Identify need areas; Additional job postings.	Med to High \$\$; Additional job positions
1F. Hire professionals to conduct student academic advising.	Med	Provost; Dept. Chairs/School Directors; Deans	Short-term	Number of positions	Identify need areas	Med \$\$; Additional job positions

Recommendation 2: Pursue targeted growth strategies and commensurate support for increasing research and creative activity efforts.

Action Plan	Priority	Responsible Persons	Timeline	Metrics	Processes	Resources Needed
2A. Invest in existing academic and research strengths.	Very High	Graduate Education and Research Board; Deans; Dept. Chairs/School Dir.; Center and Institute Directors	Short-term	New starts; Forecast “success”	Investment program by VPR (with Deans)	\$\$ - seed money; space; Faculty and staff positions
2B. Invest in centers and institutes to capitalize on their demonstrated successes and potential growth areas	Very High	VP-Research; Graduate Education and Research Board; Center and Institute Directors	Short-term	Investment at each level	Investment policy	\$\$ - seed money; operating support, space;
2C. Increase human resources through targeted faculty and professional (research) staff hires.	Very High	Provost; Deans; Dept. Chairs/School Directors; Center and Institute Directors	Short-term	New positions; funds for new positions, flexibility in location of positions	Define “targeted”	\$\$ - salaries; space
2D. Invest in new academic and research initiatives.	Med	Graduate Education and Research Board; Deans, Center and Institute Group	Short-term	Number of new initiatives started; Return on Investment	New initiatives program by GERB (with Deans)	\$\$ - seed money; space; faculty and staff positions
2E. Increase marketing and financial support for recruitment of high-quality graduate and undergraduate students focused on research and creative activity.	Med	University Communications & Marketing; Admissions	Mid-term	Number of new students; marketing attempts	Define marketing strategy	\$\$ for marketing “pieces”
2F. Establish equitable system for start-up of new initiatives including the provision of bridge funding	Med	Provost; GERB; Deans	Mid-term		Investment policy	No \$; some effort

Recommendation 3: Develop policies that support the facilitation of research and creative activity efforts and enhances national prominence.

Action Plan	Priority	Responsible Persons	Timeline	Metrics	Processes	Resources Needed
3A. Maintain current indirect cost returns to faculty, principal investigators, Centers, and Institutes.	Very High	Provost	Short-term	Current Indirect Cost (IDC) return percentages remain the same or are increased	Revise the IDC policy.	Low
3B. Refine the promotion and tenure guidelines to reflect the importance of RCA to the University.	High	Dept P&T committees	Short-term	Approved policy	Rewrite P&T guidelines.	Low
3C. Establish policies and guidelines that promote interdisciplinary RCA. These policies could include: <ul style="list-style-type: none"> • indirect cost distribution • working with Centers and Institutes, and • joint appointments 	High	Deans; VP-Research; Provost; Center and Institute Directors	Short-term	Approved policy; Number of interdisciplinary appointments.	New policy	Low, Medium
3D. Increase indirect cost returns to Colleges and Departments from University share of indirect.	High	Provost	Short-term	College and Department IDC returns increased.	Revise the IDC policy	Low
3E. Realign annual merit reviews and rewards to foster increased research and creative activity efforts.	Med	Deans; Dept. Chairs/School Directors	Mid-term	Approved merit review guidelines	Merit review guidelines	Low

<p>3F. Establish University-funded incentives that foster increased research and creative activity efforts. These may include:</p> <ul style="list-style-type: none"> • bonuses and recognition for individuals, teams, and programs that excel in research and creative activities, • summer stipends/salary for RCA for faculty, and • competitive funding for Professional Development leaves (sabbaticals). 	Med	Provost; VP-Finance and Administration	Mid-term		New policy	Low
<p>3G. Develop a communication (PR) strategy to highlight RCA capabilities and successes.</p>	Low	VP-Research	Mid-term	New strategy	Validate current publications	Med

Recommendation 4: Improve and expand facilities for research and creative activity efforts.

Action Plan	Priority	Responsible Persons	Timeline	Metrics	Processes	Resources Needed
4A. Provide quality space and facilities for research and creative activities through: <ul style="list-style-type: none"> • improvements, • maintenance, and • construction. 	Very High	VP-Finance and Administration and Deans, Dept. Chairs/School Directors, Center and Institute Directors	Mid-term	RCA space; percentage increase in RCA space	Space allocation	Medium \$ (space)
4B. Develop and support core multi-user facilities including: <ul style="list-style-type: none"> • equipment acquisition, upgrade, and maintenance, and • technical staff. 	Med	VP-Finance and Administration	Long-term	RCA space	Space allocation; Capital building process	High \$
4C. Develop and implement a space load policy that reflects the emphasis of RCA.	Med	VP-Finance and Administration	Short-term	RCA space percentage	Allocation and reallocation	Low \$
4D. Facilitate partnerships to optimize off-campus space and facilities.	Med	VP-Research; Researchers	Ongoing	Number of partnerships	Identify potential partners; Establish Memoranda of Understanding (MOUs)	Low \$

Recommendation 5: Improve processes and procedures of research and creative activity support functions.

Action Plan	Priority	Responsible Persons	Timeline	Metrics	Processes	Resources Needed
5A. Improve performance of Grants, Contracts, and Plant Accounting (GCPA).	Very High	VP-Finance and Administration	Short-term	Account processing time; process tracking	Independent audit/ review; End-user review	Staffing (\$); Tracking effort
5B. Improve performance of the Office of Research and Sponsored Programs.	Very High	VP-Research and Advisory Committee	Short-term	Pre- and post-award processing time; Communication with researchers	Tracking; Reporting; End-user advisory board, Consultant	Staffing (\$); Tracking effort
5C. Improve performance of the VP-Research's Technology Transfer Office.	High	VP-Research	Short-term	Processing timelines; Communication with researchers	Tracking / reporting, consultant, End-user advisory board	Reporting system
5D. VP-Research unit should provide grant information and facilitation to all areas of study.	High	VP-Research	Short-term	Statistics on support to each college	Search and report grant info to all units; Proposal preparation/ post-award to all units	Staffing (\$)
5E. VP-Research resources (staffing, etc.) must meet anticipated growth in RCA.	Med	VP-Research	Mid-term	Staffing growth	Strategic planning	Staffing (\$)
5F. Investigate the realignment of RCA support units to streamline processes to optimize customer service.	Med	VP-Research; VP-Finance and Administration	Short-term	Cost/ benefit analysis	Cost / Benefit analysis	Space (?); staffing (?)
5G. Develop incentives for faculty to	Low	VP-Research	Mid-term	Participation on	Develop an	Low \$

participate on Institutional Review Board (IRB).				IRB	inventive package (release time?)	
5H. Define a new employment structure for research-oriented hires.	Med	Deans, Center and Institute Directors, UHR	Short-term	Research-oriented classification	Research faculty and staff classification; nonclassified support staff classification	Low \$ (Definition of new classifications, not opening of new positions)

APPENDIX A. Vice President for Research vs. Associate Provost for Research

Late in the Research and Creative Activity Implementation Team deliberations, notice was received that another implementation team may recommend that the office of the Vice President for Research office be reorganized as an Associate Provost for Research position to facilitate closer interaction with Graduate Studies. The RCAIT briefly discussed the potential organizational restructure but did not come to consensus on a recommendation.

The major reason cited for leaving the Research Division under a Vice President was to keep research at the presidential cabinet level. This ensures that research receives presidential visibility within the university.

The major reason cited for moving research to an Associate Provost position was to strengthen the relationship between research and academic areas.

In either organizational structure, it was recognized that research should remain a University priority and that the Research Division should maintain a close relationship with the academic areas through the deans. It is imperative that research stress this relationship and foster stronger communications with the colleges.

APPENDIX B. Research Peer Universities

A subcommittee was formed to examine the best research practices of peer institutions. The subcommittee was composed of David Wight, Sergio Ulloa, Jack Blazyk and Roxanne Male'-Brune.

Selection Process

Peer Institution: Defined for these purposes as universities that have comparable (1) academic ranking as Ohio University and have improved or maintained these rankings, as per *U.S. News and World Report* and (2) have increased total external funding expenditures at least two-fold within six years within the approximate range of \$20M to \$100M, as per NSF.

These criteria were selected based on the goal of increasing external funding while maintaining academic excellence. Based on these criteria, the following universities were selected as peer institutions for this report (Table 2).

Table 2. Selected Peer Institutions

	NSF Research Expenditures										US NEWS
	1996	1997	1998	1999	2000	2001	2002	2003	Ratio 2003/1996	Increased >2	(2004-06)
119 U. NH	45,693	45,886	52,359	57,613	72,108	87,879	93,222	96,415	2.1	Yes	95,98,97
126 U. Louisville	29,655	33,434	39,147	57,051	64,062	72,857	80,974	88,522	3.0	Yes	4th tier
127 U. MS all campuses	26,215	26,231	28,079	32,129	44,927	58,410	71,893	85,378	3.3	Yes	3rd tier
134 Drexel U.	19,322	19,267	19,603	22,397	24,876	27,698	44,465	69,548	3.6	Yes	123,106,109
148 FL International U.	16,856	17,359	17,880	25,061	34,649	44,291	47,654	52,175	3.1	yes	4th tier
154 GA State U.	18,114	27,069	31,153	36,523	36,600	38,960	44,564	45,653	2.5	Yes	4th tier
160 Northeastern U.	17,980	19,822	26,385	30,209	35,340	34,467	38,540	42,931	2.4	yes	3rd tier, 120, 115
161 U. MD Baltimore County	14,304	19,799	18,155	21,854	26,044	29,641	36,323	42,906	3.0	yes	3rd tier
162 U. NV, Las Vegas	16,893	15,628	16,912	20,170	24,215	27,008	30,527	42,205	2.5	yes	4th tier
171 OH U. all campuses	18,329	21,008	21,469	21,437	23,767	27,146	36,601	37,527	2.0	yes	107, 98, 109
176 Wright State U. all campuses	17,381	17,291	19,676	23,131	29,092	32,033	30,962	34,860	2.0	yes	4th tier

Data-Gathering Process

The VP for Research or comparable administrator was contacted, and data were collected via teleconference. Some administrators requested copies of the completed survey to add/revise information.

The following universities responded: Drexel, Georgia State University (GA State), University of Maryland- Baltimore County (U. MD), Wright State University, Northeastern University, and University of New Hampshire (U. NH). Responses are included in Appendix B.

Conclusions

Some conclusions from the surveys are:

Growth sector:

- Sponsor: Most experienced significant increases in federal funding.
- Discipline: Growth across many areas. Life and Biomedical; Physical Sciences and Engineering and Social and Behavioral Sciences.

Factors that influenced increase:

- Increase in full-time faculty: Most reported increases in faculty hires. Four of six universities prioritized hiring research-intensive faculty and/or research staff.
- Teaching load: One of six universities reported a reduced workload policy for new faculty. One is currently drafting a variable workload policy.
- Incentives: salary return to PI for funded grants –mixed response to benefit.
- Research space: Five of six universities recently obtained funding, primarily state and federal appropriations, for new research space.
- Research Fair: Two universities cited their universitywide research fair as a mechanism to promote research, especially interdisciplinary research.

University Selective Investment

- Most reported a strong preference to invest in areas already receiving external funding or showing great potential for external funding. Most did not undergo a formal, RFP-driven selective process.
 - “in process of developing a major research initiative”
 - “no university provided investment as match” for NSF- and NIH-funded centers
 - “no”
 - “no leave up to external funding agencies”
 - “bad idea ... better to support existing [funded] strengths
 - “selected four areas,” but not by RFP process
- Six of six universities have centralized internal award programs through the VP for Research or Vice Provost for Research for faculty research, ranging from \$90,000 to \$1,200,000/year with an average of \$454,000/year. In FY 2005, Ohio University had \$200,000 for faculty research, \$72,000 for student research and \$128,000 for equipment and curriculum enhancement.

Office for Research and Sponsored Program Staff

- 15 award + post award + admin (external funding \$101 M)
- 6 preaward + postaward + admin (external funding \$60 M)
- 12 preaward + postaward + admin. (external funding \$90 M)
- 11 preaward + postaward + admin (external funding \$60 M)
- 14 preaward + post award + admin. (external funding \$70 M)
- 18 preaward + postaward + admin (external funding \$108 M)

Ohio University has 7.7 pre award + post award + admin at a currently external funding level of \$57M.

Advice:

- “Hire people who express a value for research. Promote research culture. Incentivize interdisciplinary research, e.g. IDC distribution to PI and co-PIs.”
- “Change the environment to be more pro-research.”
- “Select faculty for [research] prowess. Need deans to make competitive [startup] packages... need deans to have research entrepreneurship quality.”
- “Raise research consciousness. Hire strategically and selectively. Give them the start up they need. Emphasize research across all disciplines. Create infrastructure. Provide adequate instrumentation and research administration.”

- “Think strategically. Pick the best people with greatest potential and build infrastructure...not within academic program. Build critical mass in centers.”

DATA

U.S. News and World Report: Prior to 2004, *U.S. News* categorized universities within three categories - 1st, 2nd or third tier -- based on numerical scores and cumulative rankings, which were not published. Since 2004, *U.S. News* has published these numerical scores and cumulative rankings.

Criteria for Ranking (2002-2006):

Criteria	% total score	Breakdown
Peer Assessment	25%	
Retention	20%	
Faculty Resources	20%	30%: class<20; 10%: class >50 35%: Faculty salary 15%: Faculty w/highest degrees in field 5%: student/faculty ratio 5%: Full-time faculty
Student Selectivity	15%	50%: ACT/SAT [40% 2002] 40%: top 10% HS [35% 2002] 10%: acceptance rate [15% 2002] 10%: %enrolled/accepted [2002 only]
Financial Resources	10%	
Graduation Rate	5%	
Alumni Giving Rate	5%	

U.S. News and World Report Rankings for Ohio University (data before 2004 not published but requested by Institutional Research)

Year	Rank	Overall Score	Peer Assess.	Ave. Fresh. Ret.	Grad rate Predicted	Grad rate Actual	%Class under 20	%Class >50	%Fulltime faculty	SAT/ACT 25-75th%	Freshman in top 10%HS	Accept. Rate	Ave. Alumni giving rate
1996	2nd tier	N/R	N/R	85	N/R	62	N/R	N/R	N/R	21-26	20	78	N/R
1997	2nd tier	N/R	N/R	84	53	70	N/R	N/R	N/R	21-26	19	72	40
1998	2nd tier	N/R	N/R	84	51	68	N/R	N/R	N/R	22-26	21	73	16
1999	2nd tier	N/R	3.1	84	52	66	N/R	N/R	86	21-26	20	75	14
2000	106	N/R	3.1	84	54	70	46	10	84	22-26	19	74	14
2001	71*	N/R	3.1	84	55	70	43	8	86	21-26	18	80	13
2002	90	N/R	3.1	85	56	69	43	10	89	21-26	17	77	12
2003	92	N/R	3.2	85	55	70	43	11	89	21-26	18	78	12
2004	107	42	3.1	85	58	70	42	11	89	21-26	18	75	11
2005	98	43	3.1	84	58	70	41	11	90	22-26	19	79	9
2006	109	42	3	84	56	70	45	10	90	21-26	17	86	10

*Faculty Resources rank (defined in 2001 as 30%:class <20; 10%:class >50; 35%:Faculty salary; 15%:Faculty w/highest degrees in field; 5%:student/faculty ratio;5%: Full-time faculty) decreased dramatically from 164 to 75

Year	Rank	Financial Resource Rank	Peer Assess.	Grad./Ret. Rank	Student Selectivity	Faculty Resources Rank	Alumni Giving
2000	106	166	86	76	117	164	115
2001	71*	181	88	76	112	75	119
2002	90	174	84	74	123	140	130
2003	92	175	78	70	144	156	157
2004	107	162	84	73	134	151	165
2005	98	152	84	79	125	159	170
2006	109	155	92	83	153	138	160

Based on the published rankings from 2004, 2005 and 2006, a list of institutions was selected that had comparable ranking as Ohio University and have maintained these rankings during this period.

2004 U.S. News and World Report Rankings

	2004 Rank	Overall Score	Peer Assess.	Ave. Fresh. Ret.	Grad rate Predicted	Grad rate Actual	%Class under 20	%Class >50	%Fulltime faculty	SAT/ACT 25-75th%	Freshman in top 10%HS	Accept. Rate	Ave. Alumni giving rate
SUNY Col. Env. Sci & Forest	78	48	2.7	84	62	72	73	7	95	1040-1230	30	58	17
U. Mass	91	45	3.4	83	55	61	37	15	94	1010-1250	21	58	16
U. New Hampshire	95	44	2.9	85	58	72	48	12	94	1010-1200	18	77	15
Texas Christian U	99	43	2.7	82	67	64	49	7	87	1030-1250	28	71	28
U. Arizona	99	43	3.6	77	59	55	29	17	99	990-1220	32	86	10
Ohio University	107	42	3.1	85	58	70	42	11	89	21-26	18	75	11
U. Dayton	107	42	2.5	89	66	76	33	4	76	22-27	18	84	27
U. Kentucky	107	42	3	79	59	58	34	9	88	21-26	26	82	21
U. Nebraska	107	42	3.2	81	54	54	36	13	N/R	21-27	26	78	25
U. of the Pacific	107	42	2.5	86	65	69	57	6	81	1050-1260	46	71	12
Florida State	112	41	3	86	65	63	31	17	91	1040-1240	58	70	13
U. Missouri - Rolla	112	41	2.8	84	73	55	39	7	90	25-30	40	90	21
U. S. Carolina - Columbia	112	41	3	82	54	60	36	11	N/R	1010-1230	24	70	24
U. Oklahoma	117	40	3	82	60	54	37	14	92	23-28	32	89	20
Drexel U.	123	39	2.9	85	63	57	49	8	70	1070-1280	23	60	21

2005 U.S. News and World Report Rankings

2005	Rank	Overall Score	Peer Assessment	Ave. Fresh. Ret.	Grad rate Predicted	Grad rate Actual	%Class under 20	%Class >50	%Fulltime faculty	SAT/ACT 25-75th%	Freshman in top 10%HS	Accept. Rate	Ave. Alumni giving rate
Ohio University	98	43	3.1	84	58	70	41	11	90	22-26	19	79	9
SUNY Col. Env. Sci & Forest	98	43	2.5	85	62	70	72	7	99	1040-1220	26	57	21
Texas Christian U	98	43	2.7	82	65	65	45	9	82	1060-1260	33	65	28
U. Arizona	98	43	3.6	77	59	55	29	17	99	990-1240	34	85	10
U. Dayton	98	43	2.6	88	67	76	33	2	74	22-28	19	82	26
U. Mass	98	43	3.3	84	57	64	38	15	94	1030-1240	16	82	15
U. Nebraska	98	43	3.2	81	59	59	32	14	100	21-27	25	76	23
U. New Hampshire	98	43	2.9	85	58	72	44	14	94	1010-1230	20	69	15
Drexel U.	106	42	3	84	66	57	53	7	75	1100-1290	31	70	19
U. Missouri - Rolla	106	42	2.8	84	76	60	45	7	91	25-30	40	79	21
U. of the Pacific	111	41	2.6	85	68	68	58	6	83	1050-1278	37	71	12
Florida State	111	41	3.1	86	64	63	32	16	91	1050-1250	55	64	12
U. S. Carolina - Columbia	117	40	3	82	56	61	35	11	90	1030-1250	26	64	21
U. Oklahoma	120	39	3	83	64	54	35	14	92	24-28	36	82	21
U. Kentucky	120	39	3	79	63	61	21	17	88	22-27	28	81	20

2006 U.S. News and World Report Rankings

	2006 Rank	Overall Score	Peer Assessment	Ave. Fresh. Ret.	Grad rate Predicted	Grad rate Actual	%Class under 20	%Class >50	%Fulltime faculty	SAT/ACT 25-75th%	Freshman in top 10%HS	Accept. Rate	Ave. Alumni giving rate
SUNY Col. Env. Sci & Forest	93	45	2.7	84	N/R	68	76	7	96	1030-1240	20	64	26
U. Nebraska	97	44	3.1	80	58	61	34	14	99	22-28	28	74	22
Texas Christian U	97	44	2.7	82	67	67	50	8	81	1080-1270	32	64	28
U. Arizona	97	44	3.6	78	59	57	31	16	99	1000-1230	36	83	9
U. New Hampshire	97	44	2.8	85	58	71	49	13	96	1010-1230	22	68	15
U. Dayton	104	43	2.5	88	66	75	34	4	74	23-27	22	80	24
U. of the Pacific	104	43	2.5	85	65	70	59	6	83	1060-1280	37	64	12
U. Mass	104	43	3.2	84	58	62	41	15	94	1030-1240	15	81	14
Ohio University	109	42	3	84	56	70	45	10	90	21-26	17	86	10
Drexel U.	109	42	2.9	83	64	58	53	8	79	1100-1310	34	73	18
Florida State	109	42	3	87	64	66	34	15	90	1070-1260	55	65	17
U. Missouri - Rolla	109	42	2.7	84	77	63	42	8	92	24-30	41	93	21
U. Oklahoma	109	42	3	84	59	56	42	12	91	23-28	36	82	21
U. S. Carolina - Columbia	109	42	3	83	57	64	43	11	89	1050-1250	25	67	22
U. Kentucky	120	40	3	78	63	60	27	16	88	21-27	26	79	21

NSF External Expenditures:

The committee chose to utilize total expenditure data collected and published by NSF, rather than individually reported data, to standardize the data. The most current data available from NSF at the time of the study was 2003 R&D expenditures.

Source: TABLE 26. R&D expenditures at universities and colleges, ranked by FY 2003 R&D expenditures: FY 1996–2003;

<http://www.nsf.gov/statistics/nsf05320/tables/table26.xls>

Selection of Peer Institutions

The following institutions were selected based on the criteria of having comparable (1) ranking as Ohio University and have improved or maintained these rankings, as per U.S. News and World Report and (2) have increased total external funding at least two-fold within six years within the approximate range of \$20M to \$100M, as per NSF.

	1996	1997	1998	1999	2000	2001	2002	2003	Ratio 2003/1996	Increased >2	US NEWS (2004-06)
119 U. NH	45,693	45,886	52,359	57,613	72,108	87,879	93,222	96,415	2.1	Yes	95,98,97
126 U. Louisville	29,655	33,434	39,147	57,051	64,062	72,857	80,974	88,522	3.0	Yes	4th tier
127 U. MS all campuses	26,215	26,231	28,079	32,129	44,927	58,410	71,893	85,378	3.3	Yes	3rd tier
134 Drexel U.	19,322	19,267	19,603	22,397	24,876	27,698	44,465	69,548	3.6	Yes	123,106,109
148 FL International U.	16,856	17,359	17,880	25,061	34,649	44,291	47,654	52,175	3.1	yes	4th tier
154 GA State U.	18,114	27,069	31,153	36,523	36,600	38,960	44,564	45,653	2.5	Yes	4th tier
160 Northeastern U.	17,980	19,822	26,385	30,209	35,340	34,467	38,540	42,931	2.4	yes	3rd tier, 120, 115
161 U. MD Baltimore County	14,304	19,799	18,155	21,854	26,044	29,641	36,323	42,906	3.0	yes	3rd tier
162 U. NV, Las Vegas	16,893	15,628	16,912	20,170	24,215	27,008	30,527	42,205	2.5	yes	4th tier
171 OH U. all campuses	18,329	21,008	21,469	21,437	23,767	27,146	36,601	37,527	2.0	yes	107, 98, 109
176 Wright State U. all campuses	17,381	17,291	19,676	23,131	29,092	32,033	30,962	34,860	2.0	yes	4th tier