

**Research Growth Strategies – Final Report  
November 8, 2006**

**Introduction**

Given the UWM campus focus on growing research, an ad hoc committee consisting of representatives from the Offices of the Provost and Academic Affairs and the Vice Chancellor for Research\* met from August - November, 2006 to examine research growth models and strategies of (aspirational) peer universities successful in increasing their own research agendas and profiles. Universities included in the study were those which experienced extraordinary growth, excluding medical schools, over a ten year period (1994-2003) as documented by [TheCenter](#) in their annual report “*The Top American Research Universities*”. [TheCenter](#), housed at the University of Florida, (<http://thecenter.ufl.edu/>) offers analysis and data useful for understanding American research university performance. Additional institutions were suggested by the Provost and UW-System.

The institutions studied are listed below along with the “tier” to which they were assigned.

<b>University</b>	<b>Tier</b>
Arizona State University	I
Georgia State University	I
Marquette University	III
North Dakota State University	I
Portland State University	III
Texas Tech University	II
University of Cincinnati	I
University of Illinois-Chicago	I
University of Louisiana-Lafayette	II
University of Louisville	I
University of Maryland-Baltimore Co	I
University of Memphis	II
University of Mississippi	II
University of New Hampshire	II
University of Oklahoma	II
University of South Carolina	I
University of South Florida	II
University of Southern Mississippi	II
University of Wisconsin-Madison	III
Virginia Commonwealth University	III
Wayne State University	III

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\* Committee members included Gesele Durham and Colleen Johnson from the Office of the Provost and Academic Affairs/Assessment and Institutional Research and Mark Harris, Vicky Everson and Daniel Guido from the Office of Vice Chancellor for Research.

The final 21 universities included were studied individually in an effort to document the key strategies each employed which allowed and facilitated the growth of their research enterprises. Members of the committee researched the institutional websites to extract information related to research and growth strategies. This information was then compiled to identify strategies.

### *Institutional Tiers*

In order to facilitate use of the findings, after completing the survey, the committee divided the institutions into three tiers based upon the following criteria:

- Tier I      Institutions that have rapidly growing research funding that have successfully used multiple research growth strategies and presented documentation of their success. These institutions should be contacted or visited.
- Tier II     Institutions with rapid to moderate growth in research funding but with less information on strategies. These institutions are worth a careful examination.
- Tier III    Institutions with less growth in research funding or that are quite different from UWM. These may provide information on selected strategies but are not considered the best analogues for UWM.

### *Structure of the Report*

The report is divided into three major parts. Part A (p. 3-21) summarizes the nine research growth strategies identified in our survey, and some details of their implementation in the Tier I and II institutions. Part B (p. 22-65) presents a detailed profile for each of the 21 institutions. Part C (p. 66-68) presents ten-year funding patterns for these institutions and UWM, and a more detailed analysis of funding in 2003 that allows the impact of medical and engineering schools to be assessed. Appendix A (p. 69) indicates which team member studied each institution.

### *Sources of Institutional Data*

The primary sources of information were the websites of the institutions. Particularly useful were the following web pages as:

- Office of the Vice President of Research or similar
- University “News & Events” pages or press release archives
- Briefings or presentations by the VPOR or university presidents to regents, senates or similar University Fact Books

## Part A: Summary of Research Growth Strategies

This section highlights notable strategies for research growth that were identified among the twenty-one institutions studied. The strategies were classified in eight broad categories plus an “other” category. A summary of how each strategy is being used is given below. This is followed by a summary of the strategies in each of the “tier I” and “tier II” institutions, arranged by tier and alphabetically by institution name within each tier.

### ***1. New funding from private and/or state sources identifying, committing to, and building on specific areas of excellence***

#### Range of funding:

- \$1.5M - \$125M

#### Specific projects:

- Comprehensive campaign
- State sales tax proceeds
- State cigarette tax increase
- Lottery funds

#### Model institutions:

- Arizona State University
- Georgia State University
- University of Louisville
- University of South Carolina

### ***2. Collaborated with corporate and/or private funding sponsors for specific research development***

#### Range of funding:

- \$1.5M - \$200M

#### Specific projects:

- Single biotech grant from private institute
- Collaboration with GE Healthcare
- Collaboration with private foundation and citizens
- Collaborations with other research institutions and private organizations

#### Model institutions:

- Georgia State University
- University of Illinois-Chicago
- University of Louisville
- University of South Carolina

### ***3. Collaborations and partnerships with local groups/cities/state/organizations to research improvements that will make a difference to the surrounding communities and/or impact the local economy***

#### Range of funding:

- \$1.2M - \$860M

#### Specific projects:

- Collaboration with business, research universities, and state government (return on investment 5 to 1)
- State return on educational investment program
- Partnership with community, college, and United Parcel Service

#### Model institutions:

- Georgia State University
- University of Cincinnati
- University of Louisville

**4. Targeted center or cluster research groups (aligned to federal funding)**

Range of funding:

- \$.5M - \$43M

Specific projects:

- Biodesign
- Nanoscale Science and Engineering
- Racial/Ethnic disparities in healthcare
- Bioterrorism studies

Model institutions:

- Arizona State University
- North Dakota State
- University of Illinois-Chicago
- University of South Carolina

**5. Significant federal awards to develop research infrastructure (EPSCoR, earmarks)**

Range of funding:

- \$10K - \$22M

Specific projects:

- NSF EPSCoR affiliation
- US DHHS Centers of Excellence
- NASA
- Public health

Model institutions:

- North Dakota State
- University of Illinois-Chicago
- University of Louisville

**6. RGI-like programs (internal seed funding)**

Range of funding:

- \$10K - \$21M

Specific projects:

- Investigator Incentives
- Clinical and Translational Science Awards
- Challenge for Excellence goals
- Research Opportunity Program

Model institutions:

- Arizona State University
- North Dakota State
- University of Louisville
- University of South Carolina

**7. Created standalone research centers, parks, and/or incubation programs**

Range of funding:

- Ranges from single 12,000 sq.ft. facility to 143 acre research “park”

Specific projects:

- Life Sciences Research Park
- Technology Business Incubation Program
- Regional Biomedical Business Start-up Center
- Private/public incubator facility/programs

Model institutions:

- Arizona State University
- North Dakota State
- University of Cincinnati
- U of Louisville

**8. *Created a Research Office with a staff, missions, website and newsletter to provide complete assistance for researchers and serve as the marketing/publicity forum***

Range of funding:

- (no specific info on funding range available)

Specific projects:

- “Proposal Machine” – targets \$1M+ external funding proposals
- Assoc. VP for Federal Government Relations
- Office of Entrepreneurial Affairs
- “Researcher’s Toolbox”

Model institutions:

- Arizona State
- North Dakota State
- U of Cincinnati
- U of Mississippi-Oxford
- U of Southern Mississippi

**9. *Programs, initiatives, or investments that are unique (or do not fit into another category)***

Range of funding:

- (no specific info on funding range available)

Specific projects:

- Technology Commercialization Company (university-owned)
- Entrepreneurial education initiative for faculty and students
- Foundation that does university/industry match-making (proposals)
- BS in entrepreneurship – ranked #3 in nation
- International Service Learning Program

Model institutions:

- Arizona State
- North Dakota State
- U of Illinois-Chicago
- U of Louisville

## Institution Summary

### STRATEGY 1:

- **New Funding from private and/or state sources identifying, committing to, and building on specific areas of excellence**

TIER I	
Arizona State U.	<p><b>Tax proceeds.</b> Technology and Research Initiative Fund (TRIF) established in 2000 by Arizona voters. Approved a 6/10<sup>th</sup>-cent increase in state sales tax to be dedicated to K-12, the community colleges, and the state's three public universities (administered by Arizona Board of Regents). FY03 was about \$46M and ASU's portion in '05 was \$23M. Maximum allowable investment in capital expenditure is 20% per year. <a href="#">PR 3/24/06</a></p> <p><b>Large private grants.</b> \$14 million Gates Foundation grant to Biodesign Institute, \$43.6 million Army grant that led to the formation of the Flexible Display Center, (announced) \$18 million grant for the incoming dean of the Ira A. Fulton School of Engineering for the <a href="#">Microscale Life Sciences Center</a></p> <p><b>State \$ for bricks &amp; mortar.</b> ASU added one-million square feet of research space since 2004. Funding is partially from the Arizona Legislature's <a href="#">Research Infrastructure Bill of 2003</a>. Here is a one-page <a href="#">summary</a> of facilities.</p>
Georgia State U.	<p>Raised \$125M in <a href="#">comprehensive campaign</a>. Highlights include \$18.45M for student scholarships; \$18.9M for professorships/endowed chairs; \$43.2M for programs/centers targeting business, ed, law, policy studies, health care delivery; \$21.5 for facilities/equipment.</p>
North Dakota State	<p><b>State investment up.</b> Over the past five years, the State of North Dakota has increased state appropriated support of NDSU by \$45.2 million. Source: president's address, 2005.</p> <p><b>\$1.48M in Forensics.</b> \$1.48 million grant from the U.S. Department of Justice to develop a forensics laboratory that supports regional law enforcement agencies.</p> <p><b>\$8.9M for Neurosci.</b> In 2004, the National Institutes of Health awarded a five-year \$8.9 million grant to establish a Center for Biomedical Research Excellence (COBRE) for visual neuroscience at NDSU.</p> <p><b>\$8.4 M for Chem/Pharm.</b> An earlier \$8.4 million award is being used to fund a center in chemistry and pharmacy.</p>
U. of Cincinnati	<p>\$81M increase in <a href="#">federal funding</a> in past two years, approximately 50% of which is from NIH; \$6M campaign for scholarships and research</p>
U. of Illinois-Chicago	<p>"<a href="#">Access to Excellence</a>" Joins scholarship to urban access mission; Structuring teaching, research and public service programs designed to improve the quality of urban life promoting public health, improving schools, furthering technology..."taking special account and advantage of the extraordinary ethnic and cultural diversity of the Chicago metropolitan area" <a href="#">UIC Scope and Mission Statement</a></p> <p><b>UIC's <a href="#">National Center for Data Mining</a></b> Est. in 1998 as resource for research...recently set trans-Atlantic internet data transfer speed record, developing a protocol that transmitted 1.4 terabytes of information at 6.8 billion bits/second.</p>
U. of Louisville	<p>\$66M Research Challenge Trust Fund "<a href="#">Bucks for Brains</a>" matches private contributions to help "Kentucky attract and retain world-class researchers and scholars, raising the national academic profile of the state."</p> <p>U of L receives \$.005 of <a href="#">state cigarette tax increase</a> for support of cancer research.</p>
U. of Maryland-	<p>\$100M capital campaign; \$17.9M NSF grants; \$4.2M from Howard Hughes Medical Institute; \$5M</p>

Baltimore Co	from Erickson Foundation matched by State <a href="#">funds</a>
U. of South Carolina	<p><b>Endowments from lottery \$.</b> The South Carolina Commission on Higher Education oversees the Research Centers of Economic Excellence <a href="#">endowment program</a>, using lottery funds that state research universities must match. Since the program's inception in 2002-2003, USC has received approximately \$30 million in state money for 11 chairs, representing nine centers of excellence that it will manage or co-manage with other institutions. More on the state legislative act of 2002 <a href="#">here</a>.</p> <p><b>The U's investment plan</b> "We plan to meet those challenges by judiciously investing some \$60 million annually for the next five years in new technology, facilities, infrastructure, services, software, and people." (Vision Report – details on this planned investment are on this <a href="#">page</a>).</p> <p><b>\$10.8M for nano</b> A yet-to-be-determined site for a new, larger NanoCenter, where USC will engage in the micro-scale research of nanotechnology. The new center recently received \$10.8 million in state money for a total of \$35 million in investment capital.</p>
<b>TIER II</b>	
Texas Tech	<p><b>\$2M from State for Center for Excellence in Agri Topics.</b> The State of Texas made a first investment from the Texas Emerging Technology Fund (launched last year, \$200M) at Texas Tech. \$2M towards becoming the "international leader in agriculture genomics research and development and help make the west Texas region the fiber capital of the world." Major corporate partner: Bayer CropScience, which is contributing an endowed professorship. Plan is to launch the International Center of Excellence in Agriculture Genomics and Biotechnology. TT's investment is \$1.8M in personnel and lab equipment. Director is tops in the world for cotton geneticists and was lured from UC Davis. Has over \$6.5M in competitive grants. She's bringing a team. 2/22/06 PR.</p> <p><b>\$25M from U for Business School Complex.</b> \$60M, 140,000 sqft business building "complex" through a capital campaign that is co-chaired by two CEOs (PlainsCapital Corp and Celaro Energy) and scheduled for completion in 2009. College raised \$17M, Univ. "allocated" \$25M, and remaining need is \$18M. 4/21/06 press release.</p> <p><b>Experimental Sciences Building.</b> \$37M (\$24M in tuition revenue bonds, \$13M from Higher Ed Assistance Fund). 128,000 sqft total, 51,000 sqft laboratories. Designed for "interdisciplinary research." Using "unfinished shell space to attract more premiere researchers to the university."</p> <p><b>\$4M and \$2.4M Congressional Appropriations.</b> Congressman helps university institute secure \$3.75 million through the Defense Appropriations Bills for FY 2004 and 2005 in order to fund the Zumwalt Program, which deals with advanced fabrics against bio/chemical attack agents. PR (no dateline). Later secured \$2.4M more in FY06 appropriations (2/6/06 PR).</p> <p><b>\$2.99M from State for "Research Development."</b> From Legislature (budget), 5/2006.</p> <p><b>Regents contribute \$10M towards faculty chairs.</b> Two year fundraising effort has generated \$26M for "Regents Professorships and Chairs" including \$10M from Regents (from sale of freeway right-of-way) for matching donor gifts. Smith [the VCOR] said the professorships and chairs allow the university to recruit and retain exceptional faculty members. The primary goal is to add nationally and internationally recognized scholars who bring excellence in teaching, research, outreach and leadership. "Faculty members rely on endowments to enhance their research and teaching endeavors," Smith said. "Regents Professorships and Chairs bring prestige to our most outstanding faculty and recognition to our donors." Regents Chairs are currently funded with a minimum endowment of \$1 million. A Regents Professorship is funded by a minimum endowment of \$500,000. 1/24/06 PR.</p>
U. of Louisiana-Lafayette	<a href="#">Strategic Plan 2001-2005</a> – Incorporating the direction of Louisiana:Vision 2020, Objective 3: "Increase privately held assets by 2% over the baseline amount of \$75M in 2000 to \$90M by the end of academic year 2005-2006"; <a href="#">Strategic Plan 2005-2010</a> includes phase 2 of aggressive growth plan focusing on constant, measurable improvement with BORSF matching funds.
U. of Memphis	Fed Ex established <a href="#">FedEx Institute of Technology</a> at U of M; Methodist Healthcare Foundation gift

	of \$750,000 to Urban Child Institute at U of M to establish healthcare technology center
U. of Mississippi-Oxford	<p><b>More than 20 research centers</b> – The University focuses on patents and commercializing the results of its research to “stimulate economic development and enhance quality of life.” <a href="#">Ole Miss Facts 04-05</a></p> <p><b><a href="#">IGERT</a> (Integrated Graduate Education and Research Traineeship) collaboration with USM and with funding support from NSF (Initiated 1997)</b> – crosses the bridge between medical chemistry (at UM) and polymer science (at USM) and encourages entrepreneurship in the mix. Students who complete the program are prepared to start their own companies. Students receive a full tuition waiver plus a \$30,000 stipend.</p>
U. of New Hampshire	<p><b>State appropriations.</b> State appropriates \$ in a Technology Innovation Grant <a href="#">program</a>. Has awarded \$4M to date in 146 grants involving 106 companies. The funds are matching monies (balance coming from companies in the form of cash or inkind). \$275,000 available for current year (5 to 8 awards).</p> <p><b>\$53M for eng/sci bldg.</b> Home of the College of Engineering and Physical Sciences (CEPS), Kingsbury is the first UNH science building to be modernized under the legislature’s Knowledge Education Economy Plan (KEEP). The state has contributed \$44 million to the \$52.98-million <a href="#">project</a> to help ensure continued development of the New Hampshire’s high-tech economy.</p> <p><b>\$27.5M for squad cars.</b> <a href="#">Project54</a> research involves using voice control in police squad cars and includes a total of \$27.5M in appropriations to date by NH Senator Judd Gregg. The technology has been deployed widely.</p>
U. of Oklahoma	\$100M raised in four years during <a href="#">Campaign for Engineering</a> to build state-of-art facilities and provide scholarship funds and faculty incentives.
U. of South Florida	\$430,000 private and State funds for first-generation scholarship; State first-generation grant <a href="#">program</a> matches up to \$967,000
U. of Southern Mississippi	“ <a href="#">Expanding Excellence</a> ” initiative to provide the highest-tech education possible, creating an innovative, engaging learning experience. Established the Learning Enhancement Center and iTech in support of that initiative.



**STRATEGY 2:**

- Collaborated with corporate and/or private funding sponsors for specific research development

TIER I	
Georgia State U.	Received \$1.5M <a href="#">biotech grant</a> from Howard Hughes Medical Institute.
North Dakota State	<p><b>Open Source collab.</b> NDSU’s Archaeology Technologies Laboratory partnered with two or more corporations to develop and release, in June 2005, a beta version <a href="#">open source</a> modeling and rendering software platform.</p> <p><b>Semiconductor collab.</b> Tessera Technologies, Inc., a leading provider of miniaturization technologies for the electronics industry, today announced that it has completed a successful chip-scale packaging (CSP) technology transfer to North Dakota State University (NDSU) and has <a href="#">partnered</a> with NDSU in the development of a fully functional microelectronics center at the university. The work completed by NSDU and Tessera was sponsored by the DMEA, an arm of the U.S. Department of Defense (DoD).</p> <p><b>RFID collab.</b> Alien Technology, Morgan Hill, Calif., is building a research and manufacturing facility in NDSU’s Research &amp; Technology Park. The center is expected to be operating by mid 2006, making it one of the largest RFID manufacturing centers in the world.</p>
U. of Cincinnati	<a href="#">Center for Academic Research Excellence</a> (CARE) bldg received federal , state, and private funding - \$160M project – eye diseases of elderly research and labs, library, admin offices
U. of Illinois-Chicago	<b>9.4-Tesla</b> , the world’s most powerful MRI – developed by GE Healthcare in conjunction with UIC’s Dr. Keith Thulborn – located in the new Center for Magnetic Resonance Research at UIC – to be used to help identify and study diseases of the brain, mapping of human thoughts, and cognitive/learning processes. <a href="#">9.4 Tesla</a>
U. of Louisville	<a href="#">James Graham Brown Cancer Center</a> established by local citizens and a \$15M gift from the James Graham Brown Foundation, and incorporated into the U of L in 1987. The center has grown to include 50+ clinical/research members with a research support increase of 100%.
U. of Mississippi-Oxford	
U. of South Carolina	<p><b>According to VPOR</b> “...our collaborations with other research institutions and organizations. These include the Medical University of South Carolina, Health Sciences South Carolina (a \$200 million collaborative involving four of our state’s largest universities and health systems to increase health sciences research and improve the health status of citizens), and the Savannah River National Laboratory as well as private partners such as Intel, Kemet, and Voridian.”</p> <p><b>NSF I/UCRC</b> NSF funded the IUCRC on <a href="#">Fuel Cells</a> in 2003. Currently 16 companies and 12 faculty-led research groups.</p>
TIER II	
Texas Tech	<p><b>Agreement with Sandia National Lab.</b> “Sandia has working relations with only about two dozen universities nationwide,” said Sweazy. “This agreement is a first step in Texas Tech joining that elite group of universities.” ... “Sandia only hires scientists and engineers from the universities with which it does business,” said Sweazy. It also is important for Texas Tech to have a formal agreement with Sandia because of the large amount of federal funding, about – \$2.3 billion – that Sandia receives for research and development, said Sweazy. Sandia typically funds about \$50 million per year in research at their preferred universities. (The national lab is operated by Sandia Corporation, a Lockheed Martin company, for the U.S. Department of Energy’s National Nuclear Security Administration.) 2/8/05 PR.</p> <p><b>Int’l Alliance on bio/chemical threats.</b> Developing garments for first responders to natural disasters and bio-terror threats. The partnership includes the university’s institute, the British</p>

	company Remploy Frontline, known globally as the premiere manufacturer of CBRN (Chemical Biological Radiological and Nuclear) protective clothing, and U.S.-based Hobbs Bonded Fibers. The three signed an agreement Friday to work together to develop and produce the new protective wear. 9/16/05 PR.
U. of Louisiana-Lafayette	
U. of Memphis	Partners/sponsors of FedEx Institute of Technology: Steelcase, AutoZone, BellSouth, Time-Warner Cable, MBI, Brother, IntelliMark, SMART, Oak Ridge national Lab, Cisco, HP, Dell. Women's Foundation of Greater Memphis provided funds for Girls Experiencing Engineering (GEE).
U. of Mississippi-Oxford	<b>Jim Barksdale, <a href="#">Former CEO of Netscape and a 1965 alum</a></b> , has made numerous, major contributions toward various programs and initiatives: <ul style="list-style-type: none"> <li>o <b>1997</b> – <a href="#">Honors</a> College established (with <b>\$5.4M</b> endowment) to merge “intellectual rigor with public service.”.</li> <li>o <b>January 2000</b> – Barksdale Reading Institute established with <b>\$100M</b> endowment to implement education reform in MS and to dramatically improve the reading skills of the children there. <a href="#">BRI</a></li> <li>o 2004 - Children of Jim and Sally endowed a <b>\$100M</b> scholarship in the name of their mother through the Ole Miss Women's Council for Philanthropy. <a href="#">Children</a></li> </ul> <b>\$2M private gift (2006)</b> – to redesign the curriculum of the master's degree in school administration to train effective school principals.
U. of New Hampshire	<b>Industrial Research.</b> New Hampshire Industrial Research Center. In 1991 the <a href="#">NHIRC</a> was created by the New Hampshire Legislature for the purpose of providing a mechanism to increase collaboration between New Hampshire businesses and university-based research to promote applied and basic scientific research, engineering, and associated marketing research and technology transfer to support the New Hampshire industrial and business community for the purpose of creating high quality jobs through technology development and innovation.  <b>Pharma.</b> Bentley Pharmaceuticals (of parent Exeter) has a research arrangement with UNH that has recently resulted in a breakthrough product for drug-delivery called the <a href="#">Nanocaplet</a> . This appears to be a four year collaboration giving Bentley an exclusive agreement of some sort.
U. of Oklahoma	\$5M gift from Exxon Mobil for <a href="#">Engineering</a> Practice Facility to provide unique opportunities in real-world, hands-on interdisciplinary projects, leadership, and teamwork.
U. of South Florida	<a href="#">USF</a> Community Engagement Initiative for economic development, sustainable communities, and critical needs for education and health professions
U. of Southern Mississippi	<b>Center for Spectator Sports Security Management (<a href="#">SSSM</a>)</b> – established in 2006, focused on Research, Education, and Outreach in the pursuit of ultimate safety during sport activities. The Center develops plans for building security awareness, improving security policies, and enhancing emergency responses.

**STRATEGY 3:**

- **Collaborations and partnerships with local groups/cities/state/organizations to research improvements that will make a difference to the surrounding communities and/or impact the local economy**

TIER I	
Georgia State U.	<a href="#">Georgia Research Alliance</a> has invested over \$400 million over 15 years for innovative, university research and development. Nearly \$2 billion in new federal and private funds have come back to the Georgia economy; ROI 5 to 1.
U. of Cincinnati	Ohio's Return on Educational Investment ( <a href="#">ROEI</a> ) is three-pronged plan: tax/Medicaid reform to free up funding for state investment in higher education; grow talent pool; and create/maintain new job/business opportunities; Ohio's <a href="#">top research universities</a> have \$6.2Billion impact
U. of Illinois-Chicago	\$3.2M grant from NSF to enhance the " <a href="#">Math Trailblazers</a> " K-5 program  <a href="#">Great Cities Commitment</a> – promoting improvement to public health and schools in Chicago.  MacArthur Foundation \$1.2M grant in support of <a href="#">ceasefire initiative</a> with local city police – reduced gun-related deaths in the area by 44%
U. of Louisville	<a href="#">Metropolitan College</a> program funded by UPS, Jefferson Community College and Jefferson Technical College, providing tuition-free education with employment. From community's perspective, this agreement helped UPS to invest \$860M – and keep the air hub (and the jobs) – in Louisville.  Partnership with <b>Louisville's Jewish Hospital and Norton Hospital</b> to create the <a href="#">University of Louisville Hospital</a> - one of the most progressive medical centers in health-sciences research and patient care.
U. of Maryland-Baltimore Co	UMBC is interactive partner in Maryland's economy ( <a href="#">institutional</a> capabilities)
U. of South Carolina	
TIER II	
U. of Louisiana-Lafayette	<b>Manufacturing Extension Partnership of Louisiana (<a href="#">MEPoL</a>)</b> helps businesses and manufacturers statewide increase productivity and technological access. MEPoL was established at the LPC (Louisiana Productivity Center) through a cooperative agreement with the National Institute of Standards and Technology (NIST), a division of the U.S. Dept of Commerce. <a href="#">Research overview</a>
U. of Memphis	Schering-Plough Foundation works with community in three major areas: health, education, community initiatives. Assisi Foundation of Memphis has awarded over \$80M in past 20 years to healthcare & human services, education & literacy, social justice, cultural enrichment & arts.
U. of Mississippi-Oxford	<b>\$2.5M FedEx gift (2005)</b> – for renovation of the Starnes Athletic Center to create academic support center for student athletes that includes advanced computer facilities, study halls and classrooms.
U. of Oklahoma	\$250,000 contribution from Trilogy to endow professorship; State provides matching funds for private gifts to endowed faculty positions.
U. of South Florida	<a href="#">Florida High Tech Corridor's</a> focus is to foster applied research among UCF, USF, and UF and their respective high tech industry partners. USF <a href="#">CONNECT</a> is a link to small business development services at USF and throughout Tampa Bay area.
U. of Southern Mississippi	

**STRATEGY 4:**

○ **Targeted center or cluster research groups (aligned to federal funding)**

TIER I	
Arizona State U.	<p><b>Flexible Display Center.</b> US Army-funded industry consortium (appears to be 16 companies at present) w/ a 250k sqft facility including 43k sqft of cleanroom space. Ten personnel in this cluster. Launched in Feb 2004 w/ \$43M Army grant. <a href="#">Link.</a></p> <p><b>Arts, Media &amp; Engineering Program.</b> Has an NSF IGERT, 10 faculty, 11 staff, two-dozen IGERT fellows, 10+ affiliated faculty. <a href="#">Link.</a></p> <p><b>Institute for Biodesign.</b> 84 faculty and researchers in the cluster, 11 centers in the institute. Dozens of clinical, research/education and industrial partners listed. Facility is 800,000 sqft; biggest single infrastructure investment in Arizona. <a href="#">Link.</a></p> <p><b>Center for the Study of Religion &amp; Conflict.</b> 89 affiliated faculty, 11 staff. Won a \$0.5M “prestigious” private <a href="#">award</a> in 3/06. <a href="#">Link.</a></p> <p><b>Smaller but notable programs:</b> (1) ASU became lead institution (2005) of NSF <a href="#">PSERC</a> (13 universities, electrical power consortium; ASU has 8 faculty, 12 grad students). (2) ConnectionOne is an NSF I/UCRC. 10 faculty among three universities (also U. Hawaii and Ohio State) but only three in the cluster at ASU. Six specialized rooms in one facility (specialized equipment). <a href="#">Link.</a> (3) <a href="#">Decision theater.</a></p>
Georgia State U.	<p>Georgia Cancer Coalition: biotech, drug design, brain research through neuroscience initiative, Center for Behavioral Neuroscience, an NSF-funded consortium with Emory Univ and other Atlanta partners.</p>
North Dakota State	<p><b>Agri Research Ctr.</b> The Langdon Research Extension <a href="#">Center</a> is 710 acres for agricultural research and was established in 1907. 14 Centers (8 extension centers and 9 NDS departments). ½ of funding is from “State General Fund” (\$30M). \$4.6M from Federal appropriations. \$23M in grants/contracts. <a href="#">Link.</a></p> <p><b>Nano.</b> NDSU’s Center for Nanoscale Science and Engineering manages a research budget of nearly \$18 million for fiscal year 2005. 42 faculty and researchers, over 75,000 sqft of facilities and 15,000 sqft clean room (largest in Midwest). The center began with a \$1.4 million Department of Defense contract in 2001 to establish a Center of Excellence for research in low-power, wireless micro and nano-sensors. <a href="#">Link.</a></p>
U. of Cincinnati	
U. of Illinois-Chicago	<p><a href="#">Center for Population Health and Health Disparities:</a> \$19.6M National Cancer Institute grant to research blood disorders <a href="#">UIC 9/6/06 news release</a></p> <p>\$7.27M awarded from National Cancer Institute to study <a href="#">racial and ethnic disparities</a> in the prognosis and outcome of breast cancer victims</p> <p>“<a href="#">Bioterrorisk</a>” \$15.7M NIH grant to develop drugs to treat and stop the spread of anthrax, funded by the National Institute of Allergy and Infectious Diseases</p>
U. of Louisville	
U. of Maryland-Baltimore Co	<p>Engineering and Info Tec <a href="#">cluster</a>-nanotech, bioengineering, and environmental</p>
U. of South Carolina	<p><b>Innovista.</b> USC's research initiatives—in nanoscience and technology, biomedical, future fuels, and the environment, as well as others—will be focused in a unique new intellectual ecosystem known as <a href="#">Innovista</a>. This Innovation District will foster science and creative research, but also promote fitness, health, and environmental initiatives. By creating space for residences, retail, restaurants, and recreation that will complement the research, Innovista will be a place to live, work, learn, and play.</p>

	Will encompass 8M sq.-ft.
<b>TIER II</b>	
Texas Tech	<b>Health Science in national Medicare pilot.</b> ...announced as one of six organizations nationwide to operate a three-year demonstration project to help Medicare beneficiaries improve their quality of life while reducing their medical expenses and Medicare program costs. 7/5/05 PR. [Note from Guido: Is it a “strategy” to seek out these national pilot programs in order to build relationships that will yield significant potential for multi-year, multi-institutional follow-on extramural funding and exposure to national research priority-setting officials?]
U. of Louisiana-Lafayette	<b>\$3.9M US Dept of Energy/LA Board of Regents Support Fund project</b> (2004) – awarded to faculty in the Center for Advanced Computer Studies for research on technical solutions/software implementations useful for the energy industry. The CACS is touted as the best computer studies program in Louisiana and one of the best in the nation. <a href="#">CACS</a>  Competitive NSF programs \$1.35M of Biology faculty research funding awards for UL Lafayette many <a href="#">Unique Areas of Excellence</a> .
U. of Memphis	Healthcare (NSF/NIH), Learning Technologies, Community Hazards (NSF, DOD, USGS)
U. of Mississippi-Oxford	<b>\$11M NIH Grant (2006)</b> – to establish the <a href="#">Center of Research Excellence in Natural Products Neuroscience</a> to identify how natural products affect the nervous system, investigating the health benefits of dietary supplements, and developing new medications to treat neurological and psychiatric diseases. <b>\$1.27M US Army Space and Missile Defense Command grant (2006)</b> – to design a low-power radar chip that would be integrated into antenna arrays to ultimately seek and track targets. <a href="#">RadChip</a>
U. of New Hampshire	<b>\$3.6M from NOAA.</b> The University of New Hampshire’s Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET) awarded <a href="#">15 grants</a> totaling \$3,650,337 for new tools to clean up and protect coastal environments. A partnership of UNH and the National Oceanic and Atmospheric Administration (NOAA), the Institute was established in 1997 with the support of U.S. Sen. Judd Gregg (R-NH).  <b>Marine Research.</b> Formed in 1974, the <a href="#">UNH Marine Program</a> serves to integrate the marine research, education and public service activities of over 60 faculty, 300 undergraduate students and 100 graduate students from 14 departments and three colleges at the university. The Program serves as a catalyst for marine research activities at various levels from individual investigators to large interdisciplinary Centers of Excellence and Cooperative Institutes. Since 2000, these activities have attracted in excess of \$20M in extramural support annually at the university.
U. of Oklahoma	Two key research programs with distinguished faculty have been selected for additional faculty recruitments: phased array radar within the School of Meteorology and applied genomic research with the Depts. of Chem/Biochem and Botany/Microbiology ( <a href="#">Academic Institutional Plan</a> ).
U. of South Florida	National Center for Water Treatment Technologies sponsored by National Water Research Institute (NWRI) and U.S. Dept. of Interior
U. of Southern Mississippi	Purchased \$1.5M <a href="#">Autonomous Undersea Vehicle</a> in partnership with the National Oceanic and Atmospheric Administration to allow for deep undersea mapping and will facilitate undersea research in acoustic and inertial navigation.  Formed <a href="#">Mississippi Research Consortium</a> (MRC) in 1986 – a coalition of Mississippi’s research that supports education and extends technology development in MS, while increasing interaction with federal agencies and fostering research funding opportunities. They have a cooperative agreement to provide technical assistance to federal agencies and contractors at NASA’s John C. Stennis Space Center in Hancock County.

**STRATEGY 5:**

- **Significant federal awards to develop research infrastructure (EPSCoR, earmarks)**

<b>TIER I</b>	
Georgia State U.	
North Dakota State	<p><b>EPSCoR.</b> ND is an <a href="#">NSF EPSCoR</a> state and NDSU participates in the program. Elements includes (a) new faculty start-up awards (<a href="#">FY08 RFP</a>), (b) seed grants (\$10-20k, 7mo., more <a href="#">info here</a>), (c) research assistantship program, (d) doctoral dissertation assistantships, and (e) a <a href="#">NEW program</a>: Research Commercialization Partnerships.</p> <p><b>Federal appropriation.</b> As referenced above the NDSU agricultural research institute gets 7% of it's funding is a \$4.76M Federal appropriation.</p>
U. of Cincinnati	
U. of Illinois-Chicago	<p>\$6.4M grant from NIH to establish <a href="#">Project EXPORT</a> Center of Excellence in Rural Health to combat health disparities in rural communities</p> <p>Member of 3 Regional <a href="#">Centers of Excellence</a> receiving \$1M designated by US Dept of Health &amp; Human Services as part of the federal response to 9/11, creating new diagnostics, therapeutics &amp; vaccines for potential bioterrorist &amp; emerging infectious diseases</p>
U. of Louisville	<p>Federal grant of \$22M to build <a href="#">research lab on Shelby Campus</a>, focused on developing new vaccines to fight bioterrorism and emerging infectious diseases</p> <p>\$10.4M <b>NIH</b> (over 5 years) grant to continue research on restoring motor function to <a href="#">victims of paralysis</a></p>
U. of Maryland-Baltimore Co	<p><a href="#">Funding</a> from NASA for computer science and information science; UMBC has Howard Hughes Medical Institute investigator; received ADVANCE grant from NSF; received ACTiVATE grant from NSF</p>
U. of South Carolina	<p><b>Public Health.</b> The new 104,860-square-foot Arnold School of Public Health will anchor the Public Health Block of the new research-based Innovista innovation district. An additional University laboratory and research building of 135,000 square feet will be built, and a third new building is likely. <a href="#">Link.</a></p>
<b>TIER II</b>	
U. of Louisiana-Lafayette	
U. of Memphis	Tennessee designated <a href="#">EPSCoR</a> state in 2003.
U. of Mississippi-Oxford	<a href="#">Internet2</a> research network established with NSF/EPSCoR grants that will eventually link UM, USM, MSU, and JSU with other agencies and partners.
U. of New Hampshire	UNH became an <a href="#">EPSCoR</a> institution in 2004. A summary of UNH's EPSCoR activities is <a href="#">here</a> . UNH got a \$200k planning grant in FY05.
U. of Oklahoma	Health Sciences Center achieved \$124M in funding during 2004, \$53M of which was obtained from NIH.
U. of South Florida	\$70M in NIH funds received to support research aimed at new treatments for Alzheimer's, Parkinson's, and Huntington's diseases
U. of Southern Mississippi	<p>"Southern Miss received more than \$35 million in earmarks during fiscal year 2006, including \$20 million for the National Formulation Science Laboratory at Southern Miss and \$4.5 million for the Regional Sediment Management Support program on coastal zone mapping and imaging."</p> <p><a href="#">Hattiesburg American, 9/15/06</a></p>

**STRATEGY 6:**

- **RGI-like programs (internal seed funding)**

<b>TIER I</b>	
Arizona State U.	Two <a href="#">programs</a> . (1) Provides money for travel to meet with potential funding agency program officers and additional trips to prepare proposals and secure commitments. <a href="#">Application</a> . (2) Investigator Incentives – 5% of F&A OHR to the PI. <a href="#">Link</a> .
Georgia State U.	Research Initiation Grant; <a href="#">Research Team grant</a>
North Dakota State	Research Support and Commercialization Development <a href="#">Program</a> . “The purpose of this program is to stimulate additional scholarly activity at NDSU by assisting faculty in the conduct of their research plans.” PIs can request up to \$10k and can resubmit only one additional year. Application materials similar to our RGI w/ 3-pg. narrative. <a href="#">Criteria here</a> . Started in 1997. 34 proposals in 2004, awarded 5. Awarded 4 in 2005. “Suspended” in 2006 (I can’t tell why).
U. of Cincinnati	<a href="#">Interdisciplinary Grant Program</a> designed to support pilot research projects of collaborative nature betw faculty in two or more colleges in order to establish collaborative research efforts that will result in competitive research proposals to national funding agencies.
U. of Illinois-Chicago	NIH Clinical and Translational Science Award (CTSA) to “spur transformation of clinical and translational research ...encourage creative, new approaches that will help us solve complex medical mysteries”. <a href="#">Clinical and Translational Research Initiative Pilot Grant Guidelines</a> spawned pilot program to encourage new research in line with their <a href="#">UIC 2010 Strategic Thinking Plan</a>
U. of Louisville	<a href="#">Challenge for Excellence</a> , a 10-year, 11-goal plan launched in 1998, focusing on “improving the quality of students and faculty, increasing research and the university’s financial health and spurring economic development in Louisville and the state”. The challenge spawned from the 1997 higher education reform act, which mandated that UL become a preeminent metropolitan research university by 2020. Goals include increasing the number of patents and licenses based on university research, raising recognition for linking resources to the community, increasing endowments to \$500M, and increasing business start-ups from research activity. <b>Redirected \$21M+</b> in existing university funds into top priorities, including scholarships, faculty and staff salaries, and library resources; <b>Recruited 9 research-active faculty</b> in Public Health, Nephrology, Dentistry, Nursing, and Anesthesia
U. of Maryland-Baltimore Co	Summer Faculty Fellowship ( <a href="#">SFF</a> ) awards in math & science, social sciences & humanities, and engineering.
U. of South Carolina	<b>Seed funding.</b> The Small Grant <a href="#">Program</a> provides funds to support the formation of interdisciplinary groups, and emerging research opportunities, and seed money for new research activities. Awards are \$10-\$50k and up to 15 months. Review is by a system-wide review council. [This appears to be the very first year of this program though I can’t be certain.] <b>RGI-like program.</b> Research Opportunity <a href="#">Program</a> provides seed funding. Three categories of funding available at \$7k, \$10k, and \$20k and up to 15 months. Category I is to enhance ability to get extramural funding. Category II is general development, expansion, or enhancement of activities. Category III is for creative or performing arts.
<b>TIER II</b>	
Texas Tech	<b>Research Development Grant Competition.</b> Appears to be an RGI-like competition. They’ve got a call for round 2; \$1M up for grabs to “stimulate the generation of innovative new research efforts at Texas Tech.” Based on academic merit, ingenuity and innovation. Limit per request is \$1M, can include salaries, and timeline is up to three FYs. They encourage “large, multidisciplinary programs that have the potential to introduce new, novel areas of academic activity.” Money is from the “Research Development Fund,” which was created by Texas legislature “to support research activities in higher education.” Awarded \$1.8M in three awards in round one (2005). Received 95 applications, were planning to award \$1M.
U. of Louisiana-Lafayette	
U. of Memphis	Faculty Research Grant to provide seed <a href="#">funds</a> .
U. of Mississippi-Oxford	

U. of New Hampshire	<b>RGI-like program.</b> President's Fund for Excellence <a href="#">Research Initiative</a> . Intended to make \$400k available for seed funding to faculty, who can request up to \$20,000 or \$50,000 if multi-PI. Program funds similar stuff as our RGI. Five pages of narrative. First round awards awarded in March 2006. An additional \$300k was added and <a href="#">17 awards</a> representing 40% of total proposals were funded.
U. of Oklahoma	Development of Multidisciplinary and Interdisciplinary Projects and Programs for arts and humanities; Interdisciplinary Centers Program for science and engineering; Junior Faculty Research Program ( <a href="#">link</a> )
U. of South Florida	Interdisciplinary Research Development Grants; New Researcher Grants; Established Researcher Grants; Creative Scholarship Grants. Expectation of each of these <a href="#">programs</a> is to secure external funding
U. of Southern Mississippi	Created <a href="#">MIDAS</a> (Model for Incentive Dollars for Augmenting Salaries) incentive program in 2004 that awards faculty who secure and manage contract and grant support. MIDAS awarded \$382,000 to 32 faculty in the first year.



**STRATEGY 7:**

- Created standalone research centers, parks, and/or incubation programs

<b>TIER I</b>	
Arizona State U.	<b>MacroTechnology Works.</b> It's not clear to me who or what owns <a href="#">MTW</a> but it appears to be a function of ASU rather than a stand-alone corporate structure. MTW speeds development of applied research by engaging private and public enterprises. So far they have two centers for excellence in-house (\$43M Flexible Display Center and an NSF I/UCRC called ConnectionOne on communications/wireless). They identify several "partners" including Columbia U., Phoenix Analysis & Design Tech. Inc., and CMC Interconnect Technologies.
Georgia State U.	<a href="#">Science Park</a> : Science Teaching Lab bldg is anticipated to receive partial funding from the State. Fed funds being sought to build a Southern Lab for Infectious Diseases in the Science Park.
North Dakota State	<b>Research park.</b> <a href="#">Wired Magazine</a> profiled the park. Two Fortune 500s: John Deere, Ingersoll-Rand both in <a href="#">the park</a> . Nine tenants total and six NDSU start-ups. Established on 55 acres in 2001 it's two buildings big so far (40,000 and 75,000). One tenant is building a 120,000 sq.-ft. building. A feasibility study to establish a <a href="#">tech business incubator</a> in the park was completed in March 2003.
U. of Cincinnati	BIO/START, regional community biomedical business start-up center; Hamilton County Business Center (HCBC) is private non-profit business incubation program; UC Entrepreneurial Affairs develops initiatives and implements plans to drive technology through research and innovation, tech transfer, and commercialization. <a href="#">Links</a>
U. of Illinois-Chicago	<b>Research Resources Center</b> Maintains and supports high-technology scientific equipment for use by research faculty and staff in close proximity to data computational/statistical services. <a href="#">Research Resource Center Instrument Index</a>  <a href="#">Electronic Visualization Laboratory (EVL)</a> – Interdisciplinary graduate research laboratory, a joint effort by the College of Engineering and the School of Art and Design, combining art and computer science.
U. of Louisville	<b>Life Science Research Park</b> in downtown, now managed by <a href="#">MetaCyte</a> Business Lab, which also manages and operates U of L's iTRC program (an information tech "incubator program focused on providing support and business services to IT start-ups"). MetaCyte was founded and created by the university in conjunction with its partners: Jewish Hospital and Norton Hospital, and the City of Louisville. MetaCyte is supported by grants from the Office for the New Economy and the City of Louisville.
U. of Maryland-Baltimore Co	<a href="#">Research Technology Park</a> is 41 acre research/technology community that ultimately will have five state-of-the-art bldgs occupied by research/technology firms such as RWD Technologies, BDMetrics, Convergent Technologies, Goddard Earth Science and Technology Center (GEST), Erickson School of Aging Joint Center for Earth Systems Technology (JCET), and US Geological Survey Maryland-Delaware-D.C. Water Science Center.
U. of South Carolina	<b>Incubator.</b> 43,000 sq. ft. technology business incubation <a href="#">program</a> and facility. Managed by the Foundation under an MOU with the university.
<b>TIER II</b>	
U. of Louisiana-Lafayette	<a href="#">University Research Park</a> – includes laboratories, offices/facilities for basic and applied research, testing/consulting; an immersive visualization complex and technology incubator and Hilton Garden Inn with educational training facility located on 143 acres. It has continued to expand since it opened in 1975; most recently undergoing a \$1.45M, 70,000-80,000 square foot <a href="#">expansion of the NWRC</a> (funded by an appropriations bill) in 2004-05. In addition to the NWRC, the Park houses the Lafayette Primary Care Center, the Center for Business and Information Technologies (CBIT), the Energy Center, the NASA Regional Application Center (RAC), and the NOAA Estuarine Habitat Coastal Fisheries Research Center (a National Marine Fisheries Service federal facility).  <b>Louisiana Accelerator Center (LAC)</b> - 12,000+ sq. ft. of laboratory, machine shop and office space with a large research equipment inventory. Since 1990, funding at the Center for ion beam research alone (and related equipment) exceeded \$63M. <a href="#">LAC History</a>

U. of Memphis	FedEx Institute of Technology
U. of Mississippi-Oxford	<p><a href="#">EIGS</a> (Enterprise for Innovative Geospatial Solutions) (2003) – cluster of 36+ high tech companies &amp; 6 research programs that work collaboratively to benefit, support, and develop both business and science factions of the geospatial industry in the state of MS.</p> <p><a href="#">ACT Center (1999)</a> – with grants from NIH, Mississippi State Dept of Health, &amp; the Partnership for a Healthy Mississippi. Work focuses on tobacco use research, education, prevention, and treatment, with a specific emphasis on advancing scientific knowledge of tobacco use and cessation.</p>
U. of Oklahoma	<a href="#">Center</a> for the Creation of Economic Wealth offers opportunities for practical experience to promote the entrepreneurial spirit and assist in developing Oklahoma’s economy by translating new knowledge into economic growth.
U. of South Florida	USF Center for <a href="#">Entrepreneurship</a> (business, engineering, science, and medicine). USF <a href="#">Research Foundation</a> was established in 1989 to provide broad and flexible financial mechanisms in support of research and grants, and to facilitate the commercialization of university inventions.
U. of Southern Mississippi	<a href="#">Gulf Coast Research Laboratory</a> – (1947) was joined with the university in 1996 to include USM’s Marine Science Program and the Gunter Library, an extensive marine science library.

**STRATEGY 8:**

- **Created a Research Office with a staff, mission, website and newsletter to provide complete assistance for researchers and serve as the marketing/publicity forum**

<b>TIER I</b>	
Arizona State U.	<b>“Proposal Machine.”</b> A new program designed to help faculty go after \$1M+ grants. Has funded or would fund stuff like: Flexible Display Center, Homeland Security Center, Engineering Research Centers, Materials Research Science and Engineering Centers, large NIH grants, Science and Technology Centers. <a href="#">Link</a> .
Georgia State U.	<a href="#">Univ Research Services and Administration</a> : VP for Research, Ofc of Sponsored Progs, Ofc of Research Financial Services, Ofc of Research Compliance; Research Integrity, Faculty Support, Ofc of Tech & Commercialization Development Programs, Animal Resources, and Georgia State Univ Research Foundation
North Dakota State	<b>VP Research’s staff.</b> VP of Research has a formidable staff and three folks were promoted in 10/2005. One position description in particular caught my eye: “In her new position as Associate Vice President for Federal Government Relations, Neas is responsible for identifying opportunities to advance the university’s research programs through public policy initiatives, coordinating communication between the campus community and leaders at the federal level...” <a href="#">More here</a> .
U. of Cincinnati	Vice President for Research: Sandra Degen; <a href="#">Sponsored Research Services</a> Office has three teams within the Grants Management (pre/post award services), a Contracting Staff, and Electronic Research Admin staff. In addition, UC established Office of <a href="#">Entrepreneurial Affairs</a> as well as <a href="#">Intellectual Property Office</a> .
U. of Illinois-Chicago	<b>Office of Research Services/Research Development Services</b> Staff dedicated to handle all pre-award and non-financial post-award activities. They provide assistance to faculty and staff, develop and communicate institution-wide policies specific to sponsored programs, and have a web site, workshops, and listserv available for faculty and staff reference. <a href="#">Research@UIC</a>
U. of Louisville	Established the <a href="#">Office of Research</a> to assist in research processes, and the <a href="#">Research Integrity Committee</a> (part of the Compliance Oversight Council) to oversee research compliance activities.
U. of Maryland-Baltimore Co	<a href="#">Research Admin</a> : VP for Research, Ofc of Associate VP for Research, Ofc of Sponsored Programs Admin, Ofc of Tech Development, Human & Animal Research Protections Ofc
<b>TIER II</b>	
U. of Louisiana-Lafayette	<a href="#">Office of Research &amp; Sponsored Programs</a> for complete pre-and post-award responsibilities; website contains links to all research programs and posts new funding progress.
U. of Memphis	<a href="#">VP for Research</a> : Andrew Meyers; Research Support Services Office
U. of Mississippi-Oxford	<a href="#">Office of Sponsored Research</a> - to assist faculty/researchers in completing processes, locating funding opportunities and meeting deadlines. The web site contains a “Researcher’s Toolbox”, including information on policies, form creation/completion, and available workshops and forums that my interest researchers.
U. of Oklahoma	<a href="#">VP for Research and Dean of Graduate College</a> : T.H. Lee Williams; Office of Research Services
U. of South Florida	<a href="#">Vice President for Research</a> : Robert Chang; Division of Sponsored Research has sponsors and facilitators as leaders of the Division.
U. of Southern Mississippi	<a href="#">Center for Research Support</a> , - a part of the Sponsored Programs Administration that provides research consultants available to assist in any and every step of the research process.

**STRATEGY 9:**

- **Programs, initiatives, or investments that are unique (or do not fit into another category)**

TIER I	
Arizona State U.	<p><b>AzTE.</b> ASU’s technology commercialization company is called Arizona Technology Enterprise, LLC and the ASU Foundation is the parent company. Chronicle ranks their commercialization efforts in the top ten in three categories. AzTE moves science into industry by mining university research, prosecuting patents, negotiating licenses, and marketing inventions. Has a staff of 11 and a board of 12. Fifteen <a href="#">deals</a> (or more) since 12/2003. They split their <a href="#">tech portfolio</a> into life sciences and technologies. <a href="#">Fifteen spin-outs</a>.</p> <p><b>Student Entrepreneurs.</b> ASU established the <a href="#">Edson Student Entrepreneurship Initiative</a> that provides funding, office space, and training with an endowment that provides \$200k in annual seed funding to student teams through a competition. This usually funds 10-15 teams at \$5 to \$20k per venture. They have four staff but I see overlap with Technopolis staffing. Seems to be two years old (launched with a \$5.4M gift).</p> <p><b>Technopolis.</b> ASU launched Technopolis in 2003 as the entrepreneurial education initiative for the university for both faculty and students. It’s modeled after CONNECT at UC San Diego. The educational content is provided by a corporate partner and one business coach (both of these folks are successful entrepreneurs). Has a board of advisors of about two dozen. Four program offerings from one-on-one coaching to workshops to six-month mentoring programs, etc. Seven staff in total. <a href="#">Link</a>.</p>
Georgia State U.	<p><a href="#">P-16 Initiatives</a> Department (pre-school through college) created by Board of Regents to coordinate participation of the Univ System in state and local P-16 initiatives and to promote successful progression of students through the educational systems.</p>
North Dakota State	<p><b>VP for Interdisc. Res.</b> Reporting to the VP for Research is the Associate Vice President for Interdisciplinary Research <a href="#">Gregory McCarthy</a>.</p> <p><b>\$1,000 x 858 dev. grants.</b> NDSU has a program whereby faculty can request up to \$1,000 for what appears to be professional development and/or to meet with program officers (from what I can gather). Last year there were 858 grants.</p> <p><b>Foundation engaged in industry/university matching.</b> Any business, industry or NDSU faculty member can submit a research proposal to the executive director, outlining a research idea and research procedures. Help in preparing a proposal is available to industry through the NDSU Institute for Business and Industry Development. The NDSU Research Foundation Board will review the proposal and work with the industry sponsor and the researchers. The Foundation will facilitate patents, trademarks and licensing agreements pertaining to any results stemming from the research. <a href="#">Link</a>.</p>
U. of Cincinnati	<p><a href="#">Strive Educational Partnership</a> supported in part by Greater Cincinnati Foundation that has committed \$1million over next four years.</p>
U. of Illinois-Chicago	<p>New Bachelor’s program in <a href="#">entrepreneurship</a> ranked #3 in nation by Success magazine</p>
U. of Louisville	<p>Established <a href="#">International Service Learning Program (ISLP)</a> which was awarded 2004 Best Practices in International Education and Learning Award by the National Association of Student Personnel Administrator’s International Education Knowledge Community. The program includes courses that introduce the coordination of interdisciplinary activities, management at an international site, and further evaluation of the program’s effectiveness.</p> <p>Invested millions in <a href="#">new facilities</a>: new academic research buildings, Papa John’s Cardinal Stadium, Cardinal Park, new residence hall and new planetarium</p>
U. of Maryland-	<p><a href="#">Shriver Center</a> serves as national model of having direct/positive impact on communities; places</p>

Baltimore Co	1,000 students in internships and co-op positions
U. of South Carolina	<p><b>Faculty hiring.</b> USC is hiring 600 new faculty over a six-year period, including 100 focused on research through the <a href="#">Centenary Plan</a> (up to \$200k per faculty start-up) and 150—many of whom will work across disciplines—through the Faculty Excellence Initiative (150 teaching faculty).</p> <p><b>Research Equipment.</b> Research Equipment <a href="#">Program</a> provides awards of \$50-\$200k to purchase new equipment and requires a 30% cost share from dept/college, center or external source.</p> <p><b>ERIC.</b> <a href="#">ERIC</a> is a university-level committee appointed by Harris Pastides, Vice President for Research and Health Sciences, to advise him regarding decisions related to environmental research at the University of South Carolina. Members of the committee represent the broad range of environmental programs at the university, rather than home departments or colleges. Currently funding six faculty-led projects (very interdisciplinary in nature).</p>
<b>TIER II</b>	
Texas Tech	<b>Building an alumni base in DC?</b> The Office of the President and two colleges provide scholarships for undergrads to do internships with Congressional Rep offices in DC. "It is amazing to see how many Tech alumni graduate and then move to the D.C. area, working as public servants," said Harris. "Our alumni are everywhere in Washington, bringing recognition to our program and our school..." <a href="#">Info here.</a>
U. of Louisiana-Lafayette	
U. of Memphis	<a href="#">Herff</a> College of Engineering Community Outreach Programs
U. of Mississippi-Oxford	
U. of New Hampshire	<b>Survey on research climate.</b> The university conducted a <a href="#">survey</a> on research climate including 500 participants and questions in five areas. Results are <a href="#">here</a> (spreadsheet data).
U. of Oklahoma	Oklahoma Scholar-Leadership Enrichment Program ( <a href="#">OSLEP</a> ) is unique intercollegiate, interdisciplinary program designed to develop scholarship and leadership abilities of university students.
U. of South Florida	USF Joint Military Leadership Center being constructed (\$10.4M). College of Engineering has established <a href="#">Bridge to the Doctorate</a> program, a partnership with NSF and Florida-Georgia Louis Stokes Alliance for Minority Participation.
U. of Southern Mississippi	Key goal in <a href="#">2005-2008 Strategic Plan</a> to increase scope of marketing and promotion efforts to educate public/government about the critical role of research and create opportunities for partnerships by improving the web presence of key research efforts, producing a research magazine, standardizing and expanding promotional literature and expanding participation in public policy agendas.

## **Part B: Detailed Institution Profiles**

This section summarizes the data collected on each of the twenty-one institutions studied. The basic profile consists of the following data as available:

- Institution name
- System affiliation (if applicable)
- VCOR
- Key documents
- Research funding growth
- Key strategies
- Major investments
- Corporate partnerships
- Foundation research eEngagements
- Notes on research growth
- Significant Interdisciplinary Initiatives
- Undergraduate Research Opportunities
- Facilities/Equipment Notes
- Indirect Policies

Institution: Arizona State University  
 System: n/a but ASU has 4 campuses (main – Phoenix, downtown Phoenix opened in '06, Tempe, Mesa)  
 VCOR?: Jonathan Fink. VP for Research and Economic Affairs since 1997 (Geologist).  
 Key docs: “[Facilitating and Achieving Research Growth](#)” by VPR&E to University Council, 9/05  
 President Crow speaks candidly on how to grow research in this [press release](#) (e.g. how they “cobbled together” funding to build the first new facility).  
 A one-page research growth [roadmap](#) from 1994-2006 w/ milestones, expenditure, growth here.  
 A detailed “[town hall](#)” document on bioscience and biotech establishing ASU’s roadmap.

### Growth Trend

1. Total research funding in 2003: 145,591
2. % from federal programs: 49
3. %-change 1994-2003: 133
4. Institutional data on more recent years:
  - ASU passed a significant milestone in research expenditures by reaching \$203.5 million in the fiscal year that ended June 30. This marks the first time research expenditures – the amount of money spent to perform research and discovery – has surpassed the \$200 million level at ASU. In the last six years, ASU has doubled its research expenditures. PR 9/13/06.
  - Sources: \$174.6 million from the federal government and industry, \$23.6 million in Technology & Research Initiative Funds from state sales tax revenue, and \$5.3 million from ASU Foundation specifically for research projects.
  - Research at ASU generates and reinvests \$30.3M (2005 I think) as follows (in percent): 25 to college/schools/departments/PIs for discretionary use, 25 to research administration, 12 in cost share to college/schools/departments/PIs, 10 to tech transfer/IP/licensing (AzTE), 8 to general research support (seed funds, space, facilities, etc.), 7 to infrastructure support (libraries, purchasing, Federal relationship, tuition, health care, etc.), 7 to start-ups, major equipment purchases, renovations, etc., and 6 to strategic initiatives and TRIF “backfill.”

### Key Strategies

1. **Recruit “superstars”** Recruit key faculty (those who already have large portfolios).
2. **“Proposal Machine”** A new program designed to help faculty go after \$1M+ grants. Has funded or would fund stuff like: Flexible Display Center, Homeland Security Center, Engineering Research Centers, Materials Research Science and Engineering Centers, large NIH grants, Science and Technology Centers. [Link](#).
3. **Internal Funding** Two [programs](#). (1) Provides money for travel to meet with potential funding agency program officers and additional trips to prepare proposals and secure commitments. [Application](#). (2) Investigator Incentives – 5% of F&A OHR to the PI. [Link](#).
4. **Technopolis** ASU launched Technopolis in 2003 as the entrepreneurial education initiative for the university for both faculty and students. It’s modeled after CONNECT at UC San Diego. The educational content is provided by a corporate partner and one business coach (both of these folks are successful entrepreneurs). Has a board of advisors of about two dozen. Four program offerings from one-on-one coaching to workshops to six-month mentoring programs, etc. Seven staff in total. [Link](#).

### Major Investments

1. **State Investment** Technology and Research Initiative Fund (TRIF) established in 2000 by Arizona voters. Approved a 6/10<sup>th</sup>-cent increase in state sales tax to be dedicate to K-12, the community colleges, and the state’s three public universities (administered by Arizona Board of Regents). FY03 was about \$46M and ASU’s portion in '05 was \$23M. Maximum allowable investment in capital expenditure is 20% per year. [PR 3/24/06](#) is a compelling look at what they’ve done over the years.

### Significant Corporate Partnerships

1. **MacroTechnology Works** It’s not clear to me who or what owns [MTW](#) but it appears to be a function of ASU rather than a stand-alone corporate structure. MTW speeds development of applied research

by engaging private and public enterprises. MTW is in the university research park and appears to be one building big so far. So far they have two centers for excellence in-house (\$43M Flexible Display Center and an NSF I/UCRC called ConnectionOne on communications/wireless). They start with an assessment, the do a full project proposal, then have a concept development phase involving identifying of potential collaborators; finally, developing of a project. Staff are industry-trained and have backgrounds in quality systems, six-sigma, and product commercialization. They identify several “partners” including Columbia U., Phoenix Analysis & Design Tech. Inc., and CMC Interconnect Technologies.

Foundation Research Engagements

1. **AzTE** ASU’s technology commercialization company is called Arizona Technology Enterprise, LLC and the ASU Foundation is the parent company. Chronicle ranks their commercialization efforts in the top ten in three categories. AzTE moves science into industry by mining university research, prosecuting patents, negotiating licenses, and marketing inventions. Has a staff of 11 and a board of 12. Fifteen [deals](#) (or more) since 12/2003. They split their [tech portfolio](#) into life sciences and technologies. [Fifteen spin-outs](#).

Research Growth notes

2. **Double in 3 to 4 yrs** Goal is to double research expenditure in 3-4 years, which would represent a 20-25% annual growth rate.
3. **\$75M in recent large grants** \$14 million Gates Foundation grant to Biodesign Institute, \$43.6 million Army grant that led to the formation of the Flexible Display Center, (announced) \$18 million grant for the incoming dean of the Ira A. Fulton School of Engineering for the [Microscale Life Sciences Center](#)
4. **Adding National Academy Members** ASU had 7 National Academies members prior to 2004. They added sixteen in the last two years.

Significant Interdisciplinary Initiatives

Undergraduate Research Opportunities

1. **Student Entrepreneurs** ASU established the [Edson Student Entrepreneurship Initiative](#) that provides funding, office space, and training with an endowment that provides \$200k in annual seed funding to student teams through a competition. This usually funds 10-15 teams at \$5 to \$20k per venture. They have four staff but I see overlap with Technopolis staffing. Seems to be two years old (launched with a \$5.4M gift).

Facilities/Equipment Notes (Cost, area, source of funding/financing, office versus lab area, intended use, etc.)

1. **Facilities a reason for research growth** ASU added one-million square feet of research space since 2004. Funding is partially from the Arizona Legislature’s Research Infrastructure Bill of 2003. Fink says the increase in research funding is the result of major new ASU research facilities, such as the two buildings of the Biodesign Institute; three completed Interdisciplinary Science and Technology Buildings (two on Tempe campus and one at ASU Polytechnic); and MacroTechnology Works at ASU’s Research Park. Here is a one-page [summary](#) of facilities.

Indirect Policies

Here is the [link](#) to the manual but the best link is their [FAQ](#). Here are the rates:

SECTION I: FACILITIES AND ADMINISTRATIVE COST RATES*					
RATE TYPES: FIXED		FINAL	PROV. (PROVISIONAL)	PRED. (PREDETERMINED)	
TYPE	EFFECTIVE PERIOD		RATE (%)	LOCATIONS	APPLICABLE TO
	FROM	TO			
PRED.	07/01/03	06/30/06	49.5	On-Campus	Organized Research
PRED.	07/01/03	06/30/06	26.0	Off-Campus	Organized Research
PRED.	07/01/03	06/30/06	57.9	On-Campus	Instruction
PRED.	07/01/03	06/30/06	26.0	Off-Campus	Instruction
PRED.	07/01/03	06/30/06	33.0	On-Campus	Other Spon Act
PRED.	07/01/03	06/30/06	26.0	Off-Campus	Other Spon Act
PROV.	07/01/06	UNTIL AMENDED	Use same rates and conditions as those cited for fiscal year ending June 30, 2006.		



Their policy on administering F&A uses “cost pools” and all eight and a description can be found at the links above.

Institution: Georgia State University  
System:  
VCOR?: Robin Morris  
External \$: \$50M FY05  
Key docs: University Strategic Plan (2000-05)  
**NOTE: Carl Patton, President**  
**Former UWM SARUP Dean**

#### Growth Trend

1. Total research funding in 2003: \$45M
2. % from federal programs: 49%
3. %-change 1994-2003:
4. Institutional data on more recent years:

#### Key Strategies

1. Increase funding to \$100M by 2010 via specific goals for each school/college
2. Increase internal funding for Office of Research at same rate growth
3. Have 100 start-up companies from university research and business partners by 2010
4. Internal grant programs stimulate university research growth

#### Major Investments

1. Science Research Park
2. \$125M private funds invested in merit/need-based scholarships, professorships/endowed chairs, and academic programs/centers

#### Significant Corporate Partnerships

1. Biotech initiative via CollabTech and Venture Lab

#### Foundation Research Engagements

1. \$1.5M biotech grant from Howard Hughes Medical Institute (HHMI)
2. \$1M grant from Office of Rural Health Policy (ORHP) for Health Resources and Services Administration

#### Research Growth notes

1. Research team grant: start-up for interdisciplinary research team
2. Research initiation grant: promote scholarly/artistic activity for new faculty
3. Faculty mentored

#### Significant Interdisciplinary Initiatives

1. George Research Alliance
2. Pipeline Program (University System and NIH funds)
3. Molecular Basis of Disease program

#### Undergraduate Research Opportunities

1. Presidential Assistantships: undergraduates work with senior faculty on research projects

#### Facilities/Equipment Notes (Cost, area, source of funding/financing, office versus lab area, intended use, etc.)

1. Plans for teaching/research lab building for natural and health science; approximately \$70M cost; partial funding from State and \$25M from private funds
2. Main Street Master Plan for campus
3. Southern Laboratory for Infectious Diseases (federal funds being sought)
4. Library Transformation project

#### Indirect Policies

Institution: Marquette University  
System:  
VCOR?: William Wiener  
External \$: \$21M ?  
Key docs: Reaching Higher 2005

Growth Trend

1. Total research funding in 2003: \$
2. % from federal programs:
3. %-change 1994-2003:
4. Institutional data on more recent years:
5. Private endowment: Magis Campaign: \$357M

Key Strategies

Major Investments

1. College of Engineering \$1M scholarship endowment
2. Six endowed faculty positions were created
3. \$28M gift

Significant Corporate Partnerships

1. Thermofluid Science and Energy Research Center
2. Kohler Center for Entrepreneurship

Foundation Research Engagements

1. 3M Foundation Vision Grant

Research Growth notes

1. Awards from NIH double
2. Faculty applying for federal research dollars increases by 25%
3. Excellence in Diversity Grants (internal)

Significant Interdisciplinary Initiatives

1. Center for Dispute Resolution Education
2. Integrative Neuroscience Research Center
3. Institute for Urban Environment Risk Management

Undergraduate Research Opportunities

1. Chemistry
2. Summer Research and Internship Opportunities (SROP)
3. Biomedical Sciences Summer Research Program (SRP)
4. McNair Program

Facilities/Equipment Notes (Cost, area, source of funding/financing, office versus lab area, intended use, etc.)

Indirect Policies

Institution: North Dakota State University  
System:  
VCOR?: Dr. Phillip Boudjouk, VP for Research, Creative Activities and Technology Transfer. He was named NDSU's first VP RCATT in 2000. [Link](#). (PhD from UW Madison). Research expenditures under his tenure have increased from \$44M to \$102M  
Key docs: Organizational chart of VP for Research. [Link](#).  
FY05 Roundtable Alignment Progress Report (strategic planning) [.pdf](#).

### Growth Trend

1. Total research funding in 2003: 91,812
2. % from federal programs: 41
3. %-change 1994-2003: 148
4. Institutional data on more recent years:
5. Reported \$102.1M in research expenditure to NSF for 2004. [Press release](#).
6. NDSU likewise reported research expenditures of \$103 million for fiscal 2005.
7. \$75M capital campaign hit public phase in 10/2005.

### Key Strategies

1. **VP Research's staff** VP of Research has a formidable staff and three folks were promoted in 10/2005. One position description in particular caught my eye: "In her new position as Associate Vice President for Federal Government Relations, Neas is responsible for identifying opportunities to advance the university's research programs through public policy initiatives, coordinating communication between the campus community and leaders at the federal level..." [More here](#).
2. **Research park** [Wired Magazine](#) profiled the park. Two Fortune 500s: John Deere, Ingersoll-Rand both in [the park](#). Nine tenants total and six NDSU start-ups. Established on 55 acres in 2001 it's two buildings big so far (40,000 and 75,000). One tenant is building a 120,000 sq.-ft. building. A feasibility study to establish a [tech business incubator](#) in the park was completed in March 2003.
3. **Agri Research Ctr.** The Langdon Research Extension [Center](#) is 710 acres for agricultural research and was established in 1907.

### Major Investments

1. **State investment up** Over the past five years, the State of North Dakota has increased state appropriated support of NDSU by \$45.2 million. Source: president's address, 2005.
2. **HUD \$ for a center** The new North Dakota State University Product Design and Commercialization Center will help NDSU inventors move an invention, scientific discovery or a business idea from the dream stage into marketable products. The funds were secured through a congressionally-directed grant from the Housing and Urban Development Agency (HUD)... ..Senator Dorgan is a member of the Senate Appropriations Subcommittee that funds HUD. [PR](#) 5/16/06.
3. **EPSCoR** ND is an [NSF EPSCoR](#) state and NDSU participates in the program. Elements includes (a) new faculty start-up awards ([FY08 RFP](#)), (b) seed grants (\$10-20k, 7mo., more [info here](#)), (c) research assistantship program, (d) doctoral dissertation assistantships, and (e) a [NEW program](#): Research Commercialization Partnerships.
4. **\$1,000 x 858 dev. grants** NDSU has a program whereby faculty can request up to \$1,000 for what appears to be professional development and/or to meet with program officers (from what I can gather). Last year there were 858 grants.

### Significant Corporate Partnerships

1. **Open Source collab.** NDSU's Archaeology Technologies Laboratory partnered with two or more corporations to develop and release, in June 2005, a beta version [open source](#) modeling and rendering software platform.
2. **Semiconductor collab.** Tessera Technologies, Inc., a leading provider of miniaturization technologies for the electronics industry, today announced that it has completed a successful chip-scale packaging (CSP)

technology transfer to North Dakota State University (NDSU) and has [partnered](#) with NDSU in the development of a fully functional microelectronics center at the university. The work completed by NSDU and Tessera was sponsored by the DMEA, an arm of the U.S. Department of Defense (DoD).

3. **RFID collab.** Alien Technology, Morgan Hill, Calif., is building a research and manufacturing facility in NDSU's Research & Technology Park. The center is expected to be operating by mid 2006, making it one of the largest RFID manufacturing centers in the world.

#### Foundation Research Engagements

1. **Foundation est. 1989** The research foundation was established May 30, 1989, and incorporated in North Dakota as a scientific and educational organization under Section 501(c)3. Board includes 11 seats and the executive director reports to the board.
2. **How they get work** Any business, industry or NDSU faculty member can submit a research proposal to the executive director, outlining a research idea and research procedures. Help in preparing a proposal is available to industry through the NDSU Institute for Business and Industry Development. The NDSU Research Foundation Board will review the proposal and work with the industry sponsor and the researchers. The Foundation will facilitate patents, trademarks and licensing agreements pertaining to any results stemming from the research.
3. **An "RGI-like" program** Research Support and Commercialization Development [Program](#). "The purpose of this program is to stimulate additional scholarly activity at NDSU by assisting faculty in the conduct of their research plans." PIs can request up to \$10k and can resubmit only one additional year. Application materials similar to our RGI w/ 3-pg. narrative. [Criteria here](#). Started in 1997. 34 proposals in 2004, awarded 5. Awarded 4 in 2005. "Suspended" in 2006 (I can't tell why).

#### Research Growth notes

1. **\$1.48M in Forensics** \$1.48 million grant from the U.S. Department of Justice to develop a forensics laboratory that supports regional law enforcement agencies.
2. **\$8.9M for Neurosci** In 2004, the National Institutes of Health awarded a five-year \$8.9 million grant to establish a Center for Biomedical Research Excellence (COBRE) for visual neuroscience at NDSU.
3. **\$8.4 M for Chem/Pharm** An earlier \$8.4 million award is being used to fund a center in chemistry and pharmacy.
4. **Nano** NDSU's Center for Nanoscale Science and Engineering manages a research budget of nearly \$18 million for fiscal year 2005. The center began with a \$1.4 million Department of Defense contract in 2001 to establish a Center of Excellence for research in low-power, wireless micro and nano-sensors.

#### Significant Interdisciplinary Initiatives

1. **VP for Interdisc. Res.** Reporting to the VP for Research is the Associate Vice President for Interdisciplinary Research [Gregory McCarthy](#).
2. **Computing** NDSU's Center for High Performance Computing (CHPC) was established in 2003 to provide access to secure, advanced scientific computation resources for the university's researchers and their private and public sector partners. [Link](#).

#### Undergraduate Research Opportunities

1. **Nano research** The Center for Nanoscale Science and Engineering (CNSE) Electronics Testing Laboratory has 37 [UG research](#) students earning \$9-\$10k per summer.

#### Facilities/Equipment Notes (Cost, area, source of funding/financing, office versus lab area, intended use, etc.)

1. **Clean rooms** The 15,000 square foot clean room wing of the facility and its 6,500 square feet of clean room space under filter makes it one of the largest such facilities in the Midwest. 75,000 square foot building cost \$17 million and opened in March of 2004.
2. **Other facilities** Extensive research facilities include Loftsgard Hall, an \$8 million plant science facility completed in 1991, a \$10.5 million industrial agriculture/communication center completed in 1992, and four NDSU Biotechnology Institute service centers.

#### Indirect Policies

Source: <http://www.ndsu.nodak.edu/policy/813.htm>. Of the indirect costs 42.0% will be allocated back to the generating colleges or units; 16% will be allocated back to Research Administration; and 42.0% to the Office of the President.

Institution: Portland State University  
System: Oregon University System  
VCOR?: Vice Provost for Sponsored Research and Dean of the GS, William Feyerherm  
Key docs: Portland State University Portfolio [Website](#). I guess this is the result of their 05 Accreditation Self-Study? Here is the final [report](#).

### Growth Trend

1. Total research funding in 2003: 21,433
2. % from federal programs: 62
3. %-change 1994-2003: 200
4. Institutional data on more recent years:
  - a) Twelve year historical look ([chart](#), [data](#)) at Extramural funding #s. Shows steady growth over entire timeline.
  - b) Expenditure grew from \$7.3M in 1990 to \$35.9M in 2005 w/ 2005 indirects at \$5.2M.

### Key Strategies

1. **Internal funding** (1) [Faculty Enhancement Grants](#). Available to 50%FTE or better, up to \$10k. University budgets \$240k annually. 200-word abstract, 5-page proposal, budget. Must file a final report. Proposals selected by “committee” but I can’t tell who is on it; the way it’s worded it sounds like a cross-section of faculty on campus. (2) Faculty [travel grants](#). 50%FTE or better are eligible. To attend professional meetings/conferences. \$1,250 max. Funds one per person per year.
2. **More RSA support** Self-study final report (page 33) notes that faculty report a lack of “adequate financial, physical, administrative, and information resources for scholarship, research, and artistic creation.” The report relates this, then, to the goal to increase extramural funding for research.

### Major Investments

#### Significant Corporate Partnerships

1. **Food Industry** Their Food Industry Leadership Center boast “230 firms have participated in the center’s activities.” I’m not sure in what capacity but they do cite a strong applied research program.

#### Foundation Research Engagements

1. **No research** The [Foundation](#) doesn’t appear to be in the business of research/commercialization. Incorporated in 1963. Self-study states that the Foundation was created for raising, managing, and disbursing funds but it’s functions have recently changed (page 44); it’s now predominantly fiduciary in its role. Just finishing its first ever capital campaign (\$100M). Likely to meet targets.

#### Research Growth notes

1. **Areas** The self-study portfolio highlights key areas of existing strength. One that stands out is nanoscience. Nanoscience recently acquired a transmission electron microscope making their Center for Nanoscience and Nanotechnology the most advance in the Pacific Northwest. They reference significant support from the Murdock Foundation.
2. **Social Work strength** The Graduate School of Social Work accounts for 24% of the annual research expenditure of the university (according to the self-study final report).

#### Significant Interdisciplinary Initiatives

1. **Interdisciplinary Research Groups** Established several years ago, offering groups a \$50k grant per year for three years and \$10k development grants for stuff that is more exploratory in nature (collaboration ideas around a theme).

Undergraduate Research Opportunities

1. **1-credit UGR class** “If you are considering undergraduate research at PSU, you should start by visiting the web pages of the research-active faculty. Set up appointments with two or three whose research you find most interesting. When you meet, the professor will talk about current and potential research projects, ask you about your interests, and determine whether or not an opportunity exists for you. Typically, a student will join a research group by registering for one credit of Undergraduate Research (e.g., CH 405).”
2. **English Fellowships** The Phyllis and Tom Burnam Creative Writing Endowed Scholarship. This fund provides annual student support, in the form of awards, scholarships or fellowships, to English department undergraduate and/or graduate students. Awards shall be made in recognition of the best fiction, nonfiction, and poetry writing done by a student or students who have enrolled in any writing class taught by a member of the English department during the course of the year.

Facilities/Equipment Notes (Cost, area, source of funding/financing, office versus lab area, intended use, etc.)

1. **Need to build** Predicting 30,000 students by 2013, requiring 7M gross sq-ft of instructional/research/parking/housing/lease space. Currently 4.8MGSF. References a “2004 Space Needs Assessment Committee Report.” It appears they’re early in planning (e.g. a 2001-2010 plan).
2. **Not much in research** In terms of new construction they mention a new engineering building in the self-study report (facilities stuff starts on page 45).

Indirect Policies

<http://www.gsr.pdx.edu/policies/indirect.html>

INDIRECT COST RATES		
Type of Project	Base	2002-2005
Federal - Research	MTDC	42%
Federal - Training	MTDC	40%
Federal - Community based service	MTDC	34%
All off-campus programs	MTDC	26%
Foundations (see #4 above)	Total Direct Costs	26%
Local - Meeting policy #3	Total Direct Costs	26%
Local - Not meeting policy #3	Total Direct Costs	42%

MTDC = Modified total direct costs  
(total costs - tuition, equipment items > \$5,000 and subcontracts > \$25,000)



Institution: Texas Tech, Lubbock (main campus)  
 System: Six “university” campuses, four “health science center” campuses (two are co-located)  
 VCOR?: Dean O. Smith joined 9/1/2005. Created an RGI-like competition.  
 Key docs: VCOR’s “First View” of research, December 2005 [.ppt](#).  
 Office of Research, TT & ED [strategic plan](#), 8/04.  
 Check out their RGI-like internal competition: [click here](#).

Growth Trend

1. Total research funding in 2003: 69,714
2. % from federal programs: 33
3. %-change 1994-2003: 124
4. Institutional data on more recent years:
  - “Research Growth has slowed the last two years.” [03, 04]. Source: VCOR .ppt.
  - Was growing faster than national average prior to 2003. Attribute downward trend primarily to loss of 10 sr. faculty (-2M), large Federal earmarks ended (-5M) and State funding decrease (-2M) = total -17%.
  - However, awards for the period September through November 2005 total \$15.2 million, an increase of 20 percent over the same period last year but still below the peak year of FY 2003.

Key Strategies

1. Major points: increase submissions, hire faculty, launch new programs.
2. An RGI-like competition. \$1-2M per year.
3. Signed “agreement” with Sandia National Lab.
4. Recently began a branding/identity effort.
5. Health Sciences selected to participate in national Medicare pilot program. (Follow-on potential?)
6. Get “into” DC early using a program for undergrads: “Congressional Internships.”
7. “Regents Professorships and Chairs” used to attract top faculty.

Major Investments by the University or the State

1. **\$2M from State for Center for Excellence in Agri Topics** The State of Texas made a first investment from the Texas Emerging Technology Fund (launched last year, \$200M) at Texas Tech. \$2M towards becoming the “international leader in agriculture genomics research and development and help make the west Texas region the fiber capital of the world.” Major corporate partner: Bayer CropScience, which is contributing an endowed professorship. Plan is to launch the International Center of Excellence in Agriculture Genomics and Biotechnology. TT’s investment is \$1.8M in personnel and lab equipment. Director is tops in the world for cotton geneticists and was lured from UC Davis. Has over \$6.5M in competitive grants. She’s bringing a team. 2/22/06 PR.
2. **\$25M from U for Business School Complex** See “facilities” section. University has allocated \$25M towards a bricks & mortar campaign for business school.
3. **\$4M and \$2.4M Congressional Appropriations** Congressman helps university institute secure \$3.75 million through the Defense Appropriations Bills for FY 2004 and 2005 in order to fund the Zumwalt Program, which deals with advanced fabrics against bio/chemical attack agents. PR (no dateline). Later secured \$2.4M more in FY06 appropriations (2/6/06 PR).
4. **\$2.99M from State for “Research Development”** From Legislature (budget), 5/2006.
5. **Regents contribute \$10M towards faculty chairs** Two year fundraising effort has generated \$26M for “Regents Professorships and Chairs” including \$10M from Regents (from sale of freeway right-of-way) for matching donor gifts. Smith [the VCOR] said the professorships and chairs allow the university to recruit and retain exceptional faculty members. The primary goal is to add nationally and internationally recognized scholars who bring excellence in teaching, research, outreach and leadership. “Faculty members rely on endowments to enhance their research and teaching endeavors,” Smith said. “Regents Professorships and Chairs bring prestige to our most outstanding faculty and recognition to our donors.” Regents Chairs are currently funded with a minimum endowment of \$1 million. A Regents Professorship is funded by a minimum endowment of \$500,000. 1/24/06 PR.

Significant Corporate Partnerships

1. **Agreement with Sandia National Lab** “Sandia has working relations with only about two dozen universities nationwide,” said Sweazy. “This agreement is a first step in Texas Tech joining that elite group of universities.” ... “Sandia only hires scientists and engineers from the universities with which it does business,” said Sweazy. It also is important for Texas Tech to have a formal agreement with Sandia because of the large amount of federal funding, about – \$2.3 billion – that Sandia receives for research and development, said Sweazy. Sandia typically funds about \$50 million per year in research at their preferred universities. (The national lab is operated by Sandia Corporation, a Lockheed Martin company, for the U.S. Department of Energy’s National Nuclear Security Administration.) 2/8/05 PR.
2. **Int’l Alliance on bio/chemical threats** Developing garments for first responders to natural disasters and bio-terror threats. The partnership includes the university’s institute, the British company Remplo Frontline, known globally as the premiere manufacturer of CBRN (Chemical Biological Radiological and Nuclear) protective clothing,

and U.S.-based Hobbs Bonded Fibers. The three signed an agreement Friday to work together to develop and produce the new protective wear. 9/16/05 PR.

### Foundation Research Engagements

1. The Foundation doesn't appear to do anything related to "research." Created in 9/06, its assets = \$191M (2004).

### Research Growth notes

1. **Research Development Grant Competition** Appears to be an RGI-like competition. They've got a call for round 2; \$1M up for grabs to "stimulate the generation of innovative new research efforts at Texas Tech." Based on academic merit, ingenuity and innovation. Limit per request is \$1M, can include salaries, and timeline is up to three FYs. They encourage "large, multidisciplinary programs that have the potential to introduce new, novel areas of academic activity." Money is from the "Research Development Fund," which was created by Texas legislature "to support research activities in higher education." Awarded \$1.8M in three awards in round one (2005). Received 95 applications, were planning to award \$1M.
2. **Faculty Start-up Requests** It may be interesting to review Texas Tech's method of processing faculty start-up package requests/negotiations. There is a requirement to describe "how the request meets the directive of promoting increased research capacity."
3. **Health Science in national Medicare pilot** ...announced as one of six organizations nationwide to operate a three-year demonstration project to help Medicare beneficiaries improve their quality of life while reducing their medical expenses and Medicare program costs. 7/5/05 PR. [Note from Guido: Is it a "strategy" to seek out these national pilot programs in order to build relationships that will yield significant potential for multi-year, multi-institutional follow-on extramural funding and exposure to national research priority-setting officials?]
4. **Hiring 100 faculty** The number of faculty at Texas Tech University will increase by about 30 in the fall of 2005... In February 2004, Texas Tech President Jon Whitmore outlined a plan to hire 100 additional faculty members by Fall 2006 ... in part to an aggressive faculty recruiting initiative ... "We have about 90 new faculty joining us this year," said Texas Tech Provost William Marcy. "We're pleased to announce that of those 90, about 30 people will be filling brand new positions." ... new positions were funded through tuition increases ... "Hiring 90 new professorial rank faculty results in a payroll expenditure of approximately \$6.3 million per year," he said. "Using an economic multiplier of three, these expenditures contribute \$18.9 million to the economic activity in Lubbock." 8/30/05 PR.
5. **Building an alumni base in DC?** The Office of the President and two colleges provide scholarships for undergrads to do internships with Congressional Rep offices in DC. "It is amazing to see how many Tech alumni graduate and then move to the D.C. area, working as public servants," said Harris. "Our alumni are everywhere in Washington, bringing recognition to our program and our school..." [Info here.](#)

### Significant Interdisciplinary Initiatives

#### Undergraduate Research Opportunities

1. **\$1.5M grant for UG research** Texas Tech is one of four Texas universities and 50 universities nationwide to receive a Howard Hughes Medical Institute grant to support undergraduate research. The \$1.5 million grant will support TTU's Howard Hughes Medical Institute Science Education Program for the next four years. This is the fifth consecutive grant for TTU since the program began in 1992. 6/1/06 PR.
2. **For-credit courses on how to research** Their AgriSci offers for-credit courses on conducting research: "To encourage research by undergraduates as an integral part of the education process, we offer a sequential two-course series (6 semester hours) in research methodology." [Link](#)
3. **Listing research opps. on a Website** College of Human Sciences uses a [Website](#) to promote and encourage UG research – the innovation is using a Website to list faculty research interests and openings. How do we promote UG research opportunities at UWM?
4. **Student Research Days event** TTU has an "[Honors College](#)" and this has a required UG research poster session in the Spring term at their "[Student Research Days](#)" event. [I happened to be on U Michigan's campus the day they held their similar event – there were a TON of corporate people there engaging the students.]

#### Facilities/Equipment Notes (Cost, area, source of funding/financing, office versus lab area, intended use, etc.)

1. **Experimental Sciences Building** \$37M (\$24M in tuition revenue bonds, \$13M from Higher Ed Assistance Fund). 128,000 sqft total, 51,000 sqft laboratories. Designed for "interdisciplinary research." Using "unfinished shell space to attract more premiere researchers to the university."
2. **Strategic plan objective** "Have at least 9000 square feet of research space per \$1.2M in annual research expenditures."
3. **Business School Complex** \$60M, 140,000 sqft business building "complex" through a capital campaign that is co-chaired by two CEOs (PlainsCapital Corp and Celaro Energy) and scheduled for completion in 2009. College raised \$17M, Univ. "allocated" \$25M, and remaining need is \$18M. 4/21/06 press release.
4. **Residence Hall** \$24M, 178,000 sq ft, houses 500 students, finished 1/2005.

### Indirect Policies

**FY2007 F&A Costs**

On Campus Research and Training = 46.5%

Off Campus Research and Training = 26%

[Link here.](#)

Institution: University of Cincinnati  
System: State University since 1977  
VCOR?: Sandra Degen  
External \$: \$336M FY05  
Key docs: UC/21: Defining the New Urban Research University  
**NOTE: Nancy Zimpher, President  
Former UWM Chancellor**

#### Growth Trend

1. Total research funding in 2003: \$255M
2. % from federal programs: 73%
3. %-change 1994-2003:
4. Institutional data on more recent years:

#### Key Strategies

1. Students at core of university mission/growth
2. Grow research
3. Achieve academic excellence
4. Forge key partnerships
5. Establish a sense of place

#### Major Investments

1. Lindner Center for HOPE
2. Return on Educational Investment (ROEI)

#### Significant Corporate Partnerships

1. Uptown Consortium that includes Children's Hospital, Cincinnati Zoo, Health Alliance, and Tri-health
2. Procter and Gamble
3. GE

#### Foundation Research Engagements

#### Research Growth notes

1. Four faculty members received Fulbright grants
2. \$6M campaign for scholarships, initiatives, and research

#### Significant Interdisciplinary Initiatives

1. Undergraduate degree in interdisciplinary studies that requires research component (ex: one track is Brain and Mind Studies)

#### Undergraduate Research Opportunities

1. Women in Science and Engineering program (WISE)
2. McNair program

#### Facilities/Equipment Notes (Cost, area, source of funding/financing, office versus lab area, intended use, etc.)

#### Indirect Policies

Institution: University of Illinois at Chicago  
 System: One of three campuses of State of Illinois' land-grant university (with Springfield and Urbana-Champaign)  
 VCOR?: Eric A. Gislason, named interim 7/1999, permanent 8/2001  
 Key docs: "[From the Inside Out - 2004 Annual Report](#)"

### Growth Trend

1. Total research funding in 2003: 291,507
2. % from federal programs: 58%
3. %-change 1994-2003: 156%
4. Institutional data on more recent years: \$228.1M (FY04)
  - o External funding rose 12.3% from \$205.2M in FY03. During that time, research expenditures from all sources rose from \$259.9M to \$291.5M (12.2%).
  - o Ranked #48 in the NSF's annual compilation of research data (FY02) ahead of Purdue, Michigan State and Indiana universities
  - o "Of the nation's top 50 universities in federal research funding, UIC's growth rate was the second-highest in the last five years measured."

### Key Strategies

1. Developing teaching, research and public service programs designed to improve the quality of urban life promoting public health, improving schools, furthering technology..."taking special account and advantage of the extraordinary ethnic and cultural diversity of the Chicago metropolitan area" [UIC Scope and Mission Statement](#)
2. Clinical and Translational Science Awards (CTSAs) program - designed to "spur transformation of clinical and translational research ...give research institutions more freedom to foster productive collaboration... lower barriers between disciplines, encourage creative, new approaches that will help us solve complex medical mysteries". NIH Director Elias A. Zerhouni, M.D, October 12, 2005 [Clinical and Translational Research Initiative Pilot Grant Guidelines](#)

### Major Investments

1. \$19.6M National Cancer Institute grant to research blood disorders [UIC 9/6/06 news release](#)
2. \$15.7M grant to develop drugs to treat and stop the spread of anthrax, funded by the National Institute of Allergy and Infectious Diseases (NIH)
3. \$6.4M grant from NIH to establish Project EXPORT Center of Excellence in Rural Health to combat health disparities in rural communities.
4. \$6.5M grant from NIH to install and operate 900 MHz nuclear magnetic resonance machine to research the structure, dynamics and interactions of proteins involved in diseases.
5. \$3.2M grant from NSF to enhance the "Math Trailblazers" K-5 program
6. \$7.27M awarded from National Cancer Institute to study racial and ethnic disparities in the prognosis and outcome of breast cancer victims

### Significant Corporate Partnerships

1. **9.4-Tesla**, the world's most powerful MRI – developed by GE Healthcare in conjunction with UIC's Dr. Keith Thulborn – is now located in the new Center for Magnetic Resonance Research at UIC. The Center, headed by Dr. Thulborn, will be using the magnet to help identify and study diseases of the brain, mapping of human thoughts, and cognitive/learning processes.
2. **UIC's National Center for Data Mining**, in conjunction with the University of Amsterdam, set a trans-Atlantic internet data transfer speed record, developing a protocol that transmitted 1.4 terabytes of information at 6.8 billion bits/second

### Foundation Research Engagements

1. Robert Wood Johnson Foundation – \$2,821,054
2. Falk Medical Research Foundation – \$1,638,550

3. Kellogg Foundation – \$1,500,000
  4. AIDS Foundation of Chicago – \$569,144
  5. Susan G. Komen Foundation – \$296,215
- Top five philanthropic sponsors, 2002 [2002 Sponsored Activities Report](#)

Research Growth notes

1. **Office of Research Services/Research Development Services** Staff dedicated to handle all pre-award and non-financial post-award activities. They provide assistance to faculty and staff in proposal development, review and endorsement of proposals, electronic proposal submissions, negotiation and execution of contracts, reporting, receipt and processing of the Notice of Awards (NOA), interpretation of sponsor guidelines, and ensuring compliance with both agency and University policies. They also develop and communicate institution-wide policies specific to sponsored programs, and have a web site, workshops, and listserv available for faculty and staff reference.
2. **Sponsor Types** The federal government is the main source of funding (\$167.2M in 2002). The Dept of Health & Human Services funding accounts for 75% of that amount. The top three for-profit agencies were Pfizer, Pharmacia and Novartis. [2002 Sponsored Activities Report](#)

Significant Interdisciplinary Initiatives

1. **Electronic Visualization Laboratory (EVL)** – Interdisciplinary graduate research laboratory, a joint effort by the College of Engineering and the School of Art and Design, combining art and computer science. Beginning with the invention of the “CAVE” virtual reality theatre in 1992, Immersadesk in 1995 and PARIS (Personal Augmented Reality Immersive System) in 1998, EVL’s research and development of visualization technologies has expanded to graphics streaming architecture that allows the management, building, and optimal utilization of optical networks.

Undergraduate Research Opportunities

1. NSF Research Experiences for Undergraduates in “Novel Materials and Processing in Chemical and Biomedical Engineering” Sponsored by NSF (NSF-REU) and the Dept. of Defense (DoD-ASSURE) 12 Fellowships available @ \$3,600 plus travel expenses

Facilities/Equipment Notes (Cost, area, source of funding/financing, office versus lab area, intended use, etc.)

1. **Research Resources Center** Maintains and supports high-technology scientific equipment for use by research faculty and staff. “RRC personnel provide user access to the instruments, training on use of the instruments, and their own service and expertise in the application of the equipment for the purpose of solving of a wide range of problems for chemical, biological and structural characterization. In addition, the availability of computational and statistical services for data handling, interpretation of experimental results and data transfer, together with the accessibility of electronic and mechanical shops further enhance the RRC's mission of contributing to the research endeavor at UIC.” [Research Resource Center Instrument Index](#)

Indirect Policies

**F&A Costs Rate Table (Effective 7/1/2006):** [UIC Research Policies](#)

Activity Types	On-Campus	Off-Campus
Organized Research	55%	26%
Instruction	40.2%	26%
Other Sponsored Activities	36.7%	26%
Clinical Drug Trials	25%	25%

Institution: University of Louisiana at Lafayette  
System: One of the 8 universities in the University of Louisiana System; was called University of Southern Louisiana until 1999  
VCOR?: Dr. Robert Stewart, VP of Research and Graduate Studies since 2005  
Key docs: [Research overview](#)

### Growth Trend

1. Total research funding in 2003: \$43,769
2. % from federal programs: 33%
3. %-change 1994-2003: 294%
4. Institutional data on more recent years: Funding has remained relatively constant since 2003, ranging from \$45M-\$47M based on budget reports

### Key Strategies

1. **Hired Dr. Robert Stewart, VP of Research and Graduate Studies** in 2005 - former director (for 25 years) of the U.S. Geological Survey's National Wetlands Research Center (which is housed in the University Research Park but owned and operated by the U.S. Geological Survey) and "no stranger to helping government departments, agencies and universities move forward in terms of research and technology." While he is "impressed" with the research and graduate studies programs and UL Lafayette, he intends to "raise the community's awareness of the important scientific work being conducted" and "raise the bar to the next level". [New VP](#)
2. **Strategic Plan, 2001-2005** – Incorporating the direction of Louisiana:Vision 2020, Objective 3: "Increase privately held assets by 2% over the baseline amount of \$75M in 2000 to \$90M by the end of academic year 2005-2006" by continuing to build the Endowment Fund and continuing success in obtaining BORSF matching funds. Objective 4: "Increase externally funded research and sponsored program awards by 5% over baseline amount of \$24,768,091 in Fall 2000 to \$26 million in Fall 2005" by being among the top 3 universities in Louisiana in security BORSF funds and increasing both private and federal externally funded research grant applications. In support of this objective, a higher than average percentage of E&G expenditures were budgeted to instruction and research. [Strategic Plan 2001-2005](#)
3. **Growth Plan, present/future**– Strategic Planning for 2005-2010, in line with Louisiana:Vision 2020, includes an objectives to:
  - a. Increase the number of patents registered and copyrights applied for by 40% by providing additional support materials and new research centers.
  - b. Increase commercialization of technology-related intellectual properties by 66.7% by providing research support and building a new computer sciences building
  - c. Create 2 new information technology related businesses by implementing a Center for immersive visualization.
  - d. Increase amount of externally sponsored research and program funding by 25% by establishing the above buildings/centers.
  - e. Incidentally, the plan also includes aggressive goals for improved freshmen retention, improving the six-year graduation rate (by 10%), and increasing enrollment through student access and success initiatives. The new Dean of the College of Engineering is hoping for a 50% increase in undergrad students in the next five years due to how technologically savvy the city of Lafayette has become. [New Dean](#)
  - f. [Strategic Plan 2005-2010](#)
4. **Develop research centers** "with national and international reputations at the cutting-edge of their disciplines." ULL has been highly successful in continuing this growth while maintaining and nurturing excellent community relationships and "producing positive benefits for its citizens." [Research overview](#)

### Major Investments

1. **\$3.9M US Dept of Energy/LA Board of Regents Support Fund project** (2004) – awarded to faculty in the Center for Advanced Computer Studies for their research on technical solutions and software implementations

useful for the energy industry. The CACS is touted as the best computer studies program in Louisiana and one of the best in the nation. [CACS](#)

2. Department of Biology faculty research funding awards, totaled over \$7.12M in grants over a three-year period (July 1, 1997 to June 30, 2000). Rigorously competitive NSF programs were a major source (\$1.35M) of these funds. UL Lafayette celebrates and builds upon its many Unique Areas of Excellence . [Unique Areas of Excellence](#)

### Significant Corporate Partnerships

#### Foundation Research Engagements

1. **\$8M Dr. Ben and Clare Roy Thibodeaux bequest** – will provide approximately 50 new freshmen from Acadiana will be awarded 4-year scholarships due to the Thibodeaux’s generosity. [Thibodeaux bequest](#)
2. **\$3M Hilliard gift** – toward the constructions of the \$15.7M Paul and Lulu Hilliard University Art Museum [Hilliard gift](#)
3. **\$1M James S. McDonnell Foundation award** to Dr. Daniel Povinelli for his project on human cognition: "The Minds of Humans and Apes: Alternative Outcomes of an Evolutionary Experiment." Through the **Cognitive Evolution Group**, Dr. Povinelli has established two laboratories exploring and testing the abilities of human children and of chimpanzees. [Research overview](#)

#### Research Growth notes

1. **Louisiana: Vision 2020** – plan developed by the Louisiana Economic Development Council in 1999, the 20-year vision for the state includes the creation of “a skilled and educated workforce, access to technology, and access to capital.” The initiative challenges those in business, academia, and government to work together to create a diversified and productive economy. [Louisiana: Vision 2020](#)
2. “The **Manufacturing Extension Partnership of Louisiana (MEPoL)** helps businesses and manufacturers statewide increase their productivity and access new technologies. Utilizing leading edge technologies and consultants around the state, MEPoL provides assistance in the areas of manufacturing, plastics and polymers, and procurement. MEPoL was established at the LPC (Louisiana Productivity Center) through a cooperative agreement with the National Institute of Standards and Technology (NIST), a division of the U.S. Department of Commerce. MEPoL is an affiliate of NIST's Manufacturing Extension Partnership, a national network of manufacturing services available in all 50 states.” [Research overview](#), [MEPoL](#)

### Significant Interdisciplinary Initiatives

1. The **Louisiana Accelerator Center** provides world-class facilities in high energy physics for interdisciplinary research by UL Lafayette faculty and students in the physical sciences. [Research overview](#)

### Undergraduate Research Opportunities

1. Creative Scholars Program
2. NSF Young Investigator Awards

### Facilities/Equipment Notes (Cost, area, source of funding/financing, office versus lab area, intended use, etc.)

1. **University Research Park** – includes laboratories, offices/facilities for basic and applied research, testing/consulting; an immersive visualization complex and technology incubator and Hilton Garden Inn with educational training facility located on 143 acres. It has continued to expand since it opened in 1975; most recently undergoing a \$1.45M, 70,000-80,000 square foot expansion of The National Wetlands Research Center (funded by an appropriations bill) in 2004-05. In addition to the NWRC, the Park houses the Lafayette Primary Care Center, the Center for Business and Information Technologies (CBIT), the Energy Center, the NASA Regional Application Center (RAC), and the NOAA Estuarine Habitat Coastal Fisheries Research Center (a National Marine Fisheries Service federal facility). [Research Park](#) , [NWRC expansion](#)
2. **Microscopy Center** - a world-class, 12-room suite laboratory providing advanced microscopy instrumentation supporting research conducted by faculty, undergraduate students and graduate students. [Research overview](#)
3. **Louisiana Accelerator Center** - 12,000+ sq. ft. of laboratory, machine shop and office space with a large research equipment inventory. It opened in 1976 as the Acadiana Research Laboratory in a 4000 square foot, \$70,000 bare metal building, and have benefited from many years of consistent improvements and significant additions to the scientific



equipment inventory. In 2001, the name was changed from the ARL to the LAC. Since 1990, funding at the Center for ion beam research alone (and related equipment) exceeded \$63M. [LAC](#), [LAC History](#)

*Indirect Policies (none found)*

Institution: University of Louisville  
System: Part of the state university system since 1970, Louisville operates three campuses – Balknap (3 miles from downtown, the Health Sciences Center in downtown’s medical complex, and the Shelby Campus in eastern Jefferson County.  
VCOR?: Current search underway for Executive VP for Research; current Senior VPR (Dr. Nancy Martin) will remain in position until position is filled. Since Martin took the position in 1996, the university’s total research dollars have quadrupled. [U of L Researchers named](#)  
Key docs: [Progress-Office of the President](#)

### Growth Trend

1. Total research funding in 2003: 88,522
2. % from federal programs: 45%
3. %-change 1994-2003: 332%
4. Institutional data on more recent years:
  - o Total research funding 2004: \$119,156 (\$54,476 federal @ 45.7%) [Challenge:Full Speed Ahead](#)
  - o Since 1999, funding rose from \$14.8M to \$74.5M, and increased its sponsored funding from \$42.1M to \$178M. NIH funding growth is “fastest in the nation among research universities” [The Goals:Research Funding](#)
  - o 1999-2000 - Received 34 grants, \$1.8M in outside grants & contracts; established air quality laboratory & Environmental Leadership Institute

### Key Strategies

1. **Challenge For Excellence**, launched in 1998, focusing on “improving the quality of students and faculty, increasing research and the university’s financial health and spurring economic development in Louisville and the state” [What is the Challenge?](#) The 10-year, 11-goal plan spawned from the 1997 higher education reform act, which mandated that UL become a preeminent metropolitan research university by 2020. Goals include increasing the number of patents and licenses based on university research, raising recognition for linking resources to the community, increasing endowments to \$500M, and increasing business start-ups from research activity.

### Major Investments

1. Increased state support - \$66M Research Challenge Trust Fund “**Bucks for Brains**” that matches private contributions.
2. Gift of \$15M from **James Graham Brown Foundation** for cancer research, resulting in partnership with Norton Healthcare and development of a top-level cancer hospital.
3. \$10.4M grant from **NIH** to continue research on restoring motor function to victims of paralysis.
4. \$11.7M **NIH** program project grant for research in gene therapy
5. **State** - \$.005 of cigarette tax increase in support of cancer research

### Significant Corporate Partnerships

1. Partnership with **Louisville’s Jewish Hospital and Norton Hospital** to create one of the most progressive medical centers in health-sciences research and patient care.
2. Launched **Minerva Enterprises** – a “for-profit holding company that uses university resources to attract financial capital for creating joint ventures.”
3. “**Metropolitan College**” program with UPS, Jefferson Community College and Jefferson Technical College providing tuition-free education with employment. From community’s perspective, this agreement helped UPS to invest \$860M in Louisville air hub. [U of L Helps Deliver Workforce to UPS](#)
4. **1400+ ongoing partnerships** with business, government & civic entities within the community

### Foundation Research Engagements

1. **\$66M donated by alumni and friends** in FY05

### Research Growth notes

1. Significantly **increased marketing efforts** to raise visibility of university among prospective students and the public
2. Established **Research Integrity Committee** to oversee research compliance activities.
3. **Expanded academic offerings**, creating many overseas degree programs
4. **Redirected \$21M+** in existing university funds into top priorities, including scholarships, faculty and staff salaries, and library resources
5. **Recruited 9 research-active faculty** in Public Health, Nephrology, Dentistry, Nursing, and Anesthesia in compliance with the Challenge for Excellence (2004-2005)

#### Significant Interdisciplinary Initiatives

1. **Interdisciplinary Center for Research On Early Childhood Issues and Initiatives**, in the College of Education and Human Development
2. **International Service Learning Program (ISLP)** – awarded 2004 Best Practices in International Education and Learning Award by the National Association of Student Personnel Administrator’s International Education Knowledge Community. The program includes courses that introduce the coordination of interdisciplinary activities, management at an international site, and further evaluation of the program’s effectiveness. [VP Update](#)

#### Undergraduate Research Opportunities

1. **Summer Research Opportunity Program (SROP)**: 10-week program in department that offers graduate degrees. Open to sophomores and juniors. Mentors provide individualized research projects with opportunities for group seminars.
2. **NIH/KBRIN program**: Research-active faculty mentor 10 students in biological or biomedical research. Grant from National Center for Research Resources to develop Biomedical Research Infrastructure Network in Kentucky.
3. **Neurosciences Program**: Minorities, women, underrepresented students and persons with disabilities are placed in the laboratory with a professor/mentor to learn research methods and techniques to encourage undergraduate students in Kentucky to consider a science career.
4. **Minority Undergraduate Summer Program in Cardiovascular Research**: Grant from NIH/National Heart Blood and Lung Institute to expose minority students to cardiovascular research at U of L.
5. **U of L Cancer Education Program**: specifically for medical and dental students to enhance their knowledge in cancer biology and encourage them to pursue careers in cancer health care, research, and education.

#### Facilities/Equipment Notes (Cost, area, source of funding/financing, office versus lab area, intended use, etc.)

1. Invested millions in **new facilities**: new academic research buildings, Papa John’s Cardinal Stadium, Cardinal Park, new residence hall and new planetarium
2. Created **Life Science Research Park** in downtown, now managed by MetaCyte Business Lab, which also manages and operates U of L’s iTRC program (an information tech “incubator program focused on providing support and business services to IT start-ups”). MetaCyte was founded and created by the university in conjunction with its partners: Jewish Hospital and Norton Hospital, and the City of Louisville. MetaCyte is supported by grants from the Office for the New Economy and the City of Louisville. [MetaCyte](#)
3. Federal grant of \$22M to build **research lab on Shelby Campus**, focused on developing new vaccines to fight bioterrorism and emerging infectious diseases.
4. Will be converting Reynolds Building into 77 loft condominiums

#### Indirect Policies

1. **Office of the President** may authorize some fixed costs from the F&A pool prior to transferring the funds to the University and the U of L Research Foundation.
2. 20% of the F&A funds retained by ULRF as Research Infrastructure Funds (RIFs), allocated thusly:
  - a. Principal Investigator RIF – 10% of F&A costs awarded on extramural grants and contracts
  - b. Department RIF - 10% of F&A costs awarded on extramural grants and contracts
3. 20% of the net remaining F&A funds retained by ULRF and allocated to boost research activities
4. 80% transferred to University’s General Fund.

#### Budget policies

Institution: University of Maryland Baltimore County  
System: University System of Maryland  
VCOR?: Scott Bass  
External \$: \$78M (FY05)  
Key docs:

#### Growth Trend

1. Total research funding in 2003: \$43M
2. % from federal programs: 80%
3. %-change 1994-2003:
4. Institutional data on more recent years:
  - a. Ranked 16<sup>th</sup> among universities receiving funding from NASA
  - b. FY02 \$36M research expenditures yielded 25 invention disclosures and 38 filings for patents (73% more inventions per \$1M of research than national average)
  - c. Ranked 13 among public campuses in nation for major awards in Arts & Humanities

#### Key Strategies

1. Capital Campaign \$100M goal
2. Build research portfolio
3. Special initiatives focus: Women/Minorities in Science and Engineering (WISE); Promise and Alliance for Graduate Education and Professoriate programs

#### Major Investments

1. Women in STEM (Science, Technology, Engineering, Math)
2. Bioengineering and Environmental Systems; Nanotech and Information Technology (College of Engineering and Information Tech Clusters)
3. PeopleSoft

#### Significant Corporate Partnerships

1. Research Park on campus (BD Metrics, Convergent Technologies, Goddard Earth Science and Technology Center (GEST))
2. Silicon Graphics, Apple, Bell Atlantic

#### Foundation Research Engagements

1. Erickson Foundation \$5M commitment, matched by State funds
2. Howard Hughes Medical Institute (HHMI) \$4.2M grant

#### Research Growth notes

1. \$15M NSF grant in collaboration with Princeton, Rice, Hopkins, Texas A&M, City College of New York to create Engineering Research Center
2. \$2.9M NSF grant to Center for Environmental Research and Education for graduate research and training focused on water in urban environment
3. \$2.2M HHMI undergraduate Education Science Program
4. Top three funding sources: NASA, NSF, NIH

#### Significant Interdisciplinary Initiatives

1. Statement made about an individual professor's efforts to connect arts, science, and engineering

#### Undergraduate Research Opportunities

1. Minority Access to Research Careers (MARC)
2. Summer Program in Computational Biology (SPCB)
3. BSURE: summer research training for under-represented groups in science and math
4. Experiences in Molecular Biology and Academic Research Careers (EMBARC), summer

5. HHMI Scholars Program (undergraduate biological sciences program)

Facilities/Equipment Notes (Cost, area, source of funding/financing, office versus lab area, intended use, etc.)

1. New Center for Student Life, \$35M
2. Two residence halls build in past four years to accommodate 1,145 students
3. Retriever Activities Center (RAC), sports-related
4. Technology Center (facility for start-up and emerging companies)

Indirect Policies

Institution: University of Memphis  
System:  
VCOR?: Andrew Meyers  
External \$: \$40M FY05  
Key docs:

#### Growth Trend

1. Total research funding in 2003: \$39M
2. % from federal programs: 39%
3. %-change 1994-2003:
4. Institutional data on more recent years:

#### Key Strategies

1. invest in people
2. create interdisciplinary initiatives
3. build partnerships

#### Major Investments

1. Wireless internet in all academic buildings
2. Girls Experiencing Engineering (GEE), middle/high school level students

#### Significant Corporate Partnerships

1. Federal Express
2. Steelcase
3. AutoZone
4. Bell South
5. Time-Warner Cable

#### Foundation Research Engagements

1. Women's Foundation of Greater Memphis for GEE program
2. American Chemical Society (ACS) Petroleum Research Fund
3. Sloan Foundation
4. Ford Foundation
5. Kellogg Foundation
6. Rockefeller Foundation

#### Research Growth notes

1. Research incentive pay
2. Grant Center: Alliance for Nonprofit Excellence
3. EPSCoR (experimental NSF program) to assist State in increasing level of research funding; joint effort with Board of Regents, Vanderbilt University, State government to increase collaboration and improve education opportunities of under-represented groups

#### Significant Interdisciplinary Initiatives

1. Center for Genomic Research: developing interdisciplinary research program
2. Institute for Nanomaterials Development and Innovation (nanoscale science and engineering) with Oak Ridge National Lab

#### Undergraduate Research Opportunities

1. Honors Program provides funds for students to present research at National Conference for Undergraduate Research (NCUR)
2. Undergraduate research database developed to match students with researchers
3. Works-in-Progress Symposium (WIPS): undergraduate research presentations on campus

4. Student Research Forum (SRF): jointly sponsored: Graduate College and Honors Programs
5. Honors Thesis Research Grants: offset costs to students for undergraduate research (competitive program)

Facilities/Equipment Notes (Cost, area, source of funding/financing, office versus lab area, intended use, etc.)

1. Building new University Center including new bookstore
2. New building for K. Wilson School of Hospitality and Resort Management
3. New athletic training facility

Indirect Policies

Institution: University of Mississippi-Oxford  
System: Main campus at Oxford, the Medical Center in Jackson, the Advanced Education Center in Tupelo, and the Desoto County Center in Southaven  
VCOR?: Dr. Alice M. Clark, VP for Research and Sponsored Programs. Faculty member at UM since 1979, former director of the UM National Center for National Products Research since it opened in 1995 [Clark](#)  
Key docs: [Ole Miss Facts 04-05](#), [Research Details 2003-04](#)

### Growth Trend

1. Total research funding in 2003: \$49,861
2. % from federal programs: 81%
3. %-change 1994-2003: 384%
4. Institutional data on more recent years:
  - a. 2004-05 Sponsored Research: \$102.7M; “External funding for research, service & education projects on Oxford & Jackson campuses topped \$100M each of the past four years.” [Ole Miss Facts 04-05](#)
  - b. Current web site (undated material) lists sponsored research at \$114.27M [Facts & Firsts](#)
  - c. 8/21/2006 news: “External funding for research and sponsored programs at the University of Mississippi has topped \$100 million for the sixth consecutive year.” The \$102.9M+, including in 201 sponsored programs at the UM Medical Center in Jackson (\$39.3M) and 301 awards on the Oxford campus for \$63.6M. "Last year we were awarded the highest number of awards and in more disciplines than ever before," Clark said. "We also had more faculty involved in more sponsored projects and a 10 percent increase in the number of proposals." [Research Funding](#)

### Key Strategies

1. **More than 20 research centers** – The University focuses on patents and commercializing the results of its research to “stimulate economic development and enhance quality of life.” [Ole Miss Facts 04-05](#)
2. **Established Office of Sponsored Research** - to assist faculty/researchers in completing processes, locating funding opportunities and meeting deadlines. The web site contains a “Researcher’s Toolbox”, including information on policies, form creation/completion, and available workshops and forums that my interest researchers. [Researcher’s Toolbox](#)

### Major Investments

1. **\$11M NIH Grant (2006)** – to establish natural products neuroscience research center. The Center of Research Excellence in Natural Products Neuroscience will be identifying components and properties of natural products that affect the nervous system, investigating the health benefits of dietary supplements, and developing new medications to treat neurological and psychiatric diseases. The Center will also support undergrad and graduate student research and establish a community outreach series. [Biomedical](#)
2. **\$1.27M US Army Space and Missile Defense Command grant (2006)** – to design a low-power radar chip that would be integrated into antenna arrays to ultimately seek and track targets. [RadChip](#)

### Significant Corporate Partnerships

1. **\$2.5M FedEx gift (2005)** – for renovation of the Starnes Athletic Center to create academic support center for student athletes that includes advanced computer facilities, study halls and classrooms. [FedEx](#)

### Foundation Research Engagements

1. **Total Foundation/University Endowment: \$397.8M (non-dated information on current web site)**
2. **Jim Barksdale, former CEO of Netscape and a 1965 graduate of Ole Miss** – has made numerous, major contributions toward various programs and initiatives:
  - a. **1997** – Honors College established (with **\$5.4M** endowment) to merge “intellectual rigor with public service.” They specifically aimed to keep Mississippi’s brightest students in the state. The Honors College was later renamed the Sally McDonnell Barksdale Honors College after Sally passed away in 2003. [Honors](#)
  - b. **January 2000** – Barksdale Reading Institute established with **\$100M** endowment from Jim and his wife Sally to implement education reform in MS and to dramatically improve the reading skills of the children there. [BRI](#)



- c. 2004 - Children of Jim and Sally endowed a **\$100M** scholarship in the name of their mother through the Ole Miss Women’s Council for Philanthropy. [Children](#)
  - d. **\$2M private gift (2006)** – from Jim and Donna Barksdale (he is former CEO of Netscape) to redesign the curriculum of the master’s degree in school administration to train effective school principals. [Former CEO](#)
3. **\$4.5M** gift from the estate of **Eugenia Pichitino** in 1997 to provide scholarships for top honors high school students. Eugenia’s son is a graduate of Ole Miss. [Pichitino](#)

Research Growth notes

- 1. **Opened ACT Center (1999)** – with grants from NIH, Mississippi State Dept of Health, & the Partnership for a Healthy Mississippi. Work at The Center focuses on tobacco use research, education, prevention, and treatment, with a specific emphasis on advancing scientific knowledge of tobacco use and cessation.
- 2. **Opened EIGS (Enterprise for Innovative Geospatial Solutions) (2003)** – cluster of 36+ high tech companies & 6 research programs that work collaboratively to benefit, support, and develop both business and science factions of the geospatial industry in the state of MS. EIGS replaces the former Mississippi Space Commerce Initiative (MSCI, 1999) upon expiration of the Joint Sponsored Research Agreement that kept MSCI alive. Instead of focusing solely on research, EIGS – essentially the “part two” of MSCI – brings businesses and their support into the mix. [EIGS](#)

Significant Interdisciplinary Initiatives

- 1. **IGERT (Integrated Graduate Education and Research Traineeship) collaboration with USM and with funding support from NSF (Initiated 1997)** – crosses the bridge between medical chemistry (at UM) and polymer science (at USM) and encourages entrepreneurship in the mix. Students who complete the program are prepared to start their own companies. Students receive a full tuition waiver plus a \$30,000 stipend. [IGERT](#)

Undergraduate Research Opportunities

- 1. **NSF REUs available (1999)** through the Professional Opportunities for Women in Research and Education (POWRE) program).
- 2. **Through the Sally McDonnell Barksdale Honors College, many REU opportunities are offered:**
  - a. **Fred Hutchinson Cancer Research Center** – nine week program for students in junior and senior years in biology.
  - b. **Lawrence Livermore National Laboratory** opportunities in four “critical Skills” areas of chemistry and materials science, computer science, engineering and physics.
  - c. **NIH U\*STAR program** – for underrepresented minorities in biomedical science
  - d. **Dept of Energy Science Undergraduate Laboratory Internships** for students studying any science
  - e. **Sigma Xi Grants-in-Aid of Research** for researchers in sciences and engineering [REU](#)

Facilities/Equipment Notes (Cost, area, source of funding/financing, office versus lab area, intended use, etc.)

- 1. **National Center for National Products Research (1995)** – modern facilities include the Thad Cochran Research Center, the Coy Waller Laboratory building, and the Maynard W. Quimby Medicinal Plant Garden, housing various specialized laboratories, greenhouses, and a science library. [NCNPR](#)
- 2. Vaught-Hemingway Stadium - \$13M expansion in 2002. Many of the funds were raised through private donations - \$5M from former student Dr. Gerald M. Hollingsworth, for whom they later named the Field; Carl and Nancy Herrin \$1M gift, etc. [Stadium](#)

Indirect Policies [F&A Costs Policy](#)

FY 2003-2007	
<b>On Campus:</b>	
Research	44.0%
Instruction	44.0%
Other Sponsored Projects	44.0%
<b>Off Campus:</b>	
All Projects	26.0%

Institution: University of New Hampshire  
 System:  
 VCOR?: Vice President of Research John Aber  
 Key docs: Office of the VP of Research's FY05 [Annual Report](#).  
 Office of VP of Research organizational [chart](#) showing programs, responsibilities.

### Growth Trend

1. Total research funding in 2003: 96,415
2. % from federal programs: 62
3. %-change 1994-2003: 121
4. Institutional data on more recent years:
  - d. FY05: new awards total exceeded \$100 million for the first time.
  - e. Awards from competitive proposals grew by 15.2% to \$108,335,557, from \$94,066,804 in FY04.
  - f. Federal sponsorship grew by 11% in FY05.
  - g. The U.S. Department of Commerce (DOC) remained UNH's largest sponsor, growing another 32% to \$37.9 million, (35% of the total).
  - h. Total support from NH state agencies declined by 36.1% to \$5.0 million.
  - i. Awards from business and industry increased 82.1% to \$10.9 million and 102.1% to \$6.8 million from non-profits.

### Key Strategies

1. **RGI-like program** President's Fund for Excellence [Research Initiative](#). Intended to make \$400k available for seed funding to faculty, who can request up to \$20,000 or \$50,000 if multi-PI. Program funds similar stuff as our RGI. Five pages of narrative. First round awards awarded in March 2006. An additional \$300k was added and [17 awards](#) representing 40% of total proposals were funded.
2. **Survey on research climate** The university conducted a [survey](#) on research climate including 500 participants and questions in five areas. Results are [here](#) (spreadsheet data).
3. **Partnerships/Commercialization** The Office of Research Partnerships and Commercialization ([ORPC](#)) was founded in November 2000 to develop and manage the intellectual property portfolio of the University of New Hampshire.
4. **EPSCoR** UNH became an [EPSCoR](#) institution in 2004. A summary of UNH's EPSCoR activities is [here](#). UNH got a \$200k planning grant in FY05.

### Major Investments

1. **State appropriations** State appropriates \$ in a Technology Innovation Grant [program](#). Has awarded \$4M to date in 146 grants involving 106 companies. The funds are matching monies (balance coming from companies in the form of cash or inkind). \$275,000 available for current year (5 to 8 awards).
2. **\$53M for eng/sci bldg** Home of the College of Engineering and Physical Sciences (CEPS), Kingsbury is the first UNH science building to be modernized under the legislature's Knowledge Education Economy Plan (KEEP). The state has contributed \$44 million to the \$52.98-million [project](#) to help ensure continued development of the New Hampshire's high-tech economy.
3. **\$27.5M for squad cars** [Project54](#) research involves using voice control in police squad cars and includes a total of \$27.5M in appropriations to date by NH Senator Judd Gregg. The technology has been deployed widely.

### Significant Corporate Partnerships

1. **Industrial Research** New Hampshire Industrial Research Center. In 1991 the [NHIRC](#) was created by the New Hampshire Legislature for the purpose of providing a mechanism to increase collaboration between New Hampshire businesses and university-based research to promote applied and basic scientific research, engineering, and associated marketing research and technology transfer to support the New Hampshire industrial and business community for the purpose of creating high quality jobs through technology development and innovation.

2. **Pharma** Bentley Pharmaceuticals (of parent Exeter) has a research arrangement with UNH that has recently resulted in a breakthrough product for drug-delivery called the [Nanocaplet](#). This appears to be a four year collaboration giving Bentley an exclusive agreement of some sort.

#### Foundation Research Engagements

1. **No R&D** The UNH Foundation does development and apparently no R&D activities.

#### Research Growth notes

1. **Two spin-offs** UNH seems to have two spin-offs to date. The second, Xemed, was founded by a physics professor working on MRI and is [profiled](#) here. The second was Chaoticom (now Groove Mobile), founded in 2001, and dealing with music downloads to cell phones – recent press [here](#).
2. **\$3.6M from NOAA** The University of New Hampshire’s Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET) awarded [15 grants](#) totaling \$3,650,337 for new tools to clean up and protect coastal environments. A partnership of UNH and the National Oceanic and Atmospheric Administration (NOAA), the Institute was established in 1997 with the support of U.S. Sen. Judd Gregg (R-NH).

#### Significant Interdisciplinary Initiatives

1. **Marine Research** Formed in 1974, the [UNH Marine Program](#) serves to integrate the marine research, education and public service activities of over 60 faculty, 300 undergraduate students and 100 graduate students from 14 departments and three colleges at the university. The Program serves as a catalyst for marine research activities at various levels from individual investigators to large interdisciplinary Centers of Excellence and Cooperative Institutes. Since 2000, these activities have attracted in excess of \$20M in extramural support annually at the university.

#### Undergraduate Research Opportunities

1. **Center for UG research** UNH’s **Hamel Center for Undergraduate Research** provides the resources and financial support for the research, scholarly and creative projects of UNH students. Two [programs](#); one is international in scope.
2. **Annual conference** Annual weeklong symposium for UG research [showcasing](#). In it’s 8<sup>th</sup> year in 2007.
3. **UG research online** A new online UG research [journal](#).

#### Facilities/Equipment Notes (Cost, area, source of funding/financing, office versus lab area, intended use, etc.)

#### Indirect Policies

Rates are available in a spreadsheet [here](#).

Institution: University of Oklahoma  
System:  
VCOR?: T.H. Lee Williams  
External \$: \$210M (FY04)  
Key docs: Institutional Academic Plan for 2004-05

#### Growth Trend

1. Total research funding in 2003: \$
2. % from federal programs:
3. %-change 1994-2003:
4. Institutional data on more recent years:
5. Private endowment: 1994: \$204M; 2004: \$850M

#### Key Strategies

1. Improve graduation rates
2. Select/grow research areas to fit national niche
3. Targeted research areas are allocated additional faculty lines

#### Major Investments

1. New technological central network infrastructure
2. \$1billion in fundraising over past decade has provided for dramatic capital improvements, growth in faculty endowment, and student scholarships

#### Significant Corporate Partnerships

1. Devon energy Corp.
2. Exxon

#### Foundation Research Engagements

1. McCasland Foundation

#### Research Growth notes

1. Recruited faculty at school/college level rather than department level to insure recruitment that addressed University strategic plan to sustain growth of research expenditures

#### Significant Interdisciplinary Initiatives

1. Scholar-leadership enrichment program
2. Faculty shared across schools/colleges for interdisciplinary courses
3. Center for Creation of Wealth (C2W) (Engineering, Business & Law, and Honors College) encourages creative ways to translate new knowledge into economic growth.

#### Undergraduate Research Opportunities

1. Honors College undergraduate research opportunities program

#### Facilities/Equipment Notes (Cost, area, source of funding/financing, office versus lab area, intended use, etc.)

#### Indirect Policies

Institution: University of South Carolina  
 System:  
 VCOR?: Vice President for Research and Health Sciences [Harris Pastides](#)  
 Key docs: President’s 2006 Vision Report interactive [document](#).

Growth Trend

1. Total research funding in 2003: 121,410
2. % from federal programs: 52
3. %-change 1994-2003: 64
4. Institutional data on more recent years:
  - o President Sorensen’s goal for extramural funding is to take the institution from \$166M in FY05 to \$266 million in “sponsored awards and research” in 2010.
  - o Federal, state, and private funding for sponsored programs and awards totaled \$166.2 million in fiscal year 2005. That’s an 11 percent jump over the previous year and nearly 66 percent more than fiscal year 2002, when awards totaled just over \$109 million. (Vision Report ’06).

Key Strategies

1. **Endowments** The South Carolina Commission on Higher Education oversees the Research Centers of Economic Excellence [endowment program](#), using lottery funds that state research universities must match. Since the program’s inception in 2002-2003, USC has received approximately \$30 million in state money for 11 chairs, representing nine centers of excellence that it will manage or co-manage with other institutions. More on the state legislative act of 2002 [here](#).
2. **Innovista** USC’s research initiatives—in nanoscience and technology, biomedical, future fuels, and the environment, as well as others—will be focused in a unique new intellectual ecosystem known as [Innovista](#). This Innovation District will foster science and creative research, but also promote fitness, health, and environmental initiatives. By creating space for residences, retail, restaurants, and recreation that will complement the research, Innovista will be a place to live, work, learn, and play. Will encompass 8M sq.-ft.
3. **Faculty hiring** USC is hiring 600 new faculty over a six-year period, including 100 focused on research through the [Centenary Plan](#) (up to \$200k per faculty start-up) and 150—many of whom will work across disciplines—through the Faculty Excellence Initiative (150 teaching faculty).

Major Investments

1. **\$10.8M for nano** A yet-to-be-determined site for a new, larger NanoCenter, where USC will engage in the micro-scale research of nanotechnology. The new center recently received \$10.8 million in state money for a total of \$35 million in investment capital.
2. **The U’s investment plan** “We plan to meet those challenges by judiciously investing some \$60 million annually for the next five years in new technology, facilities, infrastructure, services, software, and people.” (Vision Report – details on this planned investment are on this [page](#)).

Significant Corporate Partnerships

1. **According to VPOR** “...our collaborations with other research institutions and organizations. These include the Medical University of South Carolina, Health Sciences South Carolina (a \$200 million collaborative involving four of our state’s largest universities and health systems to increase health sciences research and improve the health status of citizens), and the Savannah River National Laboratory as well as private partners such as Intel, Kemet, and Voridian.”
2. **NSF IUCRC** NSF funded the IUCRC on [Fuel Cells](#) in 2003. Currently 16 companies and 12 faculty-led research groups.

Foundation Research Engagements

1. **Research Foundation** A major initiative to increase the support for faculty doing research at USC was the formation of the USC [Research Foundation](#) in 1997. USC Research Foundation’s management responsibilities include USC’s intellectual technology licensing program and the USC Columbia Technology Incubator. Board of directors number 15.

2. **Incubator** 43,000 sq. ft. technology business incubation [program](#) and facility. Managed by the Foundation under an MOU with the university.

#### Research Growth notes

1. **Seed funding** The Small Grant [Program](#) provides funds to support the formation of interdisciplinary groups, and emerging research opportunities, and seed money for new research activities. Awards are \$10-\$50k and up to 15 months. Review is by a system-wide review council. [This appears to be the very first year of this program though I can't be certain.]
2. **RGI-like program** Research Opportunity [Program](#) provides seed funding. Three categories of funding available at \$7k, \$10k, and \$20k and up to 15 months. Category I is to enhance ability to get extramural funding. Category II is general development, expansion, or enhancement of activities. Category III is for creative or performing arts.
3. **Research Equipment** Research Equipment [Program](#) provides awards of \$50-\$200k to purchase new equipment and requires a 30% cost share from dept/college, center or external source.

#### Significant Interdisciplinary Initiatives

1. **ERIC** [ERIC](#) is a university-level committee appointed by Harris Pastides, Vice President for Research and Health Sciences, to advise him regarding decisions related to environmental research at the University of South Carolina. Members of the committee represent the broad range of environmental programs at the university, rather than home departments or colleges. Currently funding six faculty-led projects (very interdisciplinary in nature).

#### Undergraduate Research Opportunities

1. **OUR** Office of Undergraduate Research manages several programs. [Link](#).
2. **Discovery Day** Discovery Day is an annual [event](#) for undergraduates at USC, in any and all disciplines, to present their research and scholarship.
3. **Magellan Scholars** By providing access to faculty mentoring relationships and a professional research experience, this [program](#) enables students to creatively explore their interests at a more in-depth level than can be attained in the classroom.

#### Facilities/Equipment Notes (Cost, area, source of funding/financing, office versus lab area, intended use, etc.)

1. **Public Health** The new 104,860-square-foot **Arnold School of Public Health** will anchor the Public Health Block of the new research-based Innovista innovation district. An additional University laboratory and research building of 135,000 square feet will be built, and a third new building is likely.
2. **Innovista** (Introduced above).

#### Indirect Policies

A link to policies and rates is [here](#).

Institution: University of South Florida  
System:  
VCOR?: Robert Chang  
External \$: \$310M FY05-06  
Key docs: Planning, Performance, Accountability Model

Growth Trend

1. Total research funding in 2003: \$
2. % from federal programs:
3. %-change 1994-2003:
4. Institutional data on more recent years:

Key Strategies

1. Matching grants research program with Florida High Technology Consortium
2. Link small businesses with single point-of-contact at USF; focus on biotech and life science entrepreneurs
3. Eighteen strategies that conform to measures set/reported by Top American Research Universities (TARU)

Major Investments

1. USF Community Engagement Initiative for economic development, sustainable communities, and critical needs for education and health professions
2. \$430,000 private and State funds for first-generation scholarships; State first-generation grant program that matches up to \$967,000
3. Endowed fellowships
4. Bridge to Doctorate programs
5. Research Foundation established in 1989

Significant Corporate Partnerships

1. Florida High Technology Corridor to foster applied research
2. Area hospitals
3. USF and Mote Marine Laboratory (BioSense program)

Foundation Research Engagements

Research Growth notes

1. Received NIH grant that is 9<sup>th</sup> largest given in 2005 by NIH

Significant Interdisciplinary Initiatives

1. Center for Entrepreneurship (business, engineering, science, and medicine)
2. Engineering and art

Undergraduate Research Opportunities

Facilities/Equipment Notes (Cost, area, source of funding/financing, office versus lab area, intended use, etc.)

1. ROTC and Joint Military Leadership bldg, \$10.4M

Indirect Policies

Institution: University of Southern Mississippi  
System: Main campus in Hattiesburg, Gulf Park campus opened in 2002  
VCOR?: Dr. Cecil D. Burge, VP-Res & Econ Development, served in various positions since 1970. An Associate VP just hired 11/05 to provide support and stimulate research efforts.  
Key docs: [2005-2008 Strategic Plan](#)

### Growth Trend

1. Total research funding in 2003: 35,049
2. % from federal programs: 90%
3. %-change 1994-2003: 317%
4. Institutional data on more recent years:  
1975: \$2M    2001: \$50M    2005: \$71M    2006: \$102M    The University has realized a 43% increase since 2005, and has consistently grown for last six years. [Message from the President](#)

### Key Strategies

1. “Expanding Excellence” initiative to provide the highest-tech education possible, creating an innovative, engaging learning experience. Established the Learning Enhancement Center and iTech in support of that initiative.
2. Created incentive program in 2004 that awards faculty who secure and manage contract and grant support known as MIDAS (Model for Incentive Dollars for Augmenting Salaries). MIDAS awarded \$382,000 to 32 faculty in the first year. [MIDAS](#)
3. Created **Center for Research Support**, - a part of the Sponsored Programs Administration that provides research consultants available to assist in any and every step of the research process. [Center for Research Support](#)
4. Increase scope of marketing and promotion efforts and facilitate interdisciplinary projects and programs - Key goal in 2005-2008 Strategic Plan of the Division of Research & Economic Development
5. Develop multimedia information effort to education public/government about the critical role of research and create opportunities for partnerships by improving the web presence of key research efforts, producing a research magazine, standardizing and expanding promotional literature and expanding participation in public policy agendas.
6. Leverage the university intellectual property portfolio to create joint ventures, startups, and other partnerships by facilitating a revenue stream to the Research Foundation from extra university sources, maintaining an experienced innovation and commercialization team, and developing Innovation and Commercialization Centers in Hattiesburg, Stennis, and Cedar Point.
7. Expand linkages with Congressional, Federal, State and local economic development agencies to facilitate attraction of firms where a university linkage produces a competitive advantage by expanding technical and marketing support for Congressional and State-directed industrial recruitment and assembling liaison team for coordination with local economic development agencies.

### Major Investments

1. \$4.58M donated from Luckyday Foundation for qualified new freshman scholarships. [Luckday Foundation Gift](#)
2. NOTE: **Sponsored Programs Administration Annual reports are restricted to the usm.edu domain.** Data collected from Annual Report for Federal Award Sources:
  - a. **National Science Foundation:** \$5.2M (2005); \$4.66M (2004)
  - b. **Dept of Defense:** \$6.7M (2005); \$8.5M (2004)
  - c. **NASA:** \$3.4M (2005); \$3.96M (2004)
  - d. **Dept of Commerce:** \$7.08M (2005); \$7.02M (2004)
  - e. **Dept Health & Human Services:** \$8.08M (2005); \$6.98M (2004)
  - f. **Dept of Agriculture:** \$3.6M (2005); \$3.16M (2004)
  - g. **Dept of Justice:** \$6.2M (2005); \$7.05M (2004)
  - h. **Other Federal:** \$8.97M (2005); \$7.74M (2004)

[Annual Financial Report 2005](#)

### Significant Corporate Partnerships



[none found]

Foundation Research Engagements

- 1. Various \$1M donations towards:
  - establishment of Pharmaceutical Sales Program in College of Business
  - construction fund of Trent Lott National Center of Excellence in Economic Development & Entrepreneurship
  - broadening of Workplace Learning & Performance Center

Total net assets increased from \$47M in 2003 to \$58M in 2005. [Foundation Annual Report 2005](#)

Research Growth notes

- 1. **Earmarks** - Burge is not responding to senator’s request for information on earmarks and \$80,000 spent on lobbying activity. “Southern Miss received more than \$35 million in earmarks during fiscal year 2006, including \$20 million for the National Formulation Science Laboratory at Southern Miss and \$4.5 million for the Regional Sediment Management Support program on coastal zone mapping and imaging.” [Hattiesburg American, 9/15/06](#)
- 2. Formed **Mississippi Research Consortium** (MRC) in 1986 – a coalition of Mississippi’s research universities (with Jackson State, Mississippi State, and U of MS). The Consortium supports education and extends technology development in MS, while increasing interaction with federal agencies and fostering research funding opportunities. They have a cooperative agreement to provide technical assistance to federal agencies and contractors at NASA’s John C. Stennis Space Center in Hancock County. [Mississippi Research Consortium](#)

Significant Interdisciplinary Initiatives

- 1. Key goal in 2005-2008 **Strategic Plan** of the Division of Research & Economic Development to facilitate interdisciplinary projects and programs by funding the startup of interdisciplinary/intercollege centers having clear opportunity/capacity focus.
- 2. **Behavioral Neuroscience Lab** – joins biology and psychology to study the “biological mechanisms and neurochemical substrates that mediate behavior” [About the Lab](#)
- 3. [The Southern Quarterly](#) – an independent journal of the arts, published by USM, devoted to the interdisciplinary study of Southern culture. The journal has been published since 1962.
- 4. **New doctoral program in Human Capital Development** – on the Gulf Coast, in a blended format including online and weekend courses and specifically targeting professionals. The program blends technology, workforce, and economic development. [PR posting, 9/18/2006](#)
- 5. **Center for Spectator Sports Security Management(SSSM)** – established in 2006, focused on Research, Education, and Outreach in the pursuit of ultimate safety during sport activities. The Center develops plans for building security awareness, improving security policies, and enhancing emergency responses. [SSSM](#)

Undergraduate Research Opportunities

- 1. Center for Response Driven Polymeric Films REU program – ten week session with faculty member involved in MRSEC Research [MRSEC REU](#)
- 2. Mentored undergraduate research experiences at ten NASA centers during summer and fall 2006
- 3. Research Experiences for Undergraduates in Inverse Problems and Cwatsets, Rose-Hulman Institute of Technology
- 4. REU Dynamical Systems Statistics Topology, Claremont McKenna, Harvey Mudd, Pitzer, Pomona, and Scripps

Facilities/Equipment Notes (Cost, area, source of funding/financing, office versus lab area, intended use, etc.)

- 1. Visitors’ Center at Gulf Coast Research Laboratory – “the first of seven buildings that will expand the marine aquaculture research, development and technology transfer programs of the university’s Gulf Coast Research Laboratory (GCRL).” In 1995, the 224 acres (116 acres for development and 108 acres of wetlands, marsh, and bayou) at Cedar Point was donated to the university. This land will include the 10,600 square-foot Visitors’ Center, five existing structures used for research (including an 18,000 square-foot facility for testing shrimp farming technology), and future construction. [Groundbreaking begins 8/17/2006](#)
- 2. Purchased \$1.5M Autonomous Undersea Vehicle in partnership with the National Oceanic and Atmospheric Administration. The AUV, one of only roughly 30 in the world, will allow for deep undersea mapping and will facilitate undersea research in acoustic and inertial navigation. [Autonomous Undersea Vehicle](#)

Indirect Policies

Effective Period	Category	Location	Rate
07/01/03-06/30/07	Research	On Campus	46.0%
07/01/03-06/30/07	Instruction	On Campus	51.8%
07/01/03-06/30/07	Other	On Campus	41.3%
07/01/03-06/30/07		Off Campus, Adjacent+	28.0%
07/01/03-06/30/07		Off Campus, Remote++	26.0%

Institution: University of Wisconsin-Madison  
System: University of Wisconsin System  
VCOR?:  
Key docs:

#### Growth Trend

1. Total research funding in 2003: 721,248
2. % from federal programs: 55
3. %-change 1994-2003: 84
4. Institutional data on more recent years:
  - Total awards '06: \$892.6M
  - Fed awards '06: \$552.9M
  - Non Fed awards '06: \$339.7M
  - Research Expenditures : 4th (FY04)
  - Federal Funding: 8th (FY04)
  - Non-Federal Funding: 1st (FY04)

[More data here.](#)

#### Key Strategies

#### Major Investments

#### Significant Corporate Partnerships

#### Foundation Research Engagements

1. **WiCell** UW and WARF established [WiCell](#) as a subsidiary of WARF in 1999 to [bank](#) embryonic stem cells and to conduct ESC research (Jim Thomson was first in the world to isolate cells and is center scientific director). In 9/2006 WiCell announced that it now has 13 of 21 lines in the Federal Registry.
2. **WARF** A modest grass-roots effort by UW to do a start-up or two.
3. **Research Park** [University Research Park](#)

#### Research Growth notes

1. **Seed funding** The WI Institute for Discovery has a seed funding initiative. They've established a [faculty panel](#) to review 220 letters of intent. Paul Percy is chair. Invites for full proposals announced 10/15 and full proposals due in December 2006. Winners announced in February of 2007. The fund is \$3M big and was donated by the Morgridge clan. Here is the [intro .ppt](#). Details of the program [here](#).

#### Significant Interdisciplinary Initiatives

#### Undergraduate Research Opportunities

1. **Community Scholars** One-year service learning program
2. **Hilldale Fellowships** Junior or better-standing students and faculty or staff collaborate
3. **Holstrom Scholarships** Same as Hilldale but specific to environmental topics
4. **Medical Scholars** First-year and high-school kids get involved in research
5. **McNair**
6. **Grad School** Compendium of opportunities for summer research
7. **URS** Undergrad Research Scholars. First and second-year. Work with faculty.
8. **WI Idea UG Fellows** Sophomore or better. Focus on community-based issues.
9. **Honors** School/college honor programs. First-year.
10. **Annual symposium**

Facilities/Equipment Notes (Cost, area, source of funding/financing, office versus lab area, intended use, etc.)

1. **WI Institute for Discovery** Intended for bioscience research. The project includes the public [Wisconsin Institute for Discovery](#) and the private Morgridge Institute for Discovery, made possible by a \$50 million gift from the Morgridges, matched by \$50 million from WARF and \$50 million from the state, providing a total of \$150 million for the project. Construction planned for 2008 w/ completion in 2010.
2. **Mircrobial Sciences Building** 330k sq-ft expected to be completed in May 2007 and is the second building of the [BioStar program](#). \$120M project will include labs for 47 research groups as well as classrooms, instructional labs, and 150 parking stalls underground. PR 3/26/04.
3. **Interdisciplinary Research Complex** Being built adjacent to UW Hospital and Clinics. First phase will wrap up in April 2008. Will house major programs in molecular medicine, image science and regenerative medicine. Stems from the [HealthStar initiative](#) to improve health science research at UW. Will be three towers (three phases). PR 3/26/04.

Indirect Policies

<http://www.rsp.wisc.edu/rates/index.html#fna>

**F&A Rates (Agreement Dated 08/09/06)  
Effective Dates: 7/1/2004 - 6/30/2007**

Source of Funds	Applicable To	F&A Rate
<b>Federal, Non-Direct Federal, For Profit Entities, Non-Profit Entities, Non-Federal governmental Agencies</b>	Research	47.0% of MTDC
	Public Service	35.5% of MTDC
	Instruction	52.0% of MTDC
<b>Commercially Sponsored Clinical Trials</b>	Clinical Trials	28% of TDC
<b>All Sources</b>	All Off Campus Programs	26% of MTDC
<b>Governmental Agencies within the State of WI*</b>	DHFS, DOA, DWD, DOT, DNR, DATCP, Dane County, Madison School Districts & Other State of WI governmental Units	15% of TDC
	DPI, WI Tech College System	8% of TDC
*All applications to State of WI Agencies must include F&A costs with a footnote stating, "If funded with State GPR funds or other nonfederal funds which by program or policy do not allow, F&A costs should be excluded from the award."		

Institution: Virginia Commonwealth University  
System:  
VCOR?: Dr. Francis L. Macrina, VP for Research since ...appointed as acting 1/2000 (became permanent after chairing the search), former director of VCU's Institute of Oral and Craniofacial Molecular Biology  
Key docs: [VCU 2020 Strategic Plan](#)

### Growth Trend

1. Total research funding in 2003: \$126,451
2. % from federal programs: 64%
3. %-change 1994-2003: 65%
4. Institutional data on more recent years: They have realized that their funding has not grown as much as they'd like (peer institutions' NIH budget growth rates have "substantially eclipsed" VCU's), so they have refocused their efforts in the VCU 2020 Vision for Excellence strategic plan (initiated in 2004, adopted in 2006, a 15-year plan) sets forth five themes that identify the areas in which they have atrophied and need growth. These themes, with some of their corresponding initiatives, are:
  - Ensure/maintain highest levels of efficiency, accountability & infrastructure
    - Establish a unit that evaluates, measures, & communicates effectiveness for further action
    - Increase philanthropic opportunities (in conjunction with end of capital campaign)
  - Achieve national recognition as a learning-centered research university that embraces a world-class student experience.
    - Focus on research, scholarship & creative activity with a decided focus on the student experience – put learning at the center of all that the university does
    - Double efforts to engage students, retain them, and ensure graduation
  - Assure continued international recognition for our research, scholarship & creative expression.
    - Address the 3 identified factors that have strangled growth:
      - Expand research space/renovate outdated research space
      - Community's dramatic health care economy change that drew faculty attention away from research to patient care
      - Non-competitive faculty/staff salaries – and administrative/faculty friction for resources
  - Achieve preeminence for our academic medical center.
    - Position VCU as the academic institution serving in a leadership role in research, education & public policy on the identified, growing, local populations suffering from manageable acute and chronic disease
  - Maintain VCU as a model for university-community partnerships
    - Realign the goals of the university with the needs of the community; develop collaborations between businesses, government agencies, communities, and universities

### Key Strategies

1. **Establish Research Advisory Council (2002)** – meets quarterly to develop the research agenda. Includes members of research faculty from across the university appointed by the VP for Research. [RAC](#)
2. **Establish Virginia BioTechnology Research Park (1990's)** – "statewide incubator for start-up firms and offers state-of-the-art space for companies, research institutes and every major state laboratory in Virginia" [President's Bio](#)
3. **Political** - "He (President Trani) has an ability to recognize what's important to each governor and makes sure to position his university accordingly." Recruited former state Finance Secretary Paul Timmreck as VP of Finance; As president of the Greater Richmond Chamber of Commerce, Trani had close ties to members of the business community – and their lobbying voices at the Capitol. [The right person](#)
4. **Go for change that will gain national recognition or highly-publicized community affirmation** – developed Carver-VCU Partnership with neighboring community of Carver. The initiative has attracted major federal and foundation grant support, resulted in a dramatic decrease in crimes rates in the area, and afforded the university recognition as a model of community relations and partnerships. In direct response to

this, VCU “received coast-to-coast coverage for its innovative programs toward city enhancement and revitalization.” In 1999, Trani was named “Richmonder of the Year” and one of the top 100 Richmonders of the Century by *Style* magazine. [President’s Bio](#)

#### Major Investments

1. **\$1.5M Howard Hughes Medical Institute Grant** – to “change the emphasis in undergraduate biology and life sciences education from a traditional, organismal approach to a more integrated “systems biology” approach in which all the molecular interactions in a system – pathway, organelle, cell, organism or ecosystem – are examined to understand function.” [VCU News](#)

#### Significant Corporate Partnerships

1. **VCU Health System (2000)** – merger of the clinical activities of the Medical College of Virginia Hospitals, MCV Physicians and the School of Medicine at VCU. This resulted in more than a dozen satellite primary and specialty care facilities which provide improved access to primary care for those who cannot afford health care insurance...which resulted in the Virginia Coordinated Care for the Uninsured partnership with community physicians. [President’s Bio](#)

#### Foundation Research Engagements

1. **\$20M William H. Goodwin, Jr. gift** – Launched School of Engineering

#### Research Growth notes

1. **Public-private partnership** to establish new engineering school (1996) – focus on biomedical engineering, it enrolls more than 1,000 students in the various ugrad and grad biomedical, chemical and life science, computer, electrical, and mechanical engineering and computer science programs. [President’s Bio](#)

#### Significant Interdisciplinary Initiatives

1. **Bachelor of Interdisciplinary Studies** – Nontraditional program that students who have some college credits to “design a degree compatible with their academic, career, and personal interests.” Each student must define a focus that incorporates two or more areas of study. [BIS program](#)
2. **First to Respond Program (2005)** – New BA degree in homeland security and emergency preparedness, readying students for “employment with for-profit and nonprofit consultants and research organizations, as well as private sector employment with businesses that require emergency planning to protect critical infrastructure.” [1<sup>st</sup> Response](#)

#### Undergraduate Research Opportunities

1. **VCU Life Sciences** - research focused on advances in community, economic and health-care development beginning in the freshman year, integrating disciplines across the board (economics, business, life sciences, humanities, engineering, etc.) at the undergraduate and graduate levels, incorporating VCU’s top researchers at every level of the students’ progress. [President’s Bio](#)

#### Facilities/Equipment Notes (Cost, area, source of funding/financing, office versus lab area, intended use, etc.)

1. **Broad Street expansion** - \$100M investment in construction which has attracted \$100M in new business activity in the area – including Kroger, Lowe’s and upscale apartments. Master plan identifies \$1 Billion capital projects in the next 15 years, bringing together schools of Business and Engineering “to foster interdisciplinary teaching, research and public service.” [President’s Bio](#)
2. Research Park – currently eight buildings work \$145M+ in capital investment [President’s Bio](#)
3. \$300M 500,000 square foot Philip Morris research center – currently under construction in the Research Park, and planned to be complete in 2007. When development of the Research Park is complete it will bring the stats to 1.5 million square feet of research, office & lab space in 18-20 buildings and employ roughly 3,000 people. [President’s Bio](#)

#### Indirect Policies

Facilities & Administration (F&A) Rates (07/01/04 – 06/30/07)

Research: On-Campus 49.0%; Off-campus 26.0%

Instruction: On-Campus 34.0%; Off-campus 18.7%

Other Sponsored Activities: On-Campus 30.0%; Off-Campus 18.0%

Institution: Wayne State University  
System: Independent – Michigan’s only urban research university  
VCOR?: Dr. John Oliver, VP for Research since 2003, and a search has just been launched to fill the position  
Key docs: [2004 State of the University Address](#), [2005 President’s Report](#)

#### Growth Trend

1. Total research funding in 2003: \$213,717
2. % from federal programs: 48%
3. %-change 1994-2003: 126%
4. Institutional data on more recent years:
  - j. 2006 - President Irvin D. Reid named an Ernst & Young **Entrepreneur of the Year** in Central Lakes Region [News Release, 6/19/2006](#)
  - k. **Key growth areas in 2004:** Social sciences, life sciences, physical sciences, and engineering – building capacity in areas that have critical importance in the 21<sup>st</sup> century.
  - l. **Commission on 40,000** – Born as a challenge by Governor Granholm in October of 2004 to double the number of college graduates in Michigan over the next decade, the commission was created and charged to address the topics of concern for growing the university’s population so significantly. Identified topics included class scheduling issues, technology and student services, recruitment and retention, student and employer needs and administrative resources. [Report on the Commission, 9/2005](#)

#### Key Strategies

1. **Targets of Opportunity plan for research investment** Initiated by university President Irvin D. Reid in 1997, included \$3.2M in university funds invested over three years to advance the research enterprise.
2. **School and College Research Investment Opportunity Program** (2002) Announced as part of the Preeminence in Research and Scholarship initiative by President Reid in his 2002 State of the University Address, Reid identified “up to \$1.8 million” for the schools to invest in research and scholarship. [Welcome Back Speech, 2002](#)
3. **Hired world-renowned specialist in lung cancer as director of university’s Karmanos Cancer Institute** (2002) In his former position as director, Dr. John Ruckdeschel built the Moffit Cancer Center at the University of South Florida into one of the nation’s top 10 cancer centers. Karmanos is designated as one of the best cancer centers in the nation by the National Cancer Institute. It currently serves 6,000 new patients per year on a \$200M budget. [Karmanos Cancer Institute](#)

#### Major Investments

2. **\$13.9M National Cancer Institute Grant** (2005) – five-year renewal of designation as federal Comprehensive Cancer Center.
3. **\$7.9M NIH Competitive Grant** renewal over five years from the National Institute for Environmental Health Sciences to examine the role of environmental factors in diseases (diabetes, Parkinson’s, obesity, asthma, etc.)
4. **\$7.2M State of Michigan grant** toward the 21<sup>st</sup> Century Jobs Fund – part of the governor’s “Jobs Today, Jobs Tomorrow” initiative to grow Michigan’s economy. \$4.2M of these funds have been designated for the university’s Barbara Ann Karmanos Cancer Institute. In total, the state awarded \$100M to businesses that promote commercially viable technologies. [Press Release 9/13/2006](#)
5. **\$2.2M NIH/National Institute of Diabetes and Digestive and Kidney Diseases** grant to study the effects of antibiotics on children with vesicoureteral reflux (VUR). [Press release 2/16/2006](#)

#### Significant Corporate Partnerships

#### Foundation Research Engagements

1. **\$3M Marvin Danto philanthropic donation** - to build the \$27.3M Marvin Danto Engineering Development Center [Press Release 3/15/2006](#)
2. **\$3M A. Alfred Taubman gift** – to assist in the planned construction of the new Damon J. Keith Classroom Building and Center for Civil Rights. Named for the federal judge who is known for his landmark decisions

in cases involving human rights, the Center will showcase parts of the Damon J. Keith Law Collection of African-American Legal History as well as house classrooms, offices, meeting areas and an auditorium. [Press Release 4/24/2006](#)

#### Research Growth notes

1. **TechTown** -- An “entrepreneurial ecosystem” grown from Wayne State’s Business School faculty and collaboration with established businesses. By developing an incubator of new business, researchers from the university can study startups and effectively turn “pure research into applied research. Additionally, local experts provide low- to no-cost services to the startup organizations, and the state provides major funding. By creating a stand-alone entity for these endeavors that is located off-campus and near to many established businesses, scheduled and promoted networking provides additional learning opportunities and benefits. One major success has been SenSound, a technology-based firm that recently (2004) developed new technology to discover how to transfer sound waves into digital images to track where unwanted sound originates. [TechTown](#)
2. **Wayne State University Children’s Bridge** – Committed \$1.8M (2004) for research focused on children’s health and development
3. **Intrinsically attached to the community** – They “actively engage people and organizations, enter into partnerships and work for mutually positive results.” They want to be an example of how a “great, public, urban university can work effectively with businesses, foundations, and local government for the social, cultural, and economic good of all.” [2004 State of the University Address](#)

#### Significant Interdisciplinary Initiatives

1. **Interdisciplinary Research Groups** – Strongly encouraged, faculty-initiated and faculty-led; no formal process to set up a group as long as collaboration is from two or more departments to study a single research topic. [Centers and Institutes](#)
2. **INPHAASE** (Institutes for Population Studies, Health Assessment, Administration, Services and Economics) collaboration between WSU and Henry Ford Health System to fund research devoted to understanding the biological and social bases for health disparities among populations of differing demographics. [News](#) The Commission on Interdisciplinary Studies, formed in 1992, is an initiative that continues to be actively supported by both the Office of the Provost and the Office of the Vice Chancellor for Research. A website is available for searching opportunities for engagement and funding, and for logging new collaborations. They intend to expand this initiative to include education and training.

#### Undergraduate Research Opportunities

##### Facilities/Equipment Notes (Cost, area, source of funding/financing, office versus lab area, intended use, etc.)

1. **Constructed new Welcome Center**, Housing comprehensive services for students and visitors (Admissions, Student Records, Housing, Cashiers, and Financial Aid), opened in September, 2002. The Center is located in a highly visible site on a heavily traveled street, and provides a “celebration of entry” to the community that it serves. [Welcome Back Speech, 2002](#)
2. **Eugene Applebaum College of Pharmacy and Health Sciences building**, dedicated in October, 2002, to provide one of the most technologically advanced buildings in Michigan for and “unparalleled education of future health professionals.
3. **Established TechTown** - A 75-acre Research and Technology Park. Its first building (“TechOne”) was donated to the university from GM, and the ensuing \$12M renovation was funded by private and public entities.
4. **Opened Genomic Technology Laboratory** as part of the Life Sciences grant award that will serve as a hub for the Michigan Life Sciences Corridor. Pfizer has, historically, been a significant contributor to the Corridor’s establishment and success in Michigan, donating \$600M - \$800M for the Ann Arbor hub expansion in 2001.
5. **Purchased 3 structures and 6 acres from Detroit Public Schools** (2003) – Known as “South Village”, this area will convert warehouse buildings into 400 housing units consisting of townhouses, lofts, and traditional apartments, and an additional 50,000 square feet of retail space.

#### Indirect Policies

##### **Research Projects:**

10/1/05 – 9/30/08: 50.5% MTDC On Campus; 26% Off-Campus (New Proposals)

10/1/02 – 9/30/05: 51.0% MTDC On Campus; 26% Off-Campus (New Proposals)

##### [Indirect Cost Rates](#)

## **Part C: Funding Data on Institutions Surveyed**

Data on research expenditures are compiled in TheCenter's 2005 report "The Top American Research Universities" and available in electronic form in their website. These data include federal and total research funding expenditures over ten years (1994-2003) and some details on medical and engineering funding in 2003.

The following tables present the data for the institutions included in this survey and UWM.

- The first table contains research expenditures converted to "present dollars" to allow direct comparisons. The institutions are ranked by percent change over the ten-year interval.
- The second table is an analysis of the 2003 data that separates federal versus non-federal funding. For institutions with over \$20,000,000 in federal funding, the amount of federal funding that is received by medical and engineering schools are also identified. The other schools do not have medical schools but some (such as UWM) do have engineering schools.



Table 1: Funding patterns for 1994-2003 for Total Research Expenditures (in present dollars). Data from TheCenter.

Surveyed Institutions	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	% Δ
Arizona State Univ	62,563	77,009	84,653	80,740	92,019	107,184	108,117	118,763	123,016	145,591	133%
Georgia State Univ	17,100	17,867	18,114	27,069	31,153	36,523	36,600	38,960	44,564	45,653	167%
Marquette Univ	5,322	5,588	5,946	5,855	6,763	6,469	7,653	7,236	9,807	11,385	114%
North Dakota State Un	36,977	40,677	43,661	35,197	40,007	44,696	50,063	64,882	72,105	91,812	148%
Portland State Univ	7,146	7,920	9,376	9,285	10,507	13,940	16,494	16,838	17,683	21,433	200%
Texas Tech Univ	31,169	32,251	33,970	36,850	41,970	46,206	53,897	54,987	63,248	69,714	124%
Univ of Cincinnati	93,599	91,159	127,733	141,604	159,695	153,002	171,906	192,895	217,739	255,083	173%
Univ of Illinois – Chicago	113,741	119,381	121,540	139,296	151,739	175,093	195,839	233,098	259,852	291,507	156%
Univ of Louisiana - Lafayette	11,099	13,416	13,429	22,381	24,768	30,735	32,692	32,073	47,796	43,769	294%
Univ of Louisville	20,475	22,835	29,655	33,434	39,147	57,051	64,062	72,857	80,974	88,522	332%
Univ of Maryland - Baltimore Co	8,117	11,868	14,304	19,799	18,155	21,854	26,044	29,641	36,323	42,906	429%
Univ of Memphis	13,305	14,642	18,429	21,271	22,486	24,280	27,381	29,445	33,625	38,728	191%
Univ of Mississippi - Oxford	10,303	11,005	10,758	9,774	9,922	10,294	31,427	57,597	50,756	49,861	384%
Univ of New Hampshire	43,707	42,548	45,693	45,886	52,359	57,613	72,108	87,879	93,222	96,415	121%
Univ of Oklahoma	51,703	55,262	58,898	61,769	68,505	79,568	95,068	90,704	106,705	106,424	106%
Univ of South Carolina	74,001	79,710	78,619	77,855	92,785	105,835	104,398	109,973	123,108	121,410	64%
Univ of South Florida	86,186	92,758	94,157	99,649	104,325	123,961	145,397	171,550	197,894	213,249	147%
Univ of Southern Mississippi	8,413	8,827	9,112	9,078	11,117	16,211	17,706	20,286	25,685	35,049	317%
Univ of Wisconsin-Madison	392,718	403,541	412,570	419,810	443,695	499,688	554,361	604,143	662,101	721,248	84%
Univ of Wisconsin - Milwaukee	19,180	19,684	19,679	19,995	20,807	21,325	20,010	23,492	24,933	27,259	42%
Virginia Commonwealth Univ	76,597	76,529	79,018	78,948	80,538	79,785	88,220	99,180	109,619	126,451	65%
Wayne State Univ	94,632	106,140	112,151	124,383	138,456	146,832	156,814	175,984	199,007	213,717	126%

Table 2: Analysis of 2003 research funding. Data from TheCenter

Surveyed Institutions	Total	Federal	Other	% Total Federal	Federal sub-divided					% Δ 1994- 2003
					All	Medical	w/o Med	Engin	w/o Med-En	
Arizona State Univ	145,591	71,741	73,850	49%	71,741	0	71,741	21,358	50,383	133%
Georgia State Univ	45,653	22,218	23,435	49%	22,218	0	22,218	<b>No</b>		167%
Marquette University	11,385	4,409	6,976	39%	4,409	0	4,409	<b>Yes</b>		114%
North Dakota State Univ	91,812	37,940	53,872	41%	37,940	0	37,940	585	37,355	148%
Portland State Univ	21,433	13,276	8,157	62%	13,276	0	13,276	<b>Yes</b>		200%
Texas Tech Univ	69,714	23,165	46,549	33%	23,165	0	23,165	8,837	14,328	124%
Univ of Cincinnati	255,083	185,261	69,822	73%	185,261	89,140	96,121	18,795	77,326	173%
Univ of Illinois - Chicago	291,507	168,063	123,444	58%	168,063	0	168,063	1,428	166,635	156%
Univ of Louisiana - Lafayette	43,769	14,455	29,314	33%	14,455	0	14,455	<b>Yes</b>		294%
Univ of Louisville	88,522	39,924	48,598	45%	39,924	27,040	12,884	2,885	9,999	332%
Univ of Maryland - Baltimore Co	42,906	34,164	8,742	80%	34,164	0	34,164	5,891	28,273	429%
University of Memphis	38,728	14,985	23,743	39%	14,985	0	14,985	<b>Yes</b>		
Univ of Mississippi - Oxford	49,861	40,577	9,284	81%	40,577	0	40,577	8,963	31,614	384%
Univ of New Hampshire	96,415	59,463	36,952	62%	59,463	0	59,463	8,517	50,946	121%
Univ of Oklahoma	106,424	36,153	70,271	34%	36,153	0	36,153	11,836	24,317	106%
Univ of South Carolina	121,410	63,044	58,366	52%	63,044	5,173	57,871	16,523	41,348	64%
Univ of South Florida	213,249	106,102	107,147	50%	106,102	27,089	79,013	11,441	67,572	147%
Univ of Southern Mississippi	35,049	31,653	3,396	90%	31,653	0	31,653	2,121	29,532	317%
Univ of Wisconsin-Madison	721,248	396,231	325,017	55%	396,231	115,001	281,230	68,615	212,615	84%
Univ of Wisconsin-Milwaukee	27,259	13,704	13,555	50%	13,704	0	13,704	<b>Yes</b>		42%
Virginia Commonwealth Univ	126,451	81,201	45,250	64%	81,201	57,223	23,978	4,038	19,940	65%
Wayne State Univ	213,717	102,963	110,754	48%	102,963	70,356	32,607	9,758	22,849	126%

Appendix A:

The research of each individual institution was extensive and that presented in this document is condensed. Further information regarding particular institutional activities may be available by contacting the researchers noted below.

<b>University</b>	<b>Tier</b>	<b>Researcher</b>
Arizona State University	I	Daniel Guido
Georgia State University	I	Vicky Everson
Marquette University	III	Vicky Everson
North Dakota State University	I	Daniel Guido
Portland State University	III	Daniel Guido
Texas Tech University	II	Daniel Guido
University of Cincinnati	I	Vicky Everson
University of Illinois-Chicago	I	Colleen Johnson
University of Louisiana-Lafayette	II	Colleen Johnson
University of Louisville	I	Colleen Johnson
University of Maryland-Baltimore Co	I	Vicky Everson
University of Memphis	II	Vicky Everson
University of Mississippi	II	Colleen Johnson
University of New Hampshire	II	Daniel Guido
University of Oklahoma	II	Vicky Everson
University of South Carolina	I	Daniel Guido
University of South Florida	II	Vicky Everson
University of Southern Mississippi	II	Colleen Johnson
University of Wisconsin-Madison	III	Daniel Guido
Virginia Commonwealth University	III	Colleen Johnson
Wayne State University	III	Colleen Johnson