State of the University

Oct. 22, 2009
State of the University

- Faculty and Research
- Students
- Finances
- Campus Development
- Baylor College of Medicine
Faculty grows to 541 fall 2009
Increase of 49 since fall 2003

Full-time Faculty Appointments, Departures, and Retirements
(Tenure and Tenure-track)
FY 2000 - FY 2010

Number of Faculty

Note: Departures and retirements exclude deceased; Data is based on year of appointment
Source: Faculty Database, Provost's Office
Undergraduate student-to-faculty ratio

Note: Faculty includes instructional faculty FTE, excluding Jones School.
Sponsored research revenues: up 7.3 percent to $85 million

Source: Vice President for Finance
Upward trend in sponsored project awards

FY 2010 results through first quarter: $58.6 million
Invention disclosures per $1 million in research – FY 2008

<table>
<thead>
<tr>
<th>Institution</th>
<th>Value</th>
<th>Institution</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>0.98</td>
<td>Penn</td>
<td>0.38</td>
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<tr>
<td>Georgia Tech</td>
<td>0.66</td>
<td>U Cal System</td>
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<tr>
<td>Stanford</td>
<td>0.57</td>
<td>Harvard</td>
<td>0.34</td>
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<tr>
<td>Carnegie Mellon</td>
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<td>UT Austin</td>
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<td>MIT</td>
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<td>Baylor Col. Of Med</td>
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<td>Wisconsin (WARF)</td>
<td>0.40</td>
<td>Texas A&amp;M</td>
<td>0.17</td>
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</table>

Source: AUTM stats
Top 10 Most Impactful Patent Portfolios
American Research Universities

Rice’s portfolio is small – 150 issued patents

Top 10 universities patenting in the United States with the most impactful portfolios measured by The Patent Board’s Current Impact™ indicator from July 1, 2008 and the previous twelve months. This measure showcases the broader significance of a university’s impact on the world technology as compared to all universities. The score indicates the role each university’s patents play in serving as a foundation for other patents and technologies.
Proposal submissions are up

Proposal submissions: up 22% in FY 09.

In FY 10, 342 submitted – up 39% from same period last year.
Investments in research infrastructure

- New director of the Office of Sponsored Research, Sarah White: focus on developing electronic systems and more efficient contracting
- Associate Vice Provost for Research, Cindy Farach-Carson: focus on building collaborations with the TMC and developing strategies for the BRC and CPRIT
- Senior licensing associate in life science, April Kilburn: focus on better marketing of Rice life science technologies and research agreements with life science industry
- Proposal development specialist (interviewing candidates): focus on facilitating large, collaborative center type grants
- New sponsored research specialist in Natural Sciences, Sherrie Kingston
- SEA technician will be hired to support shared equipment in the BRC
- Government Relations director, Ray Martinez: key role in federal and state appropriations, sponsored grants and state research programs
- F&A support: $2.1 million allocated to schools in FY 2010 budget
Qualitative measures of productivity: Publishing in the best journals

An average of Rice authorship on more than one paper per month in *Science* or *Nature* (including two covers) last year
Naomi Halas
Named DOD National Security Science and Engineering Faculty Fellow; Fellow of the American Academy of Arts and Sciences

Doug Natelson
Named one of the country’s top 20 scientists under age 40 by Discover magazine

Farinaz Koushanfar
Recognized in the MIT Technology Review “innovators under 35”

Ussama Makdisi
Awarded the John Hope Franklin prize for best book in American Studies
Young faculty recognition

Wotao Yin
2009 Alfred P. Sloan Foundation Fellowship

Weiwei Zhong
Searle Scholar Award

Eugene Ng
2009 Alfred P. Sloan Foundation Fellowship

Jamie Padgett
Named one of 14 “new faces of engineering” by the National Engineers Week Foundation

Nik Putnam
Beckman Young Investigator Award

Cin-Ty Lee
Donath Medal by the Geological Society of America
Other major awards

Tani Barlow
The journal *positions: east asia cultures critique*
The 2008 Council of Editors of Learned Journals Award for Best Special Issue

Michael Maas
National Endowment for the Humanities Fellowship

Melissa Marshall
Visiting scholar at the Russell Sage Foundation

Lars Lerup
Rome Prize to study the Pantheon

Alex Byrd
*Captives and Voyagers*
AHA's Wesley-Logan Book Prize for 2009

Jim Tour
Foresight Institute Feynman Prize for experimental nanotechnology
- **New faculty -- Latin America literary and cultural scholars**
  - Caribbean (Spanish and Francophone) specialist – 2008
  - Southern Cone specialist (Argentina, Chile, Uruguay) – 2009
  - Mexico specialist – 2010 (ongoing search)
- **New faculty in History and Anthropology**
  - History, Brazil – 2009
  - History, Mexico – 2009
  - Anthropology, Latin America/Nicaragua – 2009
- **Strong ties to Spain**
  - Spanish Ministry of Education moves the Spanish Resource Center to Rice
- **Student interest**
  - About one-third enroll in Spanish language courses
    - Medical Spanish, Commercial Spanish, Scientific Spanish are popular
- **Student exchanges**
  - Mexico: Monterrey Tech, ITAM, UDEM, UDLA
  - Argentina: ITBA, UdeSA
- **Creation of Puentes Consortium**
  - Research consortium with Rice, University of Arizona, Monterrey Tech, ITAM, UDEM, UDLA
Rice University Historical and Projected Enrollment
Fall 1912 – Fall 2009

Source: Enrollment Reports to the President, Registrar
Undergraduate enrollment: Applications double

Number of Applications Has Doubled Since 1999

<table>
<thead>
<tr>
<th>Entering Year</th>
<th>Applications</th>
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<tbody>
<tr>
<td>1999</td>
<td>5,740</td>
</tr>
<tr>
<td>2000</td>
<td>6,802</td>
</tr>
<tr>
<td>2001</td>
<td>6,742</td>
</tr>
<tr>
<td>2002</td>
<td>7,079</td>
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<td>2003</td>
<td>7,501</td>
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<td>2004</td>
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<td>2005</td>
<td>7,890</td>
</tr>
<tr>
<td>2006</td>
<td>8,776</td>
</tr>
<tr>
<td>2007</td>
<td>8,968</td>
</tr>
<tr>
<td>2008</td>
<td>9,813</td>
</tr>
<tr>
<td>2009</td>
<td>11,173</td>
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</table>
Percent of all undergraduates receiving Pell Grants

Percentage of Undergraduate Students Receiving Pell Grants
2007-2008

- Emory: 3%
- Wash U.: 6%
- Northwestern: 9%
- Duke: 10%
- Rice: 11%
- Vanderbilt: 12%
- Stanford: 13%
Undergraduate degrees by first major: by graduating class
Endowment distribution supports 46% of operating revenues

- Auxiliary enterprises, net 6%
- Gifts and pledges 5%
- Grants and contracts 19%
- Student tuition and fees, net 20%
- Other revenues 4%

Endowment distribution 46%

Source: Rice Financial Statements, preliminary
Consolidated budget

Three-fifths of Budget is Compensation

- Salary and Benefits: 61%
- Supplies & Expense: 24%
- Utilities: 4%
- Interest and Capital Renewal: 7%
- Equipment: 3%
- Capital Budget: 2%

FY10 Consolidated budget: $479.1M
Balancing the FY 2010 budget

Actions to date to maintain a balanced budget

- Limiting pay raises to those making $60,000 or less
- Reducing FY 2010 operating budgets by 5 percent
- Reducing the library budget
- Reducing number of faculty recruitments
- Reducing some service levels
- Negotiating volume-based price discounts as part of central, online procurement system
- Conserving energy through building temperature monitoring and management
- Replacing print publications with electronic
- Lowering mileage reimbursements
Rice will need to make further budget cuts in FY 2011

Factors that shape FY 2011 budget planning

- Endowment distribution: getting back to 5.5 percent target range
- Enrollment growth
- Tuition
- Financial aid
- New facilities
- Utilities
- Faculty recruitments
- Pay raises
Commitments to the University
FY 2000 to FY 2009

Source: Vice President for Resource Development
Rice Annual Fund: Goal
$8.2 million by FY 12
Campaign commitments by category
(dollars in millions)

Funds Pending Designation $21.9

Rice Annual Fund $27.5

Endowed Professorships $65.7

Departmental Endowments $84.5

Buildings & Equipment $157.5

Faculty Research $46.0

Endowed Scholarships $60.4

Other Departmental Funds $99.3

$562.8 million as of 9/30/09
Campus building enhancements:
\(~\$900\text{ million}\)
<table>
<thead>
<tr>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Center</td>
</tr>
<tr>
<td>Reckling Park Field</td>
</tr>
<tr>
<td>Geological Laboratories</td>
</tr>
<tr>
<td>Ryon Lab and Mechanical Engineering Renovation</td>
</tr>
<tr>
<td>Brochstein Pavilion</td>
</tr>
<tr>
<td>Central Quad</td>
</tr>
<tr>
<td>The “John and Anne” Grove</td>
</tr>
<tr>
<td>Oshman Engineering Design Kitchen</td>
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## Capital projects in the pipeline

<table>
<thead>
<tr>
<th>Complete by December 2010</th>
<th>Planning</th>
<th>Aspirations</th>
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</thead>
<tbody>
<tr>
<td>Brockman Hall</td>
<td>Continuing Studies</td>
<td>Opera Theater</td>
</tr>
<tr>
<td>South Colleges Renovation and East Servery</td>
<td>Social Sciences</td>
<td>Visual Arts</td>
</tr>
<tr>
<td></td>
<td>Science and Engineering Renovations</td>
<td></td>
</tr>
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</table>
Building a sense of community

Duncan College

McMurtry College

Tudor Fieldhouse

Barbara and David Gibbs Recreation Center

Brochstein Pavilion
• Five classrooms open; 172 total seats; four in use
• By mid November, 250 faculty, staff and graduate students in the BRC, including 24 faculty plus 5 TBN faculty offices/labs
• Second floor will house a café/coffee bar, the TMC Digital Library, a satellite vivarium and the Rice SEA/BRC equipment cores
• Floors 3-8 populated by Rice researchers from Bioengineering, Chemistry, and Biochemistry and Cell Biology
• Texas Children’s Hospital preparing to occupy half of 8th floor; determining programming
  – Conversation under way with M.D. Anderson
• Grand opening symposium being planned for early April
• AAAS regional spring meeting
“Combining quality and quantity of space with location, I think there’s probably not a better building for translational bioengineering research in the country right now.”

--Rebekah Drezek, Professor of Bioengineering

“This is a huge advantage for developing state of the art clinical collaborations. ... We have experienced a steady stream of visits with clinicians who are interested in translational programs. A few weeks back we were introduced to a five year, $75 million program for radiation sensors that is an ideal fit for our lab. We did not know of this program till this visit transpired.”

--John McDevitt, Brown-Weiss Professor of Chemistry and Bioengineering

“While I was in the clinic last week, I connected with another physician in the department who has some common interest in biomarker selection. She and I got to talking and are now meeting regularly to think about another collaboration. These interactions happened before, but with lower frequency and they required a lot more energy on my part. I finally feel like I am part of the medical center! And I think we are just beginning to see the benefits.”

--Rebecca Richards-Kortum, Stanley C. Moore Professor of Bioengineering

“People are looking to the BRC with excitement and beginning to imagine a whole other type of medicine that uses drugs and nanotechnologies to understand how veins and arteries work.”

--Vicki Colvin, Kenneth S. Pitzer-Schlumberger Professor of Chemical and Biomolecular Engineering
Baylor College of Medicine
Opportunities

- Build strong interdisciplinary and integrated research programs in promising emerging areas
  - Genomics, neuroscience, health policy, global health, bioinformatics and computational biology, medical humanities, human performance
- Enhance opportunities for undergraduate and graduate education
- Position combined Rice-BCM for enhanced success in major federal and other sponsored research and philanthropy
  - Move quickly to upper rank in research funding
  - Strengthen research infrastructure
- Create a university with a global reputation for outstanding teaching, life-enhancing research and extraordinary achievement
  - A beacon for talent and a flagship for Houston
  - Make a difference in lives and livelihoods around the world
Concerns

- Financial risks resulting from Baylor operating losses and debt
- Hospital partnerships
- Retention and recruitment of high quality medical faculty
- Challenges of implementation
- Exposure to risks in changing health care policy and regulatory environment
- Possible impact on Rice culture and priorities
Conditions for merger

- Baylor on a sustainable path to eliminate its operating deficit and capable of operating in the near future as a financial “tub on its own bottom”
- Strong, stable relationship with one or more adult private hospitals
- Solution for McNair campus hospital
- Significant funding for synergistic opportunities
- Resources for nonmedical-related endeavors at Rice sustained and enhanced through fundraising and other revenues
- Commitment to diversity of undergraduate and graduate student endeavors
- Clear governance principles
- Clear and firm arrangements for execution and implementation
  - Faculty engagement and external advice
  - Enhanced administrative team to handle merger and maintain current Rice endeavors
$467.5 million

From FY 2009 preliminary Financial Statements
Original Rice map with medical school

Medical school
1912: The Rice Institute opens with engineering, humanities, natural sciences and architecture programs
1923-24: Rice student body exceeds 1,000; 97 percent Texans
1946: Rice receives first federal funds from Office of Naval Research
1957: Residential college system begins
1963: Rice space program launched (and begins pursuing federal research funding)
1965: Rice begins admitting students of all races
1965: Architecture department becomes the School of Architecture
1967: School of Continuing Studies founded
1974: Jones School of Business and Shepherd School of Music founded
1979: School of Social Sciences founded
1985: Rice becomes a member of Association of American Universities (AAU)
1990: Economic Summit of Nations held at Rice
1991: Alice Pratt Brown Hall opens
1993: Baker Institute for Public Policy founded
1993: Smalley Institute for Nanoscale Science and Technology founded
1996: Richard Smalley and Robert Curl win Nobel prize in chemistry
1998: Charter change allows Rice to incur debt
2002: McNair Hall opens
2009: BioScience Research Collaborative opens
2009: Applications exceed 11,000; foreign students exceed 1,000; 45 percent Texans
2012: Rice’s centennial anniversary