State of the College: Fall 2010

It’s Time for Geosciences at Texas A&M
Headlines

- A Challenging Year:
  - “Texas A&M looking for funds to cut after state mandate”
  - “A&M regents push reforms”
  - “Top-level A&M official resigns amid questions over credentials ...”
  - “A&M planning for the worst”
  - “A&M to offer buyouts to deal with cuts”
  - “A&M System grades faculty — by bottom line”
  - “Aggies steeling for bigger cuts”

theeagle.com
Bryan-College Station, Texas
Overview

- Achievements and Accomplishments
  - Gulf Oil Spill Response
  - Status of New Drilling Program
  - Renewed Activity in Centers
  - Endowed Chairs/Professorships Filled
  - Increase in Undergraduate and URM Enrollment

- Challenges

- Path Forward
Oceanography, GERG and Sea Grant were honored with the 2010 Newsmaker’s Award for their contributions to the public’s information and understanding of the Gulf Oil Spill. Geosciences professors gave hundreds of interviews to media, day and night.
New Drilling Program

- NRC Panel Meeting – July
- NSB – Jan 2012
- Science Services to be re-competed 4 years out
- NSF very happy w/ TAMU Science Services
- Lots of challenging, successful science
Geoscience professors received three NSF CAREER awards and one NASA New Investigator Program Award in 2010. The three-year grants for each average around $500,000.

Dr. Gunnar Schade (Atmospheric Sciences)

Dr. Russ Schumacher (Atmospheric Sciences)

Dr. Kathleen O’Reilly (Geography)

Dr. Shaima Nasiri (Atmospheric Sciences)
Undergraduate Student Growth 2005 to 2010

* OISP Official 12th day data (not certified)
Student Minority/Diversity Profile

* OISP Official 12th day data (not certified)
iGeo 2010 brought 14 prospective students to Texas A&M, where they learned about the Geosciences, met professors, toured the campus and attended a football game. Students are from traditionally underrepresented groups in Texas. This summer, a weeklong program, GeoX, will build on the success of iGeo.
Chris Hauser and Anthony Cahill (civil engineering) received an NSF REU grant for $550,000 for undergraduate students to study at the Soltis Center in Costa Rica. The students will investigate climate change, the transfer of water and energy through the forest canopy, the changes of the flow of water within the ecosystem, and the cycling of carbon and water through biological processes.
Activities in College Centers

- Berg-Hughes Center
  - Ernie Mancini on board
  - First annual conference

- CACE
  - Symposium on Atmospheric Chemistry and Air Quality in Texas

- Revival of TCCS
  - Towards a regional climate modeling center with UT
  - Laying the groundwork to compete for a federal center

- GERG
  - Responding to the Gulf Oil Spill
Overview

- Achievements and Accomplishments
- Challenges
  - State budget
  - Research funding
  - Graduate student numbers and time to degree
  - Reframing research and its role in education
  - Accountability and the role of assessment
- Path Forward
FY10-11 Percentage Paid by Each Unit for a Total of $700K (5%) Budget Reduction per Legislative Budget Board 2009-2011
# FY12 Budget Reduction Summary

## College of Geosciences

<table>
<thead>
<tr>
<th></th>
<th>E&amp;G Amount</th>
<th>Other Amount</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Amount of Reduction Required</strong></td>
<td>$ 1,300,000</td>
<td>$ 25,000</td>
<td>$ 1,325,000</td>
</tr>
<tr>
<td>1. Eliminate Vacant Faculty Positions</td>
<td>$ 396,942</td>
<td>-</td>
<td>$ 396,942</td>
</tr>
<tr>
<td>2. Eliminate Vacant Staff Positions</td>
<td>$ 29,503</td>
<td>-</td>
<td>$ 29,503</td>
</tr>
<tr>
<td>3. Eliminate Filled Faculty Positions</td>
<td>$ 396,261</td>
<td>-</td>
<td>$ 396,261</td>
</tr>
<tr>
<td>4. Eliminate Filled Staff Positions</td>
<td>$ 314,750</td>
<td>-</td>
<td>$ 314,750</td>
</tr>
<tr>
<td>5. Operating Expenses</td>
<td>-</td>
<td>$ 25,000</td>
<td>$ 25,000</td>
</tr>
<tr>
<td>6. Travel Expenses</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7. Contracted Services</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8. Deferred Capital</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>9. Other Savings-IT Salary Offset</td>
<td>$ 162,544</td>
<td>-</td>
<td>$ 162,544</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>$ 1,300,000</td>
<td>$ 25,000</td>
<td>$ 1,325,000</td>
</tr>
</tbody>
</table>

Percentage of Target Reached

|                             | 100% | 100% | 100% |
FY12 Utilization of E&G Funds

Geography: 15%
Geology & Geophysics: 22%
Atmospheric Sciences: 14%
Oceanography: 20%
Institutional Support (IODP, Partner Placement): 2%
Information Technology: 3%
Environmental Programs: 1%
Dean's Office: 8%
Graduate Student Support: 10%
Sea Grant: 5%
Atmospheric Sciences: 14%
Geology & Geophysics: 22%
Dean's Office: 8%
Graduate Student Support: 10%
Sea Grant: 5%
Research Expenditures and IDC Returns (FY10 amounts are preliminary)

Chart does not include IODP expenditures Total exp in FY10 for ODP/IODP/SODV $60 M
Student Head Count Change by Level

<table>
<thead>
<tr>
<th>Level</th>
<th>Fall 2008</th>
<th>Fall 2009</th>
<th>Fall 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduates</td>
<td>525</td>
<td>637</td>
<td>693</td>
</tr>
<tr>
<td>Masters</td>
<td>177</td>
<td>205</td>
<td>204</td>
</tr>
<tr>
<td>PhD</td>
<td>135</td>
<td>138</td>
<td>150</td>
</tr>
</tbody>
</table>
Summary of Graduate Degrees Conferred

2000-2004

MS: 229
Ph.D.: 96

2005-2009

MS: 206
Ph.D.: 102

Other Issues

- Reframing research and its role in education
- Accountability and the role of assessment
Exemplary Assessment

In trainings offered by the Office of Institutional Assessment, two Geosciences assessments are featured:

- Embedded Assessment: Geography 390 final exam – Vatche Tchakerian

- Capstone Project: Meteorology team weather reports – Gunnar Schade
Path Forward

- Strategic Plan
- Look at endowed resources in a new way
  - Existing income
  - One-time funds
  - Development strategies
- Take proactive stance on definitions of teaching, learning, and faculty work
  - Grow graduate student enrollment and through put
  - Incorporate technology, while reducing cost
  - Produce College-wide performance evaluation guidelines, including post-tenure review
- Position ourselves for better times
  - Reserve funds for strategic priorities, retention
Strategic Plan
2010–2015

The College of Geosciences
<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairs</td>
<td>$12.0M</td>
</tr>
<tr>
<td>Professorships</td>
<td>$1.6M</td>
</tr>
<tr>
<td>Scholarship/Fellowships</td>
<td>$5.6M</td>
</tr>
<tr>
<td>Designated Centers/Labs</td>
<td>$1.3M</td>
</tr>
<tr>
<td>College/Departments/Programs</td>
<td>$1.2M</td>
</tr>
<tr>
<td>Total Book Value</td>
<td>$21.7M</td>
</tr>
<tr>
<td>Total Market Value</td>
<td>$25.0M</td>
</tr>
</tbody>
</table>

September 2010
### Endowed Chairs and Professorship fund balances available for department use per Dean’s policy dated January 22, 2010

<table>
<thead>
<tr>
<th>Unit</th>
<th>Amount Available for Departmental Use Per Policy (January 2010)</th>
<th>Amount Spent</th>
<th>Available Fund Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geography</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Geology</td>
<td>$450K+$450K – Halbouty Visiting Chair</td>
<td>$123K (2 YRs of Post Doc Support from Halbouty Visiting Chair)</td>
<td>$777K</td>
</tr>
<tr>
<td>Atmospheric</td>
<td>$220K</td>
<td>$10K (2 Scholarships)</td>
<td>$210K</td>
</tr>
<tr>
<td>Sciences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oceanography</td>
<td>$298K</td>
<td>$0</td>
<td>$298K</td>
</tr>
</tbody>
</table>

**Note:** 25% of the available fund balance must be used for departmental interdisciplinary support.
### Endowed Income Generated Annually by Category (Home of Current Holder)

<table>
<thead>
<tr>
<th>Unit</th>
<th>Endowed Chair</th>
<th>Endowed Professorship</th>
<th>Scholarships/Fellowship</th>
<th>Departmental General Endowment Fund</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$692</td>
<td>$692</td>
</tr>
<tr>
<td>GEOL</td>
<td>$218,950</td>
<td>$40,081</td>
<td>$94,563</td>
<td>$42,351</td>
<td>$395,945</td>
</tr>
<tr>
<td></td>
<td>Holders: Wiltschko, Grossman, F. Chester</td>
<td>Holders: Ikelle, Zhan, Herbert, Gibson, Everett</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATMO</td>
<td>$116,794</td>
<td>$0</td>
<td>$10,194</td>
<td>$4,374</td>
<td>$131,362</td>
</tr>
<tr>
<td></td>
<td>Holders: R. Zhang, P. Yang</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCNG</td>
<td>$102,681</td>
<td>$13,456</td>
<td>$82,638</td>
<td>$13,069</td>
<td>$211,844</td>
</tr>
<tr>
<td></td>
<td>Holders: P. Chang, W. Sager</td>
<td>Holder: W. Gardner</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** Information above does not include annual distribution to respective holder.
## FY11 Scholarships/Fellowships Awarded

<table>
<thead>
<tr>
<th>Unit</th>
<th># of Scholarships Awarded</th>
<th># of Fellowships Awarded</th>
<th>Total Scholarships/Fellowships Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLGE</td>
<td>30</td>
<td>15</td>
<td>45</td>
</tr>
<tr>
<td>GEOG</td>
<td>0</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>GEOL</td>
<td>35</td>
<td>15</td>
<td>48</td>
</tr>
<tr>
<td>ATMO</td>
<td>10</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>OCNG</td>
<td>24</td>
<td>19</td>
<td>43</td>
</tr>
</tbody>
</table>
Research Expenditures and IDC Returns (FY10 amounts are preliminary)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Total Expenditures</th>
<th>Total Indirect Costs</th>
<th>Total IDC return</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2005</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY2006</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY2007</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY2008</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY2009</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY2010</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chart does not include IODP expenditures. Total exp in FY10 for ODP/IODP/SODV $60M.
Priorities for FY12

1. Personnel (Salary and Benefits)
2. Increase Graduate Student Enrollment and Diversity
3. Grow Research Initiatives (obtain more external grants and contracts)
4. Generate Additional Revenue Streams (certificate programs, on-line learning, and short course offerings)
5. Sustain Weighted Semester Credit Hours (WSCH’s)
6. Maintain Services of IT Computer Support by offsetting IT Salaries (GPE-5%, IDC-15%, IEEF-20%, E&G-60%)
7. Explore new avenues with the Development Foundation
College Profile – September 2010

PERSONNEL
- 104 tenured and tenure track faculty
- 7 non-tenure track instructional/research faculty
- 25 research scientists
- 103 research staff
- 81 administrative staff
320 TOTAL

STUDENTS*
- 693 undergraduate
- 354 graduate
1,047 TOTAL

FACILITIES
- Academics 204,289 sq. ft.
- IODP 87,067 sq. ft.
- GERG 23,522 sq. ft.
- SEAG 6,111 sq. ft.
320,989 SQ. FT. TOTAL

* OISP Official 20th day data
## Tenured/Tenure Track Faculty Comparison

<table>
<thead>
<tr>
<th>Rank</th>
<th>Fall 2005</th>
<th>Fall 2010</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Professor</td>
<td>44</td>
<td>57</td>
<td>23%</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>22</td>
<td>26</td>
<td>15%</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>26</td>
<td>21</td>
<td>-24%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>92</td>
<td>104</td>
<td>12%</td>
</tr>
</tbody>
</table>
Masters Student Growth
2005 to 2010*

* OISP Official 12th day data (not certified)
Doctoral Student Growth
2005 to 2010*

* OISP Official 12th day data (not certified)
## Tenured/Tenure Track Faculty Transitions

<table>
<thead>
<tr>
<th></th>
<th>Fall 2005</th>
<th>Fall 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Faculty</td>
<td>92</td>
<td>104</td>
</tr>
<tr>
<td>Reinvestment hires</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>New hires</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Promotions to next faculty rank</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Departures from TAMU</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
## Tenured/Tenure Track Faculty Diversity Comparison

<table>
<thead>
<tr>
<th>Rank</th>
<th>Fall 2005</th>
<th></th>
<th>Fall 2010</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>Full Professor</td>
<td></td>
<td>45</td>
<td></td>
<td>53</td>
</tr>
<tr>
<td>Associate Professor</td>
<td></td>
<td>15</td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td></td>
<td>15</td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>75</td>
<td></td>
<td>89</td>
</tr>
<tr>
<td>% of total</td>
<td></td>
<td>84%</td>
<td></td>
<td>86%</td>
</tr>
</tbody>
</table>

- 7 Asian
- 2 Hispanic
- 1 African-American
Outcome of Volunteer Separation Program (VSP)

- Five VSP Participants
  - **Geology and Geophysics**
    - Wayne Ahr
    - Chris Mathewson
    - John Spang
  - **Oceanography**
    - Bill Bryant
  - **Sea Grant**
    - Bob Stickney

Outcome: CLGE needed more VSP applicants in order to recruit new faculty to pursue strategic initiatives as outlined in the Strategic Plan
It’s Time for Geosciences at Texas A&M!

Thank you!!
Dean’s Awards: Fall 2010
Sarah Brooks
Assistant Professor, Atmospheric Sciences

Sarah touches students’ lives. She has left indelible impressions on students who have passed through our program—from introducing them to sushi to getting them a job.  

Dr. Ken Bowman, department head

Where would I be if I had never met Dr. Brooks? I really couldn’t begin to guess. She’s just been too influential in my life, and I wouldn’t have it any other way.  

Graduate Student

Dr. Brooks rekindled my love of science and pushed me to pursue my goals. The skills she helped me obtain will stay with me the rest of my life.  

Former student
2010 Association of Former Students
College Level Teaching Awards

Steven M. Quiring
Assistant Professor, Geography

In only five years, he has employed 11 undergraduate students as research assistants . . . resulting in a number of co-authored papers and presentations.

Dr. Jonathan Smith

Dr. Quiring has made a greater impression on me than any other member of the Texas A&M faculty.

Undergraduate student

Dr. Quiring has truly affected my life by giving me opportunities I may not have obtained anywhere else and raised my standards of what I expect from an educator.

Graduate student
2010 Dean’s Distinguished Achievement Awards: Teaching

Dr. Andrew Hajash, Professor, Geology and Geophysics

The education of geology and geophysics for undergraduate students would not be at the current level if it were not for the selfless efforts of Dr. Andrew Hajash.

Geology student

His teaching style reflects his faith in the students to comprehend difficult concepts when the material is well presented.

Dr. Robert Popp, Geology and Geophysics

It would be hard to find a more helpful, intelligent and cheerful professor than Dr. Hajash.

Geology student
Dr. Benchun Duan, Assistant Professor
Geology and Geophysics

Dr. Duan is a rising star who appears to be headed for a truly distinguished career.

*Dr. Frederick Chester*

His rapid development as a leading researcher can be largely attributed to the balance between methodological innovations and creative geophysical applications.

*Dr. Steven Day, San Diego State University*

Ben and his students aren’t just on my tail . . . they have passed me by.

*Dr. Ruth Harris, USGS*
2010 Dean’s Distinguished Achievement Award: Research Scientist

- Dr. José Sericano, Research Scientist, GERG

His research has expanded our knowledge of environmental impacts in remote and underprivileged areas of the world.

Dr. Terry Wade, GERG

Dr. Sericano’s research has broadened the scientific understanding of monitoring and are included in the foundation publications in his field.

Dr. Gunnar G. Lauenstein, NOAA

He has established himself as a world-class scientist in the area of trace contaminants in the environment.

Dr. Stephen Safe, TAMU Veterinary Medicine
2010 Dean’s Distinguished Achievement Award: Technical Staff

Tim Copple, Senior Systems Administrator, Geography

Tim is one of those brilliant people who has the courage and skills to topple old ideas and find creative solutions

Jim Rosser, IT

... Calm demeanor ... unusually organized in developing preventive maintenance protocols ...

Dr. Doug Sherman, Geography

Beyond the call of duty ... always professional, courteous, knowledgeable.

Business Office
2010 Dean’s Distinguished Achievement Award: Technical Staff

- Matt Mefferd, Systems Administrator, IODP

Every customer interface is an opportunity to serve and excellence is the lowest standard he sets for himself.

Julio Cesar Flores, IODP

He displays unparalleled abilities, professional skill, resourcefulness and diplomacy. He is cool under fire with a “can-do” spirit.

Jim Rosser, IODP

Matt’s dedication and considerable talents . . . benefits IODP, Texas A&M, the College of Geosciences and the scientific community.

Philip Gates, IODP
2010 Dean’s Distinguished Achievement Award: Administrative Staff

- Carria Collins, Business Coordinator I, Atmospheric Sciences

Ms. Collins is the epitome of the idea office employee... Everyone agrees that she is the best office worker the department ever had.

*Barbara Straube, Atmospheric Sciences*

The bottom line is that she is not afraid of work.

*Dr. Andrew Dessler, Atmospheric Sciences*

Carria and Barbara Straube form the best administrative team the department has had in nearly 20 years.

*Dr. Ken Bowman, Atmospheric Sciences*
2010 Dean’s Distinguished Achievement Award: Administrative Staff

- Wendy Gamble, Business Coordinator I, Oceanography

Wendy understands the multitude of factors impacting graduate stipends . . . and handles each student’s case with diligence and concern.

Ruth Mullins and Julia O’Hern
Oceanography graduate students

Her knowledge of the job and always cheerful disposition make her a real asset to the department.

Barbara Bayer, Oceanography

She exemplifies professionalism.

Dr. Steven DiMarco, Oceanography
Faculty Receiving Promotions and/or Granted Tenure as of Sept. 1, 2010

- Promotion to Associate Professor with Tenure
  - Anthony Filippi
  - Wendy Jepson
  - Debbie Thomas
  - Daniel Thornton
Faculty Receiving Promotions and/or Granted Tenure as of Sept. 1, 2010

- Promotion to Full Professor
  - David Cairns
  - Donald Collins
  - Franco Marcantonio

- Tenured
  - Steven DiMarco