UGA Research:
How Are We Doing?
Where Are We Going?
How Do We Get There?

August 27, 2009
Research: *How* Are We Doing?

*First, the not-so-good news.*

But until recently –
No med school
No public health
No engineering
Research: *How Are We Doing?*

_But, good things are happening._

- Coverdell, CCRC, AHRC, Pharmacy
- GRA and GCC Scholars
- Other excellent faculty hires
- New, important growth opportunities
Research: *What* Are We Doing?

*Emphasizing key areas/strengths, building excellence.*
Research: *What Are We Doing?*

*Successes with bioenergy.*

- **Bioenergy**
  - DOE Bioenergy Science Center
  - Two new GRA Eminent Scholars
  - Campus wide program
  - Many new grants
  - Biomass genetics / characterization / processing, etc
  - Latest DOE Appropriation ($1.2M)
Research: *What Are We Doing?*

*Another major focus.*

- **Infectious diseases**
  - $19M Gates grant
  - Emory/UGA flu center (only 6 in U.S)
  - CDC partnership
  - New Riverbend facilities
    - *Biosafety (level 3) labs*
    - *First dedicated UGA nano facilities*
    - *Thanks to GRA, UGARF, appropriations*
Research: *What Are We Doing?*

*Interdisciplinary Faculty of Infectious Diseases (FID).*

>25 departments
6 centers
Faculty of Engineering
Research: **What Are We Doing?**

**Collaborative BOR hires: infectious diseases.**

- Infectious Diseases
- Microbiology
- BOR Enhancement Positions
- Ecology
- Public Health

- Chris Whalen
- Don Harn
- Vinny Starai
- Biao He
- Wendy Watford
- Andrew Park
- Andreas Handel
Research: *What Are We Doing?*

*More good things.*

- **Stem cells**
  - $9M regional resource

- **Cancer**
  - $2M NIH pancreatic cancer markers center (NCI)
  - $8M cancer/stem cells

- **Behavioral research**
  - Center for healthy African American families – maybe!
Research: *What Are We Doing?*

*New initiatives.*

- **Water resources**
- **Childhood obesity**
  - Critical health / economic issue for Georgia
  - *GA ranks 3rd worst, nearly 40% of kids overweight/obese*
  - University System of Georgia / GRA initiative
  - Children’s Healthcare of Atlanta priority
  - Great opportunity for UGA research and outreach

*MUST HANG ON TO WHAT WE HAVE TOO!*
Research: *How* Are We Doing (Recently)?

*Improved rankings.*

- Improved NSF ranking
- Research funding up FY09

<table>
<thead>
<tr>
<th>FISCAL YEAR</th>
<th>UGA RANK</th>
</tr>
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<tbody>
<tr>
<td>2003</td>
<td>84&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>2004</td>
<td>89&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>2005</td>
<td>90&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>2006</td>
<td>103&lt;sup&gt;rd&lt;/sup&gt;</td>
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<tr>
<td>2007</td>
<td>94&lt;sup&gt;th&lt;/sup&gt;</td>
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<table>
<thead>
<tr>
<th>Research Funding</th>
<th></th>
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<tbody>
<tr>
<td>FY08</td>
<td>FY09</td>
<td>Up</td>
</tr>
<tr>
<td>$137 M</td>
<td>$173 M</td>
<td>26%</td>
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</table>
Research: How Are We Doing (Recently)?

Sources of FY09 increase.

New ARRA funding confirmed: ~$12 million to date

<table>
<thead>
<tr>
<th>FEDERAL AGENCY</th>
<th>UGA RANK</th>
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</thead>
<tbody>
<tr>
<td>USDA</td>
<td>14th</td>
</tr>
<tr>
<td>DOE</td>
<td>25th</td>
</tr>
<tr>
<td>NSF</td>
<td>62nd</td>
</tr>
<tr>
<td>DHHS</td>
<td>96th</td>
</tr>
<tr>
<td>NASA</td>
<td>159th</td>
</tr>
<tr>
<td>DOD</td>
<td>229th</td>
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</table>

FY07 DATA

% Increase

NIH          DOE          FDA

-50          50           150

CDC          USDA

200
Research: *How* Are We Doing (Recently)?

**UGARF Licensing Income**
2001 - 2009

<table>
<thead>
<tr>
<th>Year</th>
<th>Income (SMM)</th>
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<tbody>
<tr>
<td>'01</td>
<td>$2.9</td>
</tr>
<tr>
<td>'02</td>
<td>$3.5</td>
</tr>
<tr>
<td>'03</td>
<td>$3.8</td>
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<td>'04</td>
<td>$9.2</td>
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<tr>
<td>'05</td>
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<tr>
<td>'06</td>
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<tr>
<td>'07</td>
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</tr>
<tr>
<td>'08</td>
<td>$23.8</td>
</tr>
<tr>
<td>'09</td>
<td>$30.5</td>
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</table>
Research: Where Are We Going?

What are our goals?

- Increase research funding and rankings – per elite flagships

<table>
<thead>
<tr>
<th>University</th>
<th>Rank</th>
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</thead>
<tbody>
<tr>
<td>*U WA</td>
<td>2nd</td>
</tr>
<tr>
<td>*U Minn</td>
<td>22nd</td>
</tr>
<tr>
<td>*U MD</td>
<td>47th</td>
</tr>
<tr>
<td>*U Mich</td>
<td>3rd</td>
</tr>
<tr>
<td>*Ohio St</td>
<td>23rd</td>
</tr>
<tr>
<td>*U VA</td>
<td>51st</td>
</tr>
<tr>
<td>*UCLA</td>
<td>5th</td>
</tr>
<tr>
<td>*UT, Austin</td>
<td>26th</td>
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<tr>
<td>*IND U</td>
<td>59th</td>
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<tr>
<td>*U WI</td>
<td>8th</td>
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<td>*U IL, U-C</td>
<td>38th</td>
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<tr>
<td>UGA</td>
<td>94th</td>
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<td>*U CO</td>
<td>13th</td>
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<tr>
<td>*UC, Berk</td>
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<td>*U FL</td>
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<tr>
<td>*AAU</td>
<td></td>
</tr>
<tr>
<td>*UNC</td>
<td>21st</td>
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<tr>
<td>*U Iowa</td>
<td>45th</td>
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</tbody>
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- Be “top 10” in at least one important NSF-ranked area
- Increase our interdisciplinary research

$165.9M
$103.2M
Research: *Where Are We Going?*

*Not just about dollars and rankings.*

- Couple to State needs (Research/Outreach partnership)
  - *Economic development*
  - *Healthy, vibrant, informed citizenry*

- Collateral improvements
  - *Better graduate and undergrad programs*
  - *Better educated citizenry and workforce*
  - *More faculty recognition (NAS, etc)*
Research: *What Are Our Challenges?*

- Growing but still modest medical & engineering programs
- Dearth of faculty leadership for “big” opportunities
- Sparse grant support infrastructure in units
- Interdisciplinary?
- Graduate (doctoral) programs: innovation, rankings, $$
- Many aging facilities (buildings and technology)
- Not being in Atlanta
Research: *How* Do We Get There?

- Focus on key areas, build on strengths
  - Encourage growth areas (CPH, biomed, engineering)
  - Expand “centers” of excellence, add one or two
  - Exploit the new UGA/MCG medical partnership (and Emory)
  - Build industry funding / relationships (UGA rank now = 130th)

- Hire faculty
  - Build foci of excellence
  - Include successful established faculty who bring grants, leadership
  - Consider setting some positions aside for inter-unit / bridging hires
Research: How Do We Get There?

• Emphasize faculty mentoring – avoid spaghetti
  ➢ Continue / expand last year’s Provost/OVPR mentoring program

• Enhance grant preparation and submission expertise
  ➢ Expand Sponsored Program – unit collaboration; encourage unit efforts

• Encourage more faculty to use available resource
  ➢ e.g. Research Newsletter, OSP – C&G workshops, etc

• Implement meaningful incentives
  ➢ Salary / research support? Sharing of F&A / AY salary support?
  ➢ Support for hi-tech facilities (people)
Research: *How* Do We Get There?

- Increase number and value of graduate assistantships
  - *Access to quality graduate (esp. doctoral) students is critical*

- Develop interdisciplinary graduate (doctoral) programs
  - *Interdisciplinary Life Sciences Program is a good start*

- Develop infrastructure to encourage grad training grants
  - *We need more*

- Increase pool of international doctoral students
  - *Expands our global / international credentials as well*
Thank you.