LISTENING SESSIONS FOR HOW THE OFFICE OF RESEARCH (OR) SUPPORTS THE TOP 25 STRATEGIC PLAN AND PREPARES FOR THE FUTURE

Dr. Taylor Eighmy
October 23, 2012 Public Forum
<table>
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<tr>
<th>Time</th>
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<tr>
<td>9:00</td>
<td>Introductions and Charge</td>
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<tr>
<td>9:15-10:00</td>
<td>Looking Ahead as a Great Public Research University: Thoughts on the Future, Top 25 Action Items, Charge to Breakout Groups</td>
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<td>10:00-11:15</td>
<td>Brainstorming Breakout Groups</td>
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<td>11:15-11:30</td>
<td>Break</td>
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<td>11:30-12:15</td>
<td>Reports from Breakout Groups</td>
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<td>12:15-1:00</td>
<td>Lunch</td>
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Introductions - The UTK OR and Our Guests

- UTK OR (entire division)
- UTK Centers & Institutes directors (reporting to the VCR)
- UTK Chancellor’s Cabinet
- UTK Associate Deans for Research
- UTK Research Council/Faculty Senate
- UTK Grad School
- UTK Grad School of Medicine
- UTK Graduate Council
- UTK Graduate Student Association
- UTK Undergraduate Research Student Advisory Committee
- UTK Student Editor of *Pursuit*
- UTK Employee Relations Team Leader
- UTK former VCRs
- Other guests

- UT Ag Institute
- UT Space Institute
- UT Institute for Public Service
- UT HSC
- UT VPR
- UT Research Foundation
- UT Audit
- UT General Counsel
- Other guests
Background

• This is the first of at least three listening sessions with the UTK community
• This first session is largely with the OR division and representatives from our internal and external partners
• Subsequent sessions will be with UTK DDDHs and faculty
• OR Strategic Action Plan (with delineated action items and responsibilities) will be drafted, with input from you all and the community, by February, 2013 to guide the above
Overall Charge

• I would like to ask you to assist the UTK OR in preparing for the future: What do we need to be now in preparation for 2015? For 2020?
• How can we best position the UTK OR to support the UTK Top 25 research action plans?
• How can we best position the UTK OR to serve and support our internal and external partners?
• We want to develop an OR Strategic Action Plan (with delineated action items and responsibilities) by February, 2013 to guide all of the above
What is a Great Public Research University?

“But what has made our universities the greatest in the world is not the quality of our undergraduate education--- as important as that is---but our ability to fulfill one of the other central missions of the leading universities: the production of new knowledge through the discoveries that change our lives and the world.”

Why A New Public Research University for the 21st Century is Needed!

Source: 1975-1994 figures are from the NSF federal funds survey; remainder is from AAAS R&D reports. FY 2012 figures are latest estimates, FY 2013 is the President's budget.
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Why A New Public Research University for the 21st Century is Needed!

R&D in the FY 2013 Budget + Sequester?

percent change from FY 2012

- NIST: 10.1%
- DHS: 9.0%
- DOT: 8.2%
- DOE Energy: 4.1%
- NOAA: 1.3%
- DOE Defense: -0.4%
- Other HHS: -0.4%
- USGS: -3.4%
- NSF: -5.6%
- DOE Science: -5.8%
- NASA: -6.6%
- EPA: 0.2%
- VA: -8.0%
- NIH: -9.5%
- USDA: -11.5%
- DOD Other: -17.4%
- TOTAL: -7.8%

Inflation: ~1.7%

Source: AAAS estimates based on OMB R&D data, agency budget justifications, and the Budget Control Act.
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Why A New Public Research University for the 21st Century is Needed!

Association of American Universities (AAU)

Association of Public And Land Grant Universities (APLU)

National Research Council (NRC) of the National Academies, National Science Board (NSB) of the NSF
Looking to the Future: A New Public Research University for the 21st Century

Agora
*Agora: “market,” commercial district, place for debating and voting*

Acropolis
*Acropolis: “(high) city on the extremity,” sacred to Athena (Goddess of Wisdom), close to Aristotle’s Lyceum

Knoxville, TN 2012

*Clark Kerr (1988) “Mostly it (higher education) lived in tension, at one in the same time at the bottom of the hill, at the top of the hill, and on many pathways in between.” Perhaps things do come full circle...
Looking to the Future: The New Public Research University for the 21st Century

- Place-based mission
- Mission-based discovery
- Basic and applied discovery research
- Experiential learning
- Life-long learning
- Knowledge hubs
- More than just Land- and Sun-Grant... we are a “City-Grant” institution
- This right critical mass* of opportunity
- Diverse learning environment
- Culture and knowledge economies
- Social and global engagement

*Critical mass: prospective students, alumni, employers, K-12 school systems, community colleges, neighborhoods, communities, fine art space, non-profits, NGOs, culture, venture capital, corporations, foundations, hospitals, federal R&D, corporate R&D, transit systems, IT infrastructure
UTK Top 25 Strategic Plan
UTK Top 25 Strategic Plan

Research

Current Position

- UTK demonstrated strong year-over-year growth in research expenditures and has made progress towards closing gaps to Top 25 Target peers. Growth can be attributed in part to winning major federal research grants, development of new centers and joint institutes, and expanded proposal support for faculty.

- Top 25 research expenditure metrics are not normalized, but many of the Top 25 Target peers are larger than UTK, and some have medical schools, which can account for a large portion of research expenditures. When compared to peers with no medical schools and normalized by tenure-line instructional faculty, UTK is ahead of three (Purdue, Clemson, and the University of Georgia).

- To close the gap in federal expenditures, UTK will need additional faculty. Top 25 Target peers with no medical schools have, on average, 40% more tenure-line faculty than UTK.

- Similar to graduate education, progress in research will require a long-term, multi-year commitment and new resources. While there are productivity gains to be made with current resources, maintaining growth in the long run will require additional investments. The amount and quality of research space is an emerging constraint, as well as the number of faculty.
UTK Top 25 Strategic Plan

Research
Federal Research Expenditures; UTK vs. Top 25 Peers with No Medical School; 2004 - 2009

Source: NSF Survey of Science and Engineering Expenditures, 2009; UTK NSF Survey Submission
Note: UTK Data Include: Agricultural Experiment Station, College of Veterinary Medicine, Extension, Knoxville, Space Institute
Wedge Concept

We will need to grow many wedges simultaneously...

Baseline Metric Must be Scholarly Excellence (e.g., Fulbright Fellowships, National Academy members, faculty FTE, FRES, TREs, strategic partnerships)

Time
Top 25 Strategic Plan

Dramatic Increase

Plateau?
Some Ideas to Ponder

• Embracing “Excellence in Scholarship”
• Growing undergraduate research as a primary form of experiential learning
• Expanding corporate & foundation R&D
• Developing “Big Idea” large strategic initiatives
• Focusing on transdisciplinary scholarship
• Expanding strategic partnerships
Some Ideas to Ponder

National Academies’ Government University Industry Round Table (GUIRR)

National Organization Of Research Development Professionals (NORDP)

University of Minnesota

White House/DOC event

Network of Academic Corporate Relations Officers (NACRO)

NSF EPSCoR
Some More Ideas to Ponder

• Expanded Engagement & Outreach to Best Serve the Scholarly Enterprise

How do we reclaim the essential purpose?
Some More Ideas to Ponder

Expansion of the Boyer Commission Principles and Undergraduate Research?

Carnegie Foundation and Community-Engaged Classification in 2015?
Some Essential Questions for Your Consideration:

E1: How can the Office of Research help expand and support excellence in scholarship?

E2: How can the Office of Research help expand and support corporate & foundation R&D?

E3: How can the Office of Research help expand and support “Big Idea” large strategic initiatives?

E4: How can the Office of Research help expand and support transdisciplinary scholarship?

E5: How can the Office of Research help grow and support strategic partnerships?

E6: How can the Office of Research define and support engagement & outreach serving the research and scholarly enterprise?

E7: What others essential questions can you contemplate and provide input on?
Backdrop:
UTK Action Plan (See Handout)

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Objectives</th>
<th>Lead</th>
<th>Action Plan Steps</th>
<th>Target Date</th>
<th>Status at a Glance</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1. Research Services</td>
<td>Modify existing University support services to explicitly support increasing research. Provide additional support to faculty for proposal success. Provide compliance support to maintain with future growth in expenditures.</td>
<td>Greg Roed</td>
<td>a. Formalize funding for low-plan opportunities search engine. b. Prepare more faculty with advanced proposal writing skills. c. Formalize funding for Director of Foundation and Corporate Engagement position. d. Establish and publish performance metrics.</td>
<td>Ongoing</td>
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<td>R2. Communications</td>
<td>Develop a more effective external communications strategy to increase UTK research awareness. Develop a more effective internal communications strategy to get more faculty involved in funded research.</td>
<td>Greg Roed Margie Nitchions</td>
<td>a. Analyze effectiveness of current research communications. b. Develop a plan to expand and maintain the communication effort. c. Increase support for professional and public relations. d. Increase engagement and outreach to the general public.</td>
<td>Spring 2012</td>
<td>Done</td>
</tr>
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<td>R3. Government Relations</td>
<td>Develop practices to connect researchers with UT’s government relations. Develop practices to improve researcher knowledge of government relations. Strengthen relationships between faculty and agency program officers.</td>
<td>Wei Min Shen Paul Montgomery</td>
<td>a. Develop a policy to connect researchers with UT's government relations. b. Arrange visits to Washington DC for discussions with agency program officers. c. Develop a plan to improve researcher knowledge of government relations.</td>
<td>Spring 2012</td>
<td></td>
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<td>R4. IP and Innovation</td>
<td>To increase the conversion of intellectual property generated through research into patents, economic growth, institutional licensees, and business startups.</td>
<td>David Welker Alex Miller</td>
<td>a. Identify potential inventions with high potential for patentability. b. Build closer ties among the Office of Research, the UT Research Foundation, and the Office of Economic Development. c. Identify best practices for patent application and business incubation. d. Identify potential partnerships with local companies.</td>
<td>Ongoing</td>
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Backdrop: UTK Action Plan Status (See Handout)

Orange = action step completed, target date met

Green = action step not completed but in progress; target date not passed

Yellow = action step not initiated; target date not passed

Red = action step not initiated, dependent on completion of a function outside of Top 25, OR dependent upon funding stream (note this in Status at a glance); target date passed

Blue = long-term, ongoing action OR no target end date
# UTK Action Items for Research Within the Plan

<table>
<thead>
<tr>
<th>Action Item</th>
<th>Initiative (Lead)</th>
<th>R1 Specific Action Plan Steps</th>
</tr>
</thead>
</table>
| R1          | Research Services (G. Reed)       | (a) Formalize funding for search engine  
(b) Prepare more faculty with advanced proposal writing skills  
(c) Formalize funding for Director of Foundation and Corporate Relations position  
(d) Establish and publish performance metrics |
# UTK Action Items for Research Within the Plan

<table>
<thead>
<tr>
<th>Action Item</th>
<th>Initiative (Lead)</th>
<th>R2 Specific Action Plan Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>R2</td>
<td>Communications</td>
<td>(a) Identify key external audiences and target messages</td>
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<td>(G. Reed, M. Nichols)</td>
<td>(b) Advertise in targeted publications</td>
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<td>(c) Increase support for professional design and content creation for research web sites</td>
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<td>(d) Enhance UTK’s image at high profile conferences through branding</td>
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<td>(e) Build on the power of social media and continue relationships with traditional media</td>
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<td>(f) Implement a “research success awareness” campaign</td>
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# UTK Action Items for Research Within the Plan

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<tr>
<th>Action Item</th>
<th>Initiative (Lead)</th>
<th>R3 Specific Action Plan Steps</th>
</tr>
</thead>
</table>
| R3          | Government Relations (W. Hines, P. Montgomery) | (a) Develop policy to connect researchers with UTK’s GR firm  
(b) Arrange visits in DC for discussions with agency program officers  
(c) Assist with appointments to agency advisory boards |
# UTK Action Items for Research Within the Plan

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<tr>
<th>Action Item</th>
<th>Initiative (Lead)</th>
<th>R4 Specific Action Plan Steps</th>
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</thead>
</table>
| R4          | IP and Innovation (D. Washburn and A. Miller) | (a) Form a task force of the UT System, UTRF and the campus to evaluate alternatives and adopt a model for T2  
(b) Build close ties among OR, UTRF, the Anderson Center, and other entities  
(c) Identify and adopt best practices for patent application and business incubation  
(d) Identify practices to track and report related data through the STAR metrics program |
<table>
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<tr>
<th>Action Item</th>
<th>Initiative (Lead)</th>
<th>R5 Specific Action Plan Steps</th>
</tr>
</thead>
</table>
| R5         | Partnerships (W. Hines, P. Montgomery, S. Ballentine) | (a) Identify potential partnerships with local companies and federal agencies  
(b) Identify potential strategic partners and recruit them to Cherokee Farm  
(c) Develop basic ordering agreements and joint appointment agreements with new partners |
UTK Action Items for Research Within the Plan

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<tr>
<th>Action Item</th>
<th>Initiative</th>
<th>R6 Specific Action Plan Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>R6</td>
<td>Multi-disciplinary Research (B. Dunne, Top 25 Team)</td>
<td>(a) Revise UTK distribution of institutional resources (e.g., ORU)</td>
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<td>(b) Institute faculty hiring practices where appropriate</td>
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<td>(c) Revise faculty performance and promotion review</td>
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<td>(d) Revise academic program review criteria and metrics</td>
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<td>(e) Institute a Chancellor’s Award for Research</td>
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# UTK Action Items for Research Within the Plan

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<th>Action Item</th>
<th>Initiative</th>
<th>R7 Specific Action Plan Steps</th>
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</thead>
</table>
| R7          | F&A Distribution (W. Hines, C. Cimino) | (a) Developing F&A policies for University-level centers and institutes  
(b) Remove the three-year rolling average for RIF (F&A) return  
(c) Disburse F&A quarterly for high growth cases  
(d) Revise RIF (F&A) carry over policy to increase flexibility  
(e) Implement a plan to increase Office of Research distribution as F&A grows |
## UTK Action Items for Research Within the Plan

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<th>Action Item</th>
<th>Initiative</th>
<th>R8 Specific Action Plan Steps</th>
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| R8          | Administrative Efficiency (C. Tenopir, C. Cimino) | (a) Task force to review procedures and recommend changes  
(b) Staff members assigned responsibility to streamline research procedures with legal constraints  
(c) Initiate streamlined procedures |
# UTK Action Items for Research Within the Plan

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<th>Action Item</th>
<th>Initiative</th>
<th>R9 Specific Action Plan Steps</th>
</tr>
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<tbody>
<tr>
<td>R9</td>
<td>Research Incentives (W. Hines, B. Dunne)</td>
<td>(a) Implement research incentive plan</td>
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<td>(b) Institute a Chancellor’s Award for Multidisciplinary Research</td>
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<td>(c) Coordinate with Communications Team to highlight faculty research success stories</td>
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### UTK Action Items for Research Within the Plan

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<tr>
<th>Action Item</th>
<th>Initiative</th>
<th>R10 Specific Action Plan Steps</th>
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</table>
| R10         | Infrastructure - Core Facilities (C. Boake, Core facilities Committee) | (a) Establish a standing core facilities committee, including a responsible chair  
(b) Conduct an inventory of current core facilities and other expensive multi-user equipment  
(c) Work to evaluate business models for core facilities at peer institutions  
(d) Develop business models that include organizational and funding considerations (coordinate between VCR and VCFA)  
(e) Develop written procedures for creating, funding, and closing core facilities |
UTK Action Items for Research Within the Plan

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<tr>
<th>Action Item</th>
<th>Initiative</th>
<th>R11 Specific Action Plan Steps</th>
</tr>
</thead>
</table>
| R11         | Infrastructure-Space (W. Hines, C. Cimino) | (a) UTK Space Committee includes research leadership  
(b) Plan for research space on Cherokee Farm Campus for collaboration with private and government entities |
# UTK Action Items for Research Within the Plan

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<tr>
<th>Action Item</th>
<th>Initiative</th>
<th>R12 Specific Action Plan Steps</th>
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| R12         | Research Information Technologies (W. Hines, Top 25 Infrastructure Team) | (a) Coordinate with Faculty Implementation Team on metrics and data gathering needs related to research productivity (see Faculty Plan)  
(b) Engage OIT in a review of current state of research enterprise software support, including TERA |
UTK Action Items for Other Areas Within the Plan

The Office of Research may be able to support initiatives under (see the action plan handout):

• Faculty Team
• Graduate Team
• Undergraduate Team
Specific Research Questions for Your Consideration:

For the R1-R12 specific action plans for research assigned to your group:

R__: How can the Office of Research assist in supporting and realizing R__?

For action items associated with the other (faculty, graduate and undergraduate components) of the plan:

O1: Are there Office of Research activities that can support initiatives associated with the the other (faculty, graduate and undergraduate) components? Please define.
Charge for Morning Breakout Groups

• Your input is valued, please share your constructive ideas
• There are nine breakout groups (see handout in your packet for your group’s composition)
• Each breakout group has a facilitator and rapporteur
• Each group has around eleven questions to address during the breakout, plan to talk for six minutes on each while in your group
• Some questions are common to all groups
• After the breakout, each group’s rapporteur will report out about its group’s five most important recommendations (five minutes total for each report)
• Each facilitator will then assemble and share all of the output from their group with the group, your additional input will be requested, this all will be captured within the next three weeks and help guide subsequent conversations with the DDDHs and faculty
• A Strategic Action Plan for the OR will be drafted and shared broadly over the next few months
• The final Strategic Action Plan for the Division will be issued early next semester (ideally, February 2013)
Reports from Breakout Group Rapporteurs
Lunch
Agenda- Afternoon Session

1:00-1:30  Top Five Areas for OR Focus and Improvement
1:30-2:30  Brainstorming Breakout Groups
2:30-2:45  Break
2:45-3:15  Reports from Breakout Groups
3:15-4:00  Expectations and Possible Refocus/ Reorganization of the Office of Research
4:00      Looking Ahead and Close
Specific Office of Research Research Questions for Your Consideration:

In late August, 2012, I met with some of the senior leaders of the OR and asked them to share with me and the group their top five areas of concern or opportunity.

I want to share many of these with you and hear your thoughts about these or any other matters that might help the OR prepare for the future: 2015... or even 2020!
Some of the OR Top5 Issues to Explore

OR Issue 1: Staff retention and compensation
OR Issue 2: TERA-PAMS
OR Issue 3: Expanding the Proposal Development Team
OR Issue 4: Faculty and Staff outreach and training
OR Issue 4: Staff incentives
OR Issue 6: Funds for start ups, outreach & engagement, undergraduate research, base funding
OR Issue 7: Strategic focus on research investments
OR Issue 8: Define/declare role of engagement in OR
OR Issue 9: Academic Outreach and Engagement Council status
OR Issue 10: Assisting faculty around proposal development
OR Issue 11: Large opportunities
OR Issue 12: Infiltrating Federal agency R&D agendas
Some More of the OR Top 5 Issues to Explore

OR Issue 13: Enhancing OR/Department Heads coordination
OR Issue 14: UGR faculty mentor program
OR Issue 15: Upper level advocacy for compliance
OR Issue 16: AAHRPP accreditation for IRB?
OR Issue 17: Compliance data management systems
OR Issue 18: Compliance staffing
OR Issue 19: Reducing the red tape burden for faculty
OR Issue 20: Local level support for faculty
OR Issue 21: Better (and more easily measurable) benchmarking of the research enterprise
OR Issue 22: How to measure beneficial impacts from the creative arts/humanities/social sciences (it is not all about the $)?
OR Issue 23: How to best celebrate and communicate scholarly achievement?
OR Issue 24: How best to coordinate with the UT System and the UT System components?
Specific Office of Research Research Questions for Your Consideration:

For the ideas presented this afternoon, please use these questions to discuss OR Issues 1-24 or any new idea:

OR1: How can you or the Office of Research assist in addressing this issue or supporting and realizing this idea? Please be specific to each idea.

OR2: What new or additional issues or ideas should be explored and what are your recommendations to best address these issues or ideas?
Charge for Afternoon Breakout Groups

• Your input is valued, please share your constructive ideas
• There are still the same nine breakout groups (see handout in your packet for your group’s composition)
• Each breakout group has the same facilitator and rapporteur
• Each group has unlimited issues to address during the breakout, use your time to discuss the most important ones
• The two questions are common to all groups, a free ranging exploration is desired
• After the breakout, each group’s rapporteur will report out about its group’s three most important recommendations (three minutes total for each rapporteur)
• Each facilitator will then assemble and share all of the output from their group with the group, your input will be requested, this all will be captured within the next three weeks and help guide subsequent conversations with the DDDHs and faculty
• A Strategic Action Plan for the Office of Research will be drafted and shared broadly early next year
• The final Strategic Action Plan for the Division will be issued early next semester (ideally February, 2013)
Reports from Breakout Group Rapporteurs
My Value System and Expectations

• OR is a client- or partner-service organization
• OR is highly solution oriented
• OR values ethics, diversity, inclusivity
• OR is proactive
• OR is collaborative
• OR shares your ambitions and aspirations
• If it is needs improvement, OR will work with you to fix it
• OR will especially delight in your success!
Current Organizational Structure
New Organizational Emphasis and Focus?

- Increased celebration of scholarly excellence
- Transformational faculty professional development
- Responsible Conduct of Research (RCR)
- “Big Idea” Proposal Development Team
- UT System partnerships
- UGR
- Expanded and new strategic partnerships (e.g., NIH, DOE, ORNL, Y-12, Knoxville School District, Eastman Chemical, East Tennessee innovation enterprise, foundations)
- Outreach that fully engages our research (and scholarly) enterprise with our external partners
- Transdisciplinary research
Broad Ranging Discussion on Expectations and Possible Organizational Emphasis and Focus
Looking Ahead
Thank You for Your Interest, Input and Energy!

If you have questions, then please contact me:

My email is teighmy@utk.edu
My office phone is 4-8701
My cell is (806)252-6444