Strategic Plan for Research

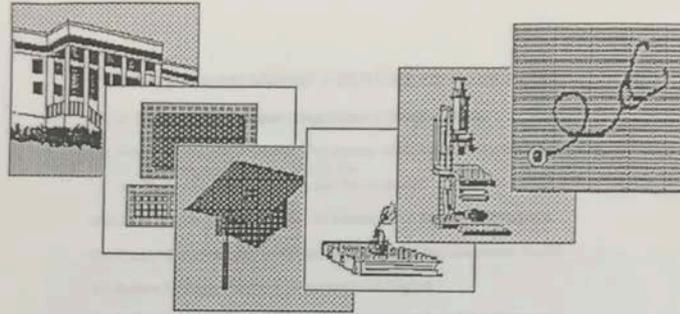# Why is it important?

- One of the main purposes of a university
- Vibrant research culture attracts:
  - Undergraduate and graduate students
  - Faculty
  - Resources
- Creates jobs
- Tells part of the university story

IMPROVING

THE

RESEARCH CLIMATE

AT

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- **March-June 2013**
  - Informal group began discussing Centers
  - Response to Committee for 125
  - Discovered few goals for research at University level
- **August 2013**
  - Met with President, who charged the group to convene an ad hoc committee to design a strategic plan for research that would inform the university strategic planning process in 2014-15
- **September-October 2013**
  - Invitations & scheduled kickoff meeting
- **December 2013-March 2014**
  - Committee & subcommittees met and drafted concepts
  - Need for information was identified – survey drafted
  - Multiple iterations of goals and objectives
- **April 2014**
  - Draft plan was delivered to Dr. Noland who affirmed the direction
- **Summer 2014**
  - Further refinement and drafting
- **Fall 2014**
  - Finalize plan
- **Spring 2015**
 - Release for feedback
- **Finalized and submitted in May**

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Membership

Member	Department
Wilsie Bishop	VP for Health Affairs & COO
Russell Brown	Psychology
W. Andrew Clark	Nutrition
Bill Duncan	ORSP
Joellen Edwards	Nursing
James Fox	Center for Excellence-ECLD
Chris Gregg	Geosciences
Nick Hagemeier	Pharmacy Practice
Joel Hillhouse	Community & Behavioral Health
David Hurley	Pharmaceutical Sciences
Jay Jarmin	Computing
Aruna Kilaru	Biology
Owen Murnane	Audiology

Member	Department
Greg Ordway	Biomedical Sciences
Robert Pack - Chair	Community & Behavioral Health
Jodi Polaha	Psychology
Kerry Proctor-Williams	Communicative Disorders
Jeff Ramsdell	Appalachian State University
Michael Ramsey	Exercise Science
Jon Smith	Business & Economics
Charles Stuart	Internal Medicine
Flo Weierbach	Nursing
John Wheeler	Center for Excellence-ECLD
Philip Wilson	History

$11.21 M

Figure 1. 1995-2012 ETSU R&D Expenditures by Year (in $millions)
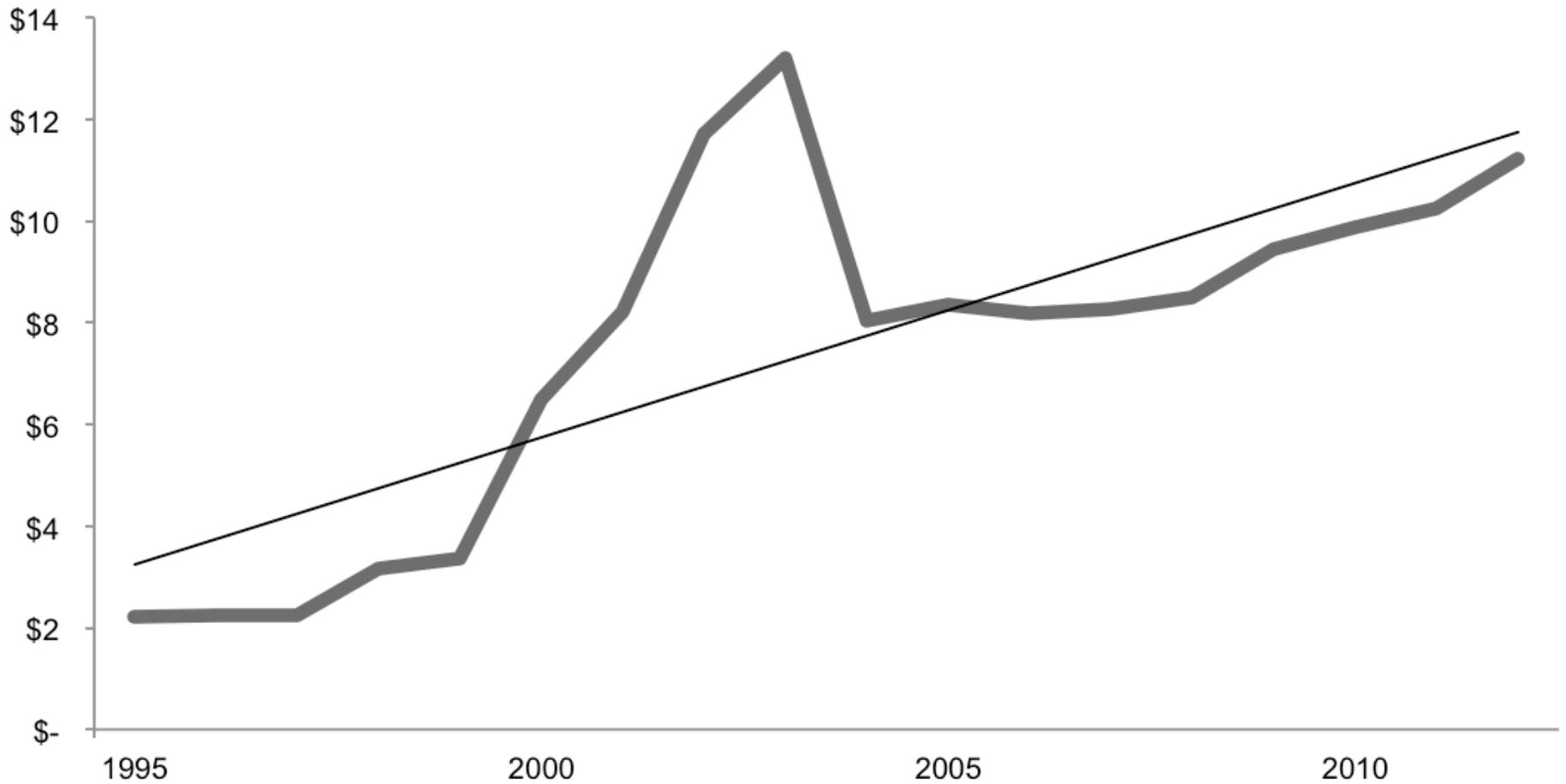
Our relative position

- Above the average DRU (mean = $7.9M)
- Below the average DRU-H (mean = $59M)
- Among the lowest funded universities in nation with allopathic medical school
- HERD = 314 of 653 ranked universities
- 7th in Tennessee after Vandy ($560M), UTK ($179M), UT HSC ($77M) UT Agriculture ($68M), U Memphis ($50M) & TSU ($15M)

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Growth Models: Target

Figure 2. 1995-2030 Growth Models for ETSU R&D Expenditures by Year (in $millions)
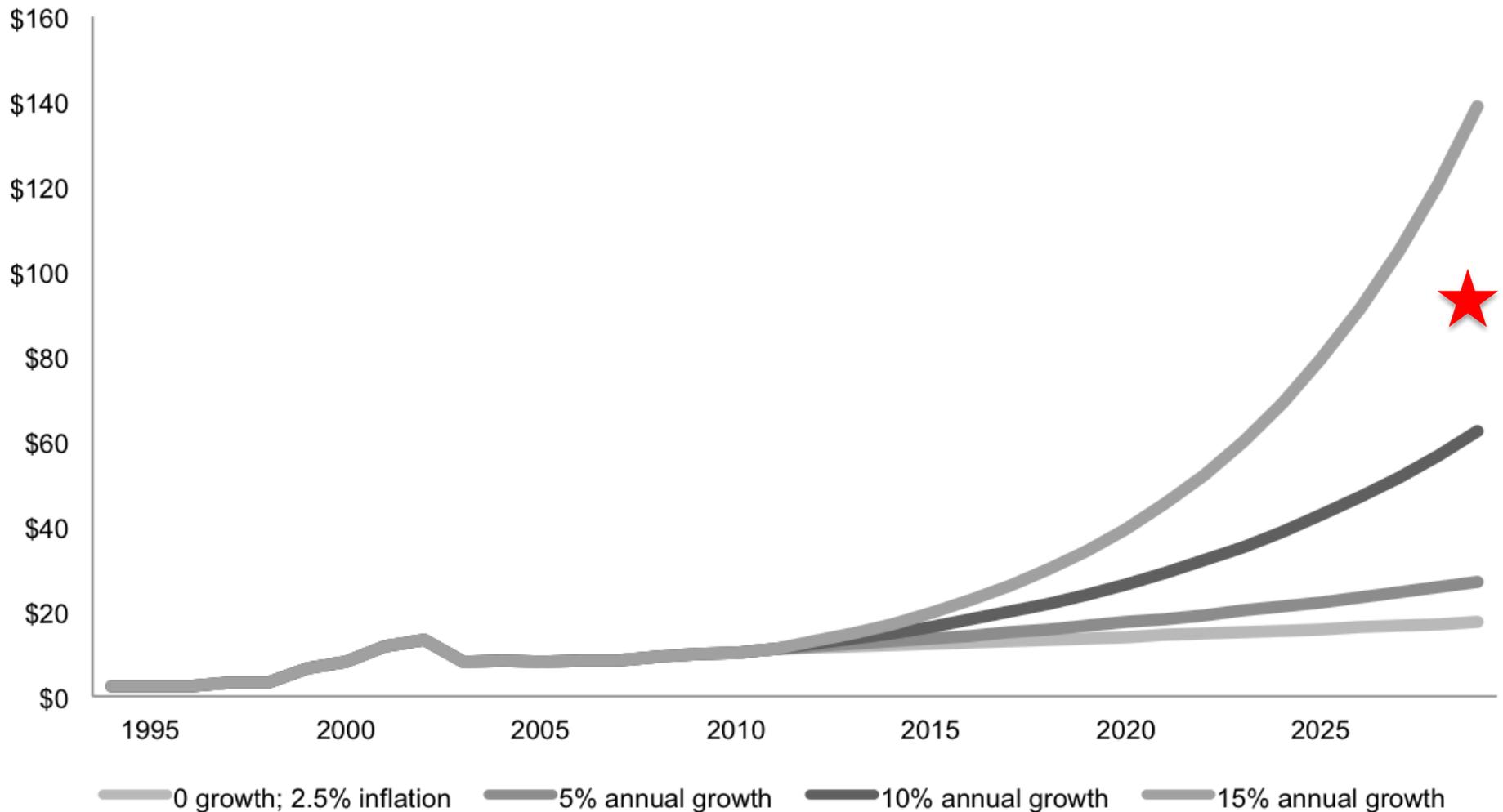
Survey data

- 357 respondents
- Themes about pre-award
  - Staffing and numbers
  - Need for online forms and routing
  - Research managers in colleges
  - Increase funding for ORSPA
- Themes about post-award
  - Roadblocks
  - Budget and expense process is unwieldy
  - Restructure
  - Limit redundancy

Consensus vision

- The vision for research and scholarly activity at ETSU should be to:

  "Transform our doctoral research university into a progressive, nationally recognized center for research, scholarship and creative activity that leverages university and regional intellectual, social, cultural, health and economic assets for global impact."

Strengths

- Interdisciplinary/ Inter-professional
- Collaborative
- Community ties
- Hard working
- Anxious to improve research scope and scale at the university.

- Existing Centers
  - Center for Appalachian Studies and Services
  - Center for Nursing Research
  - Center for Banking
  - Center of Excellence in Paleontology
  - Center of Excellence in Sports Science and Coach Education
  - Center for Early Childhood Learning and Development
  - Center of Excellence in Mathematics and Science Education
  - Center for Inflammation and Infectious Disease
  - Center for Community Outreach and Applied Research

7 Themes

- Link research to the educational experience.
- Foster a research environment to support graduate training.
- Invest in focused areas that are likely to yield external resources and/or increased reputation of the university.
- Prioritize focused recruitment and retention of highly productive faculty.
- Prepare, organize and equip university research services for growth.
- Prioritize university and college-level fund-raising for research.
- Partner with the community and industry to create opportunities to impact real needs with inter-disciplinary and translational research.

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A. Link research to the educational experience.

One element that robustly distinguishes ETSU from other educational institutions in the region is a strong faculty engaged in research, scholarship and creative activities. Engagement of undergraduate and graduate students in the research and scholarly activities of university faculty has a proven positive impact on student retention, performance, success after graduation, and ultimately, alumni satisfaction and connectedness with the university. The success of our graduates defines the success of ETSU in accomplishing its primary mission. Hence, a greater emphasis on linking students to research and scholarly activities of ETSU faculty will make ETSU more competitive among its regional and peer institutions in the recruitment and retention of students, and will result in graduation of students more competitive in the workforce marketplace.

Goal: To leverage ETSU's depth of history and intellectual assets by connecting dedicated teaching faculty with dedicated research faculty for the development of a cutting-edge transformational pedagogy.

Objective: Integrate themes of evidence-based practice and inter-professional education across campus in areas as diverse as art, music, health, humanities and science.

Outcome Measures/Indicators	Data Source/System	Responsible Party	Frequency of Monitoring	Targets (for quantitative indicators)	Baseline Data
Creation of inter-professional research awards for Appalachian Student Research Forum	Creation of award	Chair of ASRF	Annual	At least one new award each year for five years, until 2020.	No IP Research awards offered in baseline year.

Objective: Integrate the benefits of research and scholarship, such as publication and presentation, into the student experience to enhance retention and successful completion of undergraduate and graduate degrees.

Outcome Measures/Indicators	Data Source/System	Responsible Party	Frequency of Monitoring	Targets (for quantitative indicators)	Baseline Data
Publicize, increase and evaluate departmental goals for research outcomes for faculty and students according to the size of the workload commitment and investment.	Data should be gathered annually on the current support for research and scholarly activity from state dollars.	Deans & VPR	Annual	Each department in the university reports on goals for funded or national level scholarly impact concomitant to their research investments as measured by the Faculty Activity Plan	In 2014 this data is not yet collected by the VPR. A system for collection is needed.

Actions

1. Creation of inter-professional research awards for Appalachian Student Research Forum Foster a research environment to support graduate training.
2. Publicize, increase and evaluate departmental goals for research outcomes for faculty and students according to the size of the workload commitment and investment.
3. Establish working group to examine the viability of an Undergraduate Research Office and potential relationship to the Honors College (by 2015)
4. Enhance funding and promotion for Appalachian Student Research Forum and other undergraduate research.
   Increase stipends for research-degree seeking graduate students (e.g., PhD, DrPH, or research-masters) to a level that meets or exceeds national norms by 2015.
5. Full-time academic degree seeking students should be provided with health insurance
6. Form committee to prioritize new program proposals
7. Work with Provost to establish new academic doctoral and other terminal degree programs
8. Develop policy for center development and investment
9. Decide on Centers
10. Development of implementation plan
11. Publicize each grant award and paper in top ten journal
12. Offer membership in Centers for access to Center infrastructure
13. Test model with emerging research initiatives
14. National advertisement highlighting research collaborations on campus
15. Pay at 50th percentile or better with a soft money contribution toward salary
16. Coordinate a regional effort aimed at spousal employment
17. All departments have published rigorous workload and P&T plans that support research and scholarship that are adhered to by Chairs and Deans
18. Promotion of faculty through research rank
19. Chairs and Deans should prioritize new faculty hires that align with, or are able to, support existing or planned Centers
20. Develop institutional mechanisms for salary increases to provide competitive salaries to faculty that obtain extramural funding for research.
21. Implement the incentive plan for faculty that displace state dollars with extramural funds from grants.
22. VPR appointment is made
23. Assign oversight of post-award accounting to VP for Research
24. Collect and review payment procedures
25. Ascertain mechanism for change of policy at TBR
26. Make appeal for policy change
27. Establish an Associate Dean for Research (or equivalent) for each college or other administrative unit
28. Establish a Research Services Manager position for each college to help support pre- and post-award for faculty PIs
29. Provide all faculty and graduate students access to professional assistance with research design, statistical analysis, qualitative analysis, facilitation, budgeting, and training in the art of research dissemination, including writing results for peer-reviewed publication, professional poster/presentations and other reporting.
30. Establish and cultivate a formal research mentoring program wherein funded faculty, endowed professors and other established investigators mentor junior faculty, post-doctoral fellows and senior doctoral students
31. Research Development Officer hired to support existing Centers; coordinates with VPR
32. Research Development Officer hired to support new Centers and other research; coordinates with VPR
33. Resources for endowed chairs are sought by the development officers
34. Promotional information such as a one-pager or other consumable information for each research initiative.
35. Meetings with potential donors for research activities
36. Development office holds fundraisers for stated aim
37. Hold regional conference on research and economic development
38. Establish one 5/8ths position with VA each semester for three years
39. Provide adjunct appointments with some library benefits to community research partners such as Eastman scientists
40. Establish leadership council of Deans, the VPR and industry leaders in the region to foster research growth and impact

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Merger

- MSHA and Wellmont merger
  - Health research partner
  - Investment
  - Infrastructure
  - Increased access to a large rural patient population and health records
  - Patient-centered outcomes research

Summary of feedback

- General advice:
  - Ordering of items
  - Avoid creating administration/administrators
  - Center concept listed is incomplete
  - Strengthen action items
  - Investments are not clear
- How does other creative activity fit?
  - "research" is used 191 times vs. "scholarship" at 22 and "scholar/scholarly" at 33

Summary (cont.)

- Better integrate:
  - Library resources
  - Clinical enterprise
  - Businesses in the region as partners
  - Arts and Humanities
  - Undergraduate research office
- Feedback was integrated into final product
- Delivered to President Noland

Priorities by Phase and Scale of Investment

	Administrative	Small to modest investment	Large investment
Phase I	• Align ETSU and merged health system goals for research • Initiate alignment of recruitment with research strengths by addressing with Deans and Chairs • Assure that research is clearly represented and addressed at President's senior staff meetings; eg VPR or equivalent • Examine P&T and workload documents in all departments for congruence with increasing scholarship	• Establish new Centers quickly and provide support for infrastructure; follow Center Growth Investment model in plan • Address issues with post-award by reorganization to the VPR • Implement university approved incentive plan for each college; deans currently decide whether or not to do it • Each college should hire/appoint an Associate Dean for Research (or senior equivalent) and a position that supports pre-award	• Scale of support for initial Center staffing and infrastructure • Recruitment of new faculty with clinical research expertise • Develop infrastructure for outcomes research via clinical research leaders, informatics, biostatistics and health services research
Phase II	• Systematically work toward enhancing the collaboration with VA by establishing working group • Establish one 5/8ths position with the VA each semester over the next three years • Form committee to prioritize doctoral program proposals • Propose new terminal degree programs • Offer joint appointments and center membership to affiliated faculty • Work to publicize scholarly activity and output by all teams	• Pay new faculty at 50th percentile or better with research university peers; reinforce internal mechanisms for this through summer support and soft-money contribution/expectation • Address inequities for current research productive faculty by offering the same soft-money incentive • Provide faculty and graduate students service/assistance with research design, statistics, grant-writing, etc. • Establish and cultivate formal research mentoring program in each college • Increase graduate student stipends to national peer levels • Increasing support for undergraduate research through UR Office and ASRF	• Modernize/renew physical research infrastructure such as servers to accept data from health system and lab space • Lab space reorganization to prioritize and equip funded or most competitive labs • Research development officers in each new and established Center • Establish and recruit for endowed chairs
Phase III	• Center Directors and Chairs work closely with development officers • Establish leadership council of Deans, the VPR and industry partners to foster research growth and impact	• Institutionalizing development activities for research • Partnering with corporate donors for research • Regional conference on research and economic development	• Research laboratories and buildings • Building purposeful Center space

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1. Link research to the educational experience

- **Goal:** To leverage ETSU's depth of history and intellectual assets by connecting dedicated teaching faculty with dedicated research faculty for the development of a cutting-edge transformational pedagogy

- **Objective:** Integrate themes of evidence-based practice and inter-professional education across campus in areas as diverse as art, music, health, humanities and science.
  – Creation of inter-professional research awards for Appalachian Student Research Forum

- **Objective:** Integrate the benefits of research and scholarship, such as publication and presentation, into the student experience to enhance retention and successful completion of undergraduate and graduate degrees.
  – Publicize, increase and evaluate departmental goals for research outcomes for faculty and students according to the size of the workload commitment and investment.

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- **Objective:** Expand support for undergraduate research to enhance our ability to recruit highly qualified students from the top high schools in our state and region .
  - Establish working group to examine the viability of an Undergraduate Research Office and potential relationship to the Honors College (by 2015)
  - Enhance funding and promotion for Appalachian Student Research Forum and other undergraduate research.

- **Objective:** Expand support for graduate students to enhance our ability to recruit highly qualified students from across the region, nation and globe.
  - Increase stipends for research-degree seeking graduate students (e.g., PhD, DrPH, or research-masters) to a level that meets or exceeds national norms by 2015.
  - Full-time academic degree seeking students should be provided with health insurance.

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2. Foster a research environment to support graduate training

- **Goal:** Increase the competitiveness of the institution by facilitating a culture where research-focused graduate training programs are valued and cultivated by all faculty

- **Objective:** Identify and prioritize areas of greatest potential for impact for new programs or concentrations for research-focused terminal degree programs by 2016.
  - Form committee to prioritize new program proposals
  - Work with Provost to establish new academic doctoral and other terminal degree programs

- **Objective:** Align research space with the needs of productive teams.
  - Research space will be prioritized for funded faculty, followed by new faculty with start-up opportunity. Space will be analyzed on a three-year rolling average.

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3. Invest in focused areas likely to yield external resources and/or increased reputation of the university

- **Goal:** Establish and cultivate interdisciplinary Centers for research and scholarship in areas of strength that have high potential for extramural funding and meet regional, national and global needs (consistent with 125 and Vision).

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- **Objective:** Develop a timeline and implementation plan for three new research Centers on campus.
  - Develop policy for center development and investment
  - Decide on Centers
  - Development of implementation plan

- **Objective:** Increase the visibility of the major research programs at ETSU by publicizing stepwise increases in investment and accomplishment of research teams.
  - Publicize each grant award and paper in top ten journal

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- **Objective:** Strategically align faculty into interdisciplinary Centers
  - Offer membership in Centers for access to Center infrastructure.

- **Objective:** Develop dollar amount for benchmarks for university investment in research infrastructure based on productivity or potential for recognition for the university by Fall 2014.
  - Test model with emerging research initiatives

4. Prioritize focused recruitment/retention of highly productive faculty

- **Goal:** Create and implement a plan for research faculty recruitment and retention. Recruit and retain promising research faculty for areas of strength and importance for the university.

- **Objective:** Recruitment of new faculty with significant potential for developing strong, funded, high impact research programs in priority areas.
  - National advertisement highlighting research collaborations on campus
  - Pay at 50th percentile or better with a soft money contribution toward salary
  - Coordinate a regional effort aimed at spousal employment
- **Objective:** Support workload plan creation and adherence that protects research time for existing and new faculty with significant potential for developing strong, externally funded research programs.
  - All departments have published rigorous workload and P&T plans that support research and scholarship that are adhered to by Chairs and Deans

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- **Objective:** Promote department and college awareness of the opportunity to offer a primarily research track for promotion.
  - Promotion of faculty through research rank

- **Objective:** Focus recruitment to develop strength in areas of high impact.
  - Chairs and Deans should prioritize new faculty hires that align with, or are able to, support existing or planned Centers.

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- **Objective:** Develop incentives, awards, and events to demonstrate and advertise the accomplishments of faculty, staff and students engaged in research and scholarship. This approach will serve to market discoveries in research to the university, local community and alumni, and will also help to boost morale and reduce loss of faculty after investment of start-up capital.
  - Develop institutional mechanisms for salary increases to provide competitive salaries to faculty that obtain extramural funding for research.
  - Implement the incentive plan for faculty that displace state dollars with extramural funds from grants.

5. Prepare, organize and equip university research services for growth

- **GOAL:** Provide organizational support to facilitate grant-seeking and college-level leadership and resources for research and scholarly productivity. To facilitate this, ORSPA should offer timely updates to units with respect to: the number of faculty members actively involved in research activities, the number of proposals submitted annually, the number of proposals funded, measures of research related scholarly activity broadly defined so as to include performances and publications, student research activities, and financial measures including philanthropic contributions in support of university research.

- **Objective:** The position of Vice Provost for Research should be transitioned to the position of Vice President for Research, reporting to the President with concomitant access, privilege and responsibility.
  - Appointment is made

- **Objective:** The Office of Research and Sponsored Programs should have oversight of pre-award budgeting, grant and post-award accounting to facilitate efficient spending and communication with PIs.
  - Assign oversight of post-award accounting to VP for Research

- **Objective:** Review of research payment procedures at universities that have made a transition to higher impact work.
  - Collect and review payment procedures
  - Ascertain mechanism for change of policy at TBR
  - Make appeal for policy change

- **Objective:** Develop College-level infrastructure to support grant development.
  - Establish an Associate Dean for Research (or equivalent) for each college or other administrative unit
  - Establish a Research Services Manager position for each college to help support pre- and post-award for faculty PIs.

- **Objective:** Establish additional university level grant-facilitation and research mentorship support.
  - Provide all faculty and graduate students access to professional assistance with research design, statistical analysis, qualitative analysis, facilitation, budgeting, and training in the art of research dissemination, including writing results for peer-reviewed publication, professional poster/presentations and other reporting.
  - Establish and cultivate a formal research mentoring program wherein funded faculty, endowed professors and other established investigators mentor junior faculty, post-doctoral fellows and senior doctoral students.

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6. Prioritize university and college-level fund-raising for research

- **Goal:** Coordinated fundraising for research infrastructure is a university priority. Increase the activities of University Advancement in raising private funds to provide infrastructure support for high priority research activities.

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- **Objective:** New university advancement personnel should be hired to focus on research development, because ETSU Development is not sufficiently staffed presently to address philanthropy in the area of research development.
  - Research Development Officer hired to support existing Centers; coordinates with VPR
  - Research Development Officer hired to support new Centers and other research; coordinates with VPR

- **Objective:** Establish endowed chairs or scholars (presumably named).
  - Resources for endowed chairs are sought by the development officers
  - Promotional information such as a one-pager or other consumable information for each research initiative.
  - Meetings with potential donors for research activities

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- **Objective:** University Advancement will seek funds for student research scholarships, tuition, stipends, fees, and travel.
  - Development office holds fundraisers for stated aim

7. Partner with the community and industry to create opportunities to impact real needs with inter-disciplinary and translational research

- **Goal:** Establish regional needs through frequent and ongoing partnership with external stakeholders in the community.

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- **Objective:** Identify formal quarterly listening opportunities to engage with the stakeholders from regional intellectual, social, cultural, health and economic resources that will inform and support research collaboration.
    - Hold regional conference on research and economic development

- **Objective:** Establish and cultivate mutually beneficial research partnerships with healthcare, education, social services and industry such as the Mountain Home Veterans Medical Center, Eastman Chemical, Mountain States Health Alliance, other health systems, the Tennessee Departments of Health, Mental Health, Conservation, Education and Commerce and First Tennessee Human Resource Agency.
    - Establish one 5/8ths position with VA each semester for three years
    - Provide adjunct appointments with some library benefits to community research partners such as Eastman scientists
    - Establish leadership council of Deans, the VPR and industry leaders in the region to foster research growth and impact.