

A Path Forward for Research *and* *Engagement* Supporting Top 25

WORKING DRAFT

Top 25 Research *and Engagement* Advisory
Committee
July 3, 2013

Dr. Taylor Eighmy

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Agenda

- Discussion of engagement ideas
- More discussion on:
 - Faculty development
 - Graduate student support
 - Undergraduate research
 - Outreach & engagement
 - Core facilities
 - Enterprise systems
 - Research space
 - Others TBD
- Looking ahead

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Top 25 RAC Members

- Susan Ballentine (ORE)
- Chris Boake (ADR CAS)
- Alexandra Brewer (GSS/GSA)
- Bill Brown (UTIA)
- Chris Cimino (VCFA)
- George Dodds (COA)
- Bill Dunne (ADR COE)
- Nicole Fazio-Veigel (ONSF)
- Marc Gibson (UT Development)
- Lee Han (Past RC Chair)
- *Carolyn Hodges (Grad School)*
- Dave Irvine (AVRFA)
- Tom King (CURENT/ORNL)
- Tony Mezzacappa (JICS)
- Paul Montgomery (ORE)
- Sally Morris (UT Development)
- Margie Nichols (VRCM)
- Stacey Patterson (UTS AVPR)
- *Rebecca Prosser (Psychology)*
- Greg Reed (ORE)
- Joel Reeves (AVCR IT)
- Sahba Seddighi (USRA)
- Charlie Senn (ORE)
- Tina Shepardson (RC Chair)
- Melissa Shivers (Chancellor's Office)
- Carol Tenopir (CMC)
- Dave Washburn (UTRF)
- John Zomchick (Provost's Office)

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Developing Consensus --- Work in Progress---

- Feedback from AVP Melissa Shivers (1/11/13)
- Feedback from Chancellor Cheek (1/18/13,2/1/13)
- Feedback from Cabinet retreat (1/31/13)
- Feedback from Top 25 ITL (2/15/13)
- Initial feedback from the new Top 25 RAC(2/20/13)
- Feedback from ORE SMT (2/20/13)
- Input from ORE Staff (3/13/13)
- Feedback from Cabinet (3/18/13)
- Working Session with Top 25 RAC (4/3/13)
- Working session with the Research Council (4/10/13)
- Working Session with Top 25 RAC (5/28/13)
- Planned session with the Top 25 ITL (5/30/13)
- Feedback from Carnegie Community Engagement Team Leaders (6/19/13)
- Working session with Top 25 RAC (7/3/13)
- Planned session with University System Relations Committee of the Faculty Senate
- Many additional working sessions planned with the Top 25 Research Advisory Committee
 - Next meeting is 8/2/13
- Feedback from Top 25 ILT, Chancellor's Council, Deans
- Additional feedback from the Research Council
- Will seek feedback from others, as appropriate

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Update on Engagement Aspect

- UTK and UTIA seeking Carnegie designation as “Community Engaged”
- Feedback from the unsuccessful 2010 Carnegie submittal suggests the UTK SP needs to clearly call out engagement and community engagement in the SP
- We need critical engagement components that can be in place by the end of CY13
- Don’t have to be perfect, this will evolve (especially assessment)

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Proposed Engagement Approach

- Change “Research” to “Research and Engagement”
- Reference as needed, state, federal, corporate and foundation engagement
- Cross connect with other five foundational areas of the SP (through the Top 25 ILT Committee)
- Add community engagement components
- Cross connect with SAC efforts
- Work closely with Carnegie Writing Team, Carnegie Advisory Group, and AOEC
 - Elizabeth Burman
 - Tim Cross
 - Carole Myers

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Brainstorming Community Engagement

Metric or Action	Goal	Part of UT System SP?	Carnegie Essential?	Aligns with MSU OEMI?	Used by Peers?	Symplectic (Elements?) compatible?
McGrath Awards (nominations/recipients)	TBD	No	Yes	Yes	Yes	Yes
Academy of Community Engagement Scholarship (nominations/recipients)	TBD	No	Yes	Yes	Yes	Yes
Number of formal two-way partnerships (e.g., contracts, agreements, MOUs, courses, programs)	TBD	Yes	Yes	Yes	Yes	Yes
Number of engaged individuals or hours of engagement	TBD	Yes	Yes	Yes	Yes	Yes

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Brainstorming Community Engagement

Metric or Action	Goal	Part of UT System SP?	Carnegie Essential?	Aligns with MSU OEMI?	Used by Peers?	Symplectic (Elements?) compatible?
Number of students participating/hours participated	TBD	No	Yes	Yes	Yes	Yes
Number of staff participating/hours participated	TBD	No	Yes	Yes	Yes	Yes
Number of faculty participating/hours participated	TBD	Yes	Yes	Yes	Yes	Yes
UTK annual economic impact amount (\$M)	TBD	Yes	Yes	Yes	Yes	Yes

Brainstorming Community Engagement

Metric or Action	Goal	Part of UT System SP?	Carnegie Essential?	Aligns with MSU OEMI?	Used by Peers?	Symplectic (Elements?) compatible?
Number of scholarly products on engagement (papers, presentations)	TBD	No	Yes	Yes	Yes	Yes
Community engagement web portal	TBD	No	Yes	?	?	?
Community engagement assessment tool	TBD	No	Yes	?	?	?

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Brainstorming Faculty Development

- Annual awards incentive programs
- Microinvestment program in the creative arts, humanities and social Sciences (\$3k awards) [Note: coordinate]
- Transdisciplinary scholarship venture fund
- AAAS Fellows to NAS/NAE program
- Corporate R&D program development
- Corporate fellows program
- IPA program at NSF
- Hill program

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Brainstorming Faculty Development

- Federal agency fellows program
- Post third year review, one semester
- Entrepreneurial leave
- Mentoring new faculty
- Community of scholars
- Center/institute boot camp
- STEM writing
- National Academy of Inventors members/awards
- [Note: coordinate SARIF with Grad School, Humanities Center, efforts in CAS, and any new programs]
- Others TBD

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Brainstorming Graduate Student Support

- Small grants for travel funds
- Federal agency doctoral fellowships
- Facilities use agreements
- Research Week
- GRAs in sponsored projects
- Bredesen Center students
- Grant writing support (through CIRE?)
- Transdisciplinary scholarship venture Fund
- Commercialization opportunities
- Others TBD

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Brainstorming Undergraduate Research Support

- NSF REUs
- Fall and spring research fellowships
- CUR/Hill presentations
- Focus on National Awards (like NSF Graduate Fellowships)
- Collaborative portal
- Research Week Mentor awards
- Research Week Student awards
- # of Research Week Participants
- # of undergrads participating
- # of faculty mentors

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Brainstorming Undergraduate Research Support

- Science writing (Mark Littman)
- Grant writing
- Joint institute fellowships
- Internships
- More \$ for UGR
- Early information on opportunities
- [Note: tie UGR, service learning, study abroad, student leadership, national awards, and engagement together]

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Brainstorming Core Facilities

- Pilot program underway
 - One in JIAM (microscopy)
 - Two others under consideration
 - How many more
- Amount supported
- Number of core facilities
- Start up packages co-funded to support core facilities
- Others TBD

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Brainstorming Enterprise Systems (would like input from Stacey Patterson, Chris Cimino & Joel Reeves)

- TERA PAMS
- Data management
- RCR Training
- Proposal development
- Student progress
- Others TBD

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Brainstorming Research Space (would like input from Chris Cimino, Deans, Stacey Patterson)

- New research SF?
- Laboratory renovations (hoods in SERF, Daugherty)?
- JIAM fit out?
- Strong Hall
- Melrose
- Cumberland & 13th
- Walters Life Science
- Engineering

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Looking Ahead

- Share draft metrics/action items/leads/target dates the week of 7/28/13 (Excel table)
- Present to you on 8/2/13
- Adopt your feedback
- Share with Top 25 ILT and Chancellor's Council in August
- Share with Deans in August/September
- Discuss feedback at our 9/6/13
- Meet and discuss with Research Council in September
- Others TBD

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Updated Prior Metrics/Action Items

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Some Proposed Top 25 Research-Related Action Items

Primary Metric (E or N)	Secondary Metric (E or N)	Action Item (Leads)	2013	2014	2015	2020
Increase TRE State + Local (E)	GCs (E)	Fully hire 10 Remaining GC Slots (SAC, Deans, Provost, VCRE)	+5	+3	+2	-
Increase TRE State + Local (E)	GCs (N)	Seek additional 10 new GC Lines (UTK, UT System, ORNL)	-	-	-	+10
Increase TRE State + Local (E)	Research Infrastructure	State support of HPC (UT System)	+\$10 M	+5M	+5M	-
Increase TRE Corporate (E)	Partnerships (E)	New annual substantive corporate partnerships (Gibson & Eighmy) *	+2	+3	+4	+5
Increase TRE Corporate (E)	Partnerships (E)	New annual large corporate R&D grants/contracts (Ballentine & Eighmy) *	+5	+7	+10	+20

* Maps to the current 12

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Some Proposed Top 25 Research-Related Action Items NEW

Primary Metric (E or N)	Secondary Metric (E or N)	Action Item (Leads)	2013	2014	2015	2020
Increase TRE State + Local (E)	Research Infrastructure	Strong Hall	?	?	?	-
Increase TRE State + Local (E)	Research Infrastructure	Cherokee Farm	?	?	?	-
Increase TRE State + Local (E)	Research Infrastructure	UTK capital projects	?	?	?	-
Increase TRE State + Local (E)	New faculty	New COE faculty lines	?	?	?	?
Increase TRE State + Local (E)	State support	Increase Science Alliance budget	?	?	?	?

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Some Proposed Top 25 Research-Related Action Items

Primary Metric (E or N)	Secondary Metric (E or N)	Action Item (Leads)	2013	2014	2015	2020
Increase TRE Corporate (E)	Gifts (N)	Increase gifts for research, including R designated capital projects (Gibson & Deans)	+2	+3	+4	+5
Increase TRE Corporate (E)	Licensing (N)	Increase R&D funding from licensing partners (Washburn & Eighmy) *	+\$1M	+\$2M	+3M	+\$5M
Increase TRE Corporate (E)	Licensing (N)	Increase annual royalty for R&D (Washburn & Eighmy) *	+\$1M	+\$1M	+2M	+\$3M
Increase TRE Institutional (E)	Accounting (N)	NCUBO Separately budgeted (Cimino & Eighmy)	?	?	?	?

* Maps to the current 12

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Some Proposed Top 25 Research-Related Action Items

Primary Metric (E or N)	Secondary Metric (E or N)	Action Item (Leads)	2013	2014	2015	2020
Increase TRE Foundation (E)	Partnerships	New annual substantive foundation partnerships (Morris & Eighmy) *	+2	+3	+4	+5
Increase TRE Foundation (E)	Partnerships	New annual substantive foundation projects for research (Morris & Eighmy) *	+2	+3	+4	+5
Increase TRE Foundation (E)	Partnerships	New foundation gifts for research (Morris & Eighmy) *	+1	+2	+3	+5

* Maps to the current 12

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Some Proposed Top 25 Research-Related Action Items NEW

Primary Metric (E or N)	Secondary Metric (E or N)	Action Item (Leads)	2013	2014	2015	2020
Increase TRE Corporate (E)	Chairs	New Corporate endowed chairs (Rabenold, Gibson & Deans) *	?	?	?	?
Increase TRE Corporate (E)	Centers of Excellence	New centers of excellence* (Gibson, Deans, Eighmy)	?	?	?	?

* Maps to the current 12

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Some Proposed Top 25 Research-Related Action Items

Primary Metric (E or N)	Secondary Metric (E or N)	Action Item (Leads)	2013	2014	2015	2020
Increase FRE DOD	DOD (N)	New annual DOD R&D grants/contracts (Montgomery & Eighmy)	+10	+15	+20	+30
Increase FRE DOD	DOD (N)	UARC Designation (Eighmy)	-	+1	-	+1
Increase FRE NNSA/DHS	NNSA/DHS	Joint Faculty with Y-12 (COE, Eighmy)	+2	-	-	-
Increase FRE NNSA	NNSA/DHS	Joint Institute with Y-12 (COE, COB, Eighmy)	1	1	-	-
Increase FRE NSF	NSF	ERC/STC/MRCT/IUCRC (Deans, RDT & Eighmy)	+2	+3	+4	+5
Increase FRE NSF	NSF	AGEP-like Awards (Deans, RDT & Eighmy)	+2	+3	+4	+5
Increase FRE NSF	NSF	Increase basic awards (Deans, RDT & Eighmy)	+10	+20	+30	+50

* Maps to the current 12

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Some Proposed Top 25 Research-Related Action Items

Primary Metric (E or N)	Secondary Metric (E or N)	Action Item (Leads)	2013	2014	2015	2020
Increase FRE NIST/DOC (N)	NIST/DOC	NNMI IMI (COE, RDT, Eighmy)	-	+1	-	-
Increase FRE USDA (N)	USDA (N)	New R&D Collaborations with UTIA (Brown & Eighmy)	+2	+2	+2	+2
Increase FRE HHS (N)	HHS (N)	New R&D collaborations with UTMC (TBD) *	+2	+3	+5	+10
Increase FRE HHS (N)	HHS	New R&D collaborations with UTHSC GSM (TBD) *	+2	+3	+5	+10
Increase FRE HHS (N)	HHS	New NIH Center Initiatives (TBD) *	+1	+1	+2	+5
Increase FRE DOE (N)	DOE	New EFRC (TBD)	-	+1	-	-

* Maps to the current 12

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Some Proposed Top 25 Research-Related Action Items

Area Of Focus	Metric	Action Item (Leads)	2013	2015	2020
Grad Ed/ Research	Increase Ph.D.s graduated	Increase RAs on grants & contracts (Hodges)	+25	+50	+100
Faculty/ Research	Undergraduates/Faculty	New faculty hires (Zomchick)	+10	?	?
Faculty/ Research	Undergraduates/Faculty	Hire National Academy Members (TBD)	+1	+2	+3
Faculty/ Research	Awards	New CAREER Awards (Porter & Reed) *	+5	+10	+15
Faculty/ Research	Awards	New NEH Fellowships (Rutenberg, Porter & Reed) *	+3	+4	+5

* Maps to the current 12

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Some Proposed Top 25 Research-Related Action Items

Area Of Focus	Metric	Action Item (Leads)	2013	2015	2020
Faculty/ Research	Awards	New Fulbright Fellowships (Rutenberg, Porter & Reed) *	+5	+5	+5
Faculty/ Research	Awards	New Guggenheim Fellowships (Rutenberg, Porter & Reed) *	+1	+1	+1
Faculty/ Research	Other	Faculty Professional Development * (Porter & Reed)	+?	?	?
Undergraduates /Research	Research Fellowships	New AY Fellowships (Pound & Eighmy)	+10	+10	+10
TBD	TBD	TBD	?	?	?

* Maps to the current 12

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Appendix A

Current Top 25 Research Action Items

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UTK Action Items for Research Within the Plan

Action Item	Initiative (Lead)	R1 Specific Action Plan Steps
R1	Research Services (G. Reed)	<ul style="list-style-type: none"> (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

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UTK Action Items for Research Within the Plan

Action Item	Initiative (Lead)	R2 Specific Action Plan Steps
R2	Communica- tions (G. Reed, M. Nichols)	<ul style="list-style-type: none"> (a) Identify key external audiences and target messages (b) Advertise in targeted publications (c) Increase support for professional design and content creation for research web sites (d) Enhance UTK's image at high profile conferences through branding (e) Build on the power of social media and continue relationships with traditional media (f) Implement a "research success awareness" campaign

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UTK Action Items for Research Within the Plan

Action Item	Initiative (Lead)	R3 Specific Action Plan Steps
R3	Government Relations (W. Hines, P. Montgomery)	<ul style="list-style-type: none"> (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

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UTK Action Items for Research Within the Plan

Action Item	Initiative (Lead)	R4 Specific Action Plan Steps
R4	IP and Innovation (D. Washburn and A. Miller)	<ul style="list-style-type: none"> (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

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UTK Action Items for Research Within the Plan

Action Item	Initiative (Lead)	R5 Specific Action Plan Steps
R5	Partnerships (W. Hines, P. Montgomery, S. Ballentine)	<ul style="list-style-type: none"> (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

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UTK Action Items for Research Within the Plan

Action Item	Initiative	R6 Specific Action Plan Steps
R6	Multi-disciplinary Research (B. Dunne, Top 25 Team)	<ul style="list-style-type: none"> (a) Revise UTK distribution of institutional resources (e.g., ORU) (b) Institute faculty hiring practices where appropriate (c) Revise faculty performance and promotion review (d) Revise academic program review criteria and metrics (e) Institute a Chancellor's Award for Research

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UTK Action Items for Research Within the Plan

Action Item	Initiative	R7 Specific Action Plan Steps
R7	F&A Distribution (W. Hines, C. Cimino)	<ul style="list-style-type: none"> (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

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UTK Action Items for Research Within the Plan

Action Item	Initiative	R8 Specific Action Plan Steps
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

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UTK Action Items for Research Within the Plan

Action Item	Initiative	R9 Specific Action Plan Steps
R9	Research Incentives (W. Hines, B. Dunne)	(a) Implement research incentive plan (b) Institute a Chancellor's Award for Multidisciplinary Research (c) Coordinate with Communications Team to highlight faculty research success stories

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UTK Action Items for Research Within the Plan

Action Item	Initiative	R10 Specific Action Plan Steps
R10	Infrastructure - Core Facilities (C. Boake, Core facilities Committee)	<ul style="list-style-type: none"> (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

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UTK Action Items for Research Within the Plan

Action Item	Initiative	R11 Specific Action Plan Steps
R11	Infrastructure-Space (W. Hines, C. Cimino)	<ul style="list-style-type: none"> (a) UTK Space Committee includes research leadership (b) Plan for research space on Cherokee Farm Campus for collaboration with private and government entities

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UTK Action Items for Research Within the Plan

Action Item	Initiative	R12 Specific Action Plan Steps
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