ORI@UT
Information for the Research Council
September 11, 2019
Why ORI@UT?

• UT Board of Trustees in March 2019 challenged the administration to come up with ideas to grow the UT research enterprise from ~$400M to $600 or $800M in the next five years!
  • Identify opportunities and eliminate barriers to success
  • Diversify funding sources
  • Recruit faculty in growth areas
  • Leverage and enlarge our unique partnership with ORNL
Total Research Expenditures by Campus

- Research expenditures as reported on the NSF HERD Survey is the gold standard metric.
- System-wide, research expenditures hit an all-time high in FY18 at $417M increasing 46% since FY09.
- The growth over the last two years at UT Knoxville was driven primarily by IACMI.
Federal Research Expenditures by Campus

System-wide federal research expenditures have increased 19% since FY09.
Research Expenditure Rankings as Reported on NSF HERD Survey

TOTAL RESEARCH EXPENDITURES

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<th>ALL</th>
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How do we continue to grow research funding?
Traditional Approach: Add Faculty

Higher Performers (Research Funding)

Lower Performers (Research Funding)
TOTAL RESEARCH FUNDING

What would it take to grow total research funding?

Add ~600 additional faculty, funded at a rate of ~2.5x current faculty.

Source: NSF 2017 R&D (HERD) Survey; IPEDS Data Center (Human Resources / Faculty)
TOTAL RESEARCH FUNDING

What is different at Georgia Tech & UC Berkeley?

R² = 0.7634

Source: NSF 2017 R&D (HERD) Survey; IPEDS Data Center (Human Resources / Faculty)
REALIZING THE FULL POTENTIAL OF THE UT-ORNL PARTNERSHIP

- GST Graduate Program
- Science Alliance
- Bredesen Center
- Public Policy Leadership
- Governor’s Chairs
- Joint Institutes
- UT/ORNL Partnerships & Economic Development
- Distinguished Scientists
- Joint Faculty Program
- UT Facilities at ORNL

OAK RIDGE INSTITUTE @ UT
REALIZING THE FULL POTENTIAL OF THE UT-ORNL PARTNERSHIP

Oak Ridge Institute @ UT

Requires ten-year commitment to become self-sustaining.

- Focused interdisciplinary problem-based science and engineering.
- Recruit 60 new researchers/faculty complemented by ORNL scientists.
- Grow joint PhD program to 500 students.
- Attract $150++ million in new research funding annually.

Positions UT as a Top Public Research Institution!
TOTAL RESEARCH FUNDING

Impact of ORI Investment

2017 Total Research Expenditures (in Millions $)

Source: NSF 2017 R&D (HERD) Survey; IPEDS Data Center (Human Resources / Faculty)

R² = 0.7634
WHEREAS the Board of Trustees recognizes that The University of Tennessee, Oak Ridge National Laboratory (ORNL), and the State of Tennessee would benefit from a stronger and more coordinated relationship; and

WHEREAS Interim President Boyd has proposed the creation of a new institute to foster a stronger and more coordinated relationship;

NOW, THEREFORE, BE IT RESOLVED:

1. The Board of Trustees approves creation of the Oak Ridge Institute at the University of Tennessee (ORI) to organize established joint UT/ORNL programs under a single administrative umbrella and provide a platform for strategic growth opportunities and global impact;

2. ORI shall be led by an Executive Director charged with pursuing leading-edge interdisciplinary research and workforce development in emerging fields;

3. The Board directs Interim President Boyd to solicit faculty, staff, and stakeholder input to ensure the success of ORI; and

4. At the November 8, 2019 meeting of the Board, Interim President Boyd shall submit, for Board approval, a detailed business plan for ORI including necessary structural and reporting framework, fiscal implications, and implementation timelines.
Overarching Goals for ORI@UT

• Establish robust partnership platforms that promote industry engagement, entrepreneurship and technology implementation for economic and community development;

• Provide flexible mechanisms that promote discovery and innovation especially in, but not limited to, areas related to data science and technology, advanced materials and outcomes-based applications;

• Build on existing joint programs to strategically integrate collaborative opportunities between UT and ORNL; and

• Offer an enriched interdisciplinary educational and research experience for students.
To achieve long-term success, ORI@UT should:

• Work toward a strategic alignment of the expertise and infrastructure of UT and ORNL to usher in world-class interdisciplinary research and graduate education;
• Promote the growth and recruitment of top-tier faculty and graduate students;
• Identify trends and support opportunities for large, multidisciplinary collaborations and funding;
• Develop and support programs to enhance the collaborative culture of UT and ORNL;
• Create an administrative home that provides support and guidance for partnering opportunities;
• Serve as a repository and develop reports that describe the joint efforts and their impact and return to the University, ORNL, Department of Energy, Tennessee and our country.
ORI@UT Planning to Date

• UT Ideation Session – July 29, 2019
• Launched the e-mail and website:
  • ORI@Tennessee.edu
  • https://research.tennessee.edu/oak-ridge-institute/
• Steering Committee Announced
  • Moody Altamimi
  • Suresh Babu
  • Michelle Buchanan
  • Heidi Goodrich-Blair
  • Moe Khaleel
  • David Manderscheid
  • Jeff Nichols
  • Robert Nobles
  • Stacey Patterson
  • Janis Terpenny
  • Xin Sun
• ORNL Ideation Session – September 4, 2019
Steering Committee Charge

• Create a set of guiding principles that will enhance the success
• Create a timeline for rollout and implementation
• Envision a system of accountability that ensures the goals of the institute are met
• Identify key implementation tasks and process for beginning the implementation

Kickoff Meeting – September 13, 2019!
We want you to stay engaged!

ORI@Tennessee.edu