Strategic Research Plan

The strategic research task force team

February 6, 2019
Current Major Gaps to an R1 University

• Extramural research funding: $36M (R1 median: in the $300M range)
  • UoM’s is not low compared to U North Texas (UNT, an R1 University)

• Doctoral degree production: 136/year (R1 median: ~300)
  • STEM: 32 (R1 median: 152; UNT: 77)

• Research staff (post-doctorate fellows and research scientists): 25
  (R1 median: 387; UNT: 47)
Suggested Strategic Research Plans (three-year-plan) – Six Categories

1. External funding
   - Increase extramural research expenditures by 10% per year
     - At the end of year 3, increase to 48M (from 36M)
   - Improve pre-award practices (grants and contracts business practices)
   - Increase capacity of post-award services

2. Collaborations
   - Build key partnerships with other universities/institutes/centers
   - Build interdisciplinary teams
     - Identify three clusters in first year based on extensive cross-departmental collaboration potential and strong research funding potential
     - Add a fourth cluster in year 3
   - Develop international research partnerships
Suggested Strategic Research Plans (three-year-plan)

• 3. Faculty
  • Add a minimum of 20 new highly research-active faculty each year
    • A mixture of senior researchers with large grant funding and promising junior researchers expected to receive large research funds
  • Cluster-hire interdisciplinary teams

• 4. Graduate students and research staff (post-doctorate and research scientists)
  • Recruit outstanding STEM graduate students and post-docs
Suggested Strategic Research Plans (three-year-plan)

5. Facilities/Equipment/Services
   - Improve existing space utilization
   - Create spaces that provide synergistic environments that support collaboration amongst multiple users
   - Infuse spaces with cutting-edge equipment/software
   - Expand/offer supportive research services (e.g., equipment maintenance support, LSP support, HPC, statistical consulting)

6. Front end investment
   - A critical component required toward early success of R1 status

→ A network of these six categories
It is not a chicken/egg story, but a chain of reactions that need a great stimulus!
Increase STEM doctoral degree production

Increase extramural research expenditure by minimum 10% / year (3-4M / year)

A minimum of 20 new research-active faculty / year

Research space expansion, Multi-user facilities with cutting-edge equipment, Services
Additional comments from the team members

- Scholarship (including publications, book authorships, etc) and commercialization (including patents).
- Consideration of funding in tenure.
- Invest research support in successful research faculty.
- Maintain strong research environment and R1 status.