Summary of Recent Research Task Forces
Faculty Senate Research Subcommittee (January 2019)

Over the past several years, many task forces have been convened to understand best practices and needs for maintaining and growing research excellence at Lehigh University. The overall perception is that the administration has addressed some aspects of these needs and concerns through initiatives defined in the Path to Prominence, however many issues have received limited response.

Generally, the recommendations fall into the two categories of Advocating for Needed Resources and Building a Culture of Research. Likewise, various best practices at other universities have been identified. Below is a compilation of the different areas addressed, each citing the source of the prior task force that generated the area/item.

What will drive individual and interdisciplinary groups to focus on 5-10 year strategic planning, independent of administrative goals/processes in contrast to year-to-year goals/planning?

Goals:
- Report to the Senate from administration on progress toward issues addressed below
- Define the relationship between the Faculty Senate and GRC - how to align goals and roles for greatest impact
- Identify how the Senate can help cultural change among the faculty to empower them to address various issues identified below.

1) Advocating for needed resources to allow faculty time to be dedicated to research
  - Graduate student support--clear faculty consensus that support for graduate students enhances the research mission and allows faculty to devote more time to research and allows for recruitment of higher quality graduate students that will improve research success and raise visibility for Lehigh.
    - E.g., enhanced services in counseling, career services, writing services, international student services, and attention to graduate student needs in terms of entrepreneurship and tech transfer issues
    - Both the Research Task Force and Graduate Education Task Force reports, as well as the 2017 GRC Faculty Survey indicated that a lack of support for graduate students was a major obstacle to research at Lehigh.
  - Allocation of faculty lines to create successful collaborative teams
  - Advancement efforts should include efforts to fund cutting edge research facilities and teams, fund risk taking, build seed money opportunities
    - Embed research into contacts with alumni outreach and fundraising efforts
    - Long-term, wholistic budgetary planning for laboratory/facility renovations and equipment replacement/enhancement
  - Expand research investment mechanisms
    - ensure supports are available to mid-career as well as early career faculty

- ■ Seek and encourage gift support that directly impacts research without concern for overhead for externally seeded projects
- ■ To encourage grant writing, develop a 'consolation prize' model that rewards/supports grants that were close to funded but did not get funded due to lack of initial results or other small deficiencies that would be enhanced by small to moderate amounts of laboratory funds.
- ■ Matching support for externally/self-supported M.S./Ph.D. students (direct tuition recovery to PIs who attract/advise self-supporting students)
- ○ Support development of faculty as public scholars
  - ■ Travel related to building a great global presence and visibility
  - ■ Develop conferences at Lehigh that increase visibility
  - ■ Administrative support for conferences and events at Lehigh that can increase visibility
- ○ Facilities and physical infrastructure
  - ■ Can be organized around teams likely to succeed, shared interests, collaborative opportunities
- ○ Pre and post-award support and intellectual property support
  - ■ IP support
    - ● Lower or remove barriers for contracts with industry by streamlining agreement negotiation process.
    - ● Identify projects where faculty/university are not interested in pursuing IP
    - ●
  - ■ Writing support
    - ● Grant writing and budget development assistance, boilerplate templates
    - ● Technical writing support for graduate students to reduce revision time for manuscripts
  - ■ Budget tracking and reallocation
  - ■ Simplifying procedures
- ○ Teaching enhancements
  - ■ Minimize new course preps.
  - ■ Ensure research active faculty only teach 2 days/week with days every week focused on scholarship. Especially Mondays and Fridays to facilitate research travel.
  - ■ Give appropriate credit to faculty teaching large (50+ student) courses
  - ■ Encourage TAs to take more active roles for faculty travel for conferences, panels, and industry/government engagement

2) Building a culture of research

- Mentoring
  - Focused mentoring and collegial support for grant proposal development--including continuous feedback
  - Mid-career mentoring that digs deep into productivity. Mentors act as advocates to chairs and deans. (Similar to the ADVANCE MAP-WiSEly program)
  - Enhance mentoring mechanisms and recognize/reward mentoring as a key area of service
- Strategic use of internal funding mechanisms to further goals of external funding success and visibility of research
- Collaborative development of research initiatives to be invested in based on existing faculty expertise. Involvement of faculty in creation of research initiatives rather than top-down creation.
- Tracking and helpful feedback on successful use of internal funding to attain external funding or highly visible
- Feedback on par data individual and cohort/topical needs and successes relative to other universities (publications and funding rates)
- Use of flexible models in allocation of faculty time and/or allow allocation to be defined at the department-level
- Encourage travel by faculty to connect with industry, government, and colleagues for collaborations.
- Increase number of courtesy/joint appointments to foster interactions between faculty and create cross-departmental/college stakeholders as well as broader research credentials for identifying expertise and support.
- Develop and recruit research leaders, integrate new faculty into ongoing endeavors
- Merit system should reward achievement in research
  - Feedback on Lehigh investments into FIG/CORE/ACC grants
  - Discussions focused on preparing groups to focus impact/visibility and ongoing funding opportunities
  - Mentoring/collegial discussions on appropriate next steps--what would building on investment look like for a particular researcher in a particular field (shift away from year-to-year, PAR-like planning). Five-year planning at the College, Department, and Individual faculty/groups of faculty so that there can be strategic thinking.
  - Clear ROI benchmarks publicly reported
- Graduate advising counted directly as part of teaching load across all university disciplines
- University-wide seminars by luminary speakers that bring both students and faculty together on broad topics identified by students (bridging education and research)
  - Incorporate luminary talks into coursework so that students are exposed

- ■ A program through which luminaries could be selected to bring together faculty working on interdisciplinary areas so as to encourage new collaborations. Use of speakers to build networks of potential consultants on grants to build "dream teams."
  - ○ Communicate to trustees the ways in which a vibrant research community does not detract from undergraduate education, but rather enhances undergraduate education
  - ○ Enhancing grad-life issues (all of them from housing, health, social, etc.)
  - ○ More development of interdisciplinary graduate programs (like Bioengineering and Africana Studies)
  - ○ We need to develop more efficient and effective processes for developing interdisciplinary and cross-College research and educational programs, as interdisciplinary collaboration will enhance our ability to gain external funding for research and/or training.

3) Best practices at other universities related to:
- Developing grant proposals that are ultimately funded
- Intellectual property
- Mentoring focused on faculty productivity and research collaboration
- Building successful research groups both across campus and across institutions

4) Vision of shared responsibility
- Faculty are actively invested in partnering with administration
- Will require action and investment on the part of administration
- We want to see full faculty involvement in meeting these goals, and we encourage the involvement of faculty committees in identifying faculty to work on tasks to implement changes to improve research and graduate education

References:
- Report on the Faculty Task Force on Research (2016)
- Report and Recommendations of the Task Force on Graduate Education (2016)
- GRC Recommendations for Building Excellence in Research and Graduate Education (2017)
- GRC Memo on Research and Graduate Education (2017)
- RCEAS Envisioning Process for Greater Faculty Productivity and Scholarly Impact (2017)