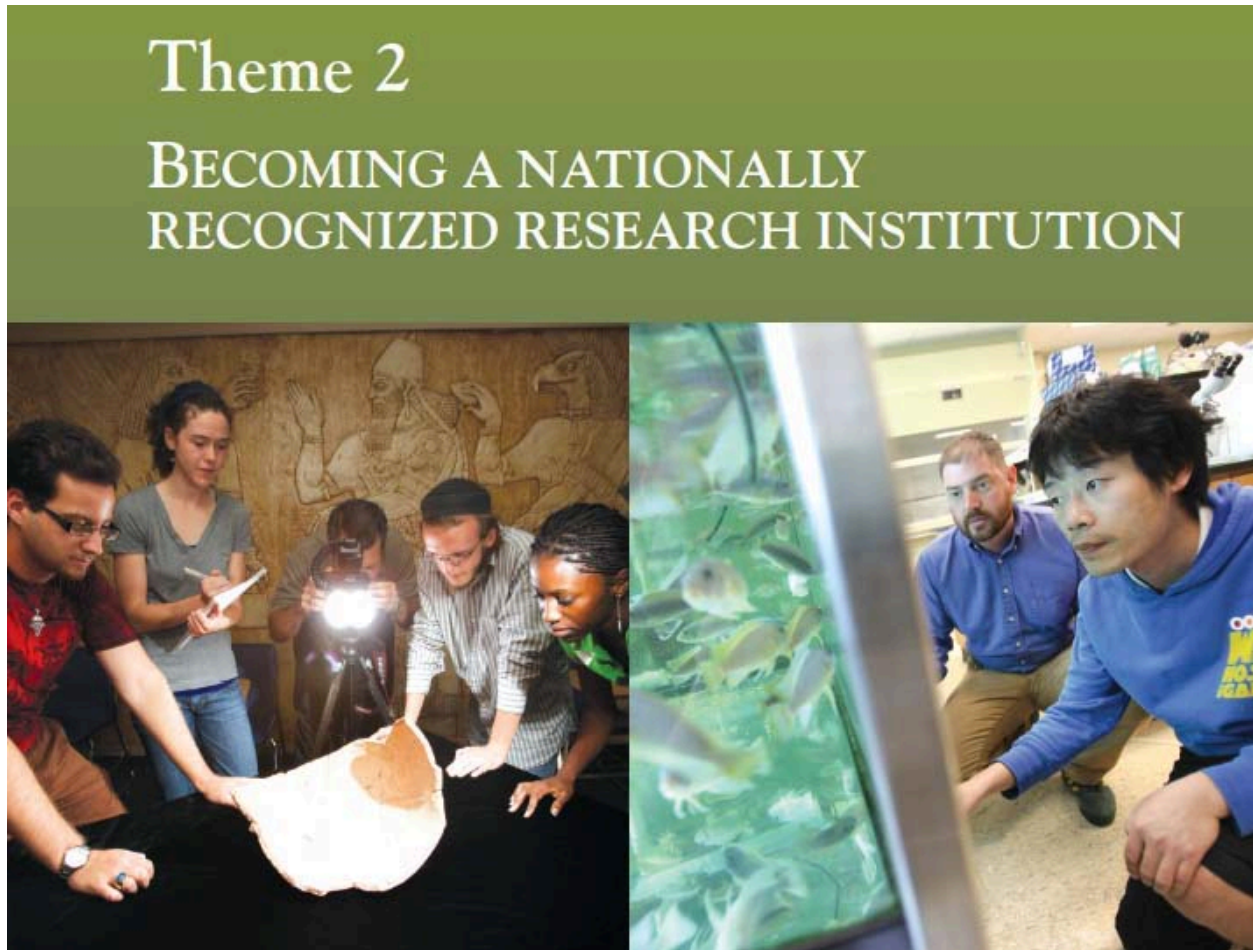


A&SPIRE YEAR TWO (2015-2016)



AOD 1 – Developing Top-Tier Tenure Guidelines

Year 2 Accomplishments

- Seven of the nine departments in the sciences division submitted revised tenure guidelines ratified by the department faculty. These revised guidelines represent advances in expectations of scholarly productivity for success in award of tenure. All recognize both quality and quantity of research as important criteria that peer-review is essential, and that competitive extramural funding must be pursued to support the colleague's research program. These guidelines set targets for funding and publication linked to national norms for scholarship such as the guidelines in *A&Spire*, Academic Analytics and the National Research Council, among others.

- In the revised tenure documents all departments highlighted teaching and service as essential areas for strong performance.
- Tenure guidelines for departments with graduate programs emphasized the importance of mentoring graduate (especially doctoral) students as an indicator of an outstanding independent investigator.
- Two departments developed guidelines for promotion to full professor.

Year 3 Goals

- All A&S science departments will finalize their revised tenure guidelines.
- All A&S science departments will complete promotional guidelines to full professor.

AOD 2 – Increasing Research in the Humanities/Social Sciences

Year 2 Accomplishments

- All departments in the Humanities/ Social Sciences Division completed the revisions to their tenure guidelines.
- They discussed the need for requesting additional clerical staff positions for faculty support.
- Departments agreed to increase fundraising and donor involvement in order to create and fund additional space for departments, faculty offices and graduate programs.

Year 3 Goal

- Benchmarks of the above subjects will be determined this coming year.

AOD 3 – Improving Doctoral Production in STEM

Year 2 Accomplishments

- To make strides toward improving doctoral production in their graduate programs, chairs were asked (1) to work directly with the Graduate School in efforts to take better advantage of resources available for recruiting larger numbers of higher-quality doctoral students; (2) to develop plans for increasing number of graduates, and (3) to institute or enhance publication requirements for doctoral students. The results of these efforts were to be reported to the College in the annual departmental reports.
- The Departments of Physics and Mathematics enhanced the doctoral education requirements:
 - Physics created the expectation that each doctoral student produce two publications for graduation. Also, the graduate faculty instituted a systematic

process to thoroughly evaluate doctoral applications and to accelerate the pace for students to complete degree requirements.

- Mathematics explored methods to enhance the size and quality of applicant pools.

Year 3 Goal

- Increase doctoral recruitment: each department will report accomplishments in the annual departmental reports regarding their use of Graduate School resources.

AOD 4 – Acquiring New Faculty in STEM

Year 2 Accomplishments

- The Department of Chemistry and Biochemistry created a long-term strategic plan, requesting six new faculty lines and the associated space requirements:
 - Hire a senior faculty member in biochemistry or chemical biology with competitive startup costs plus matching funds from the Cancer Prevention Research Institute of Texas (CPRIT) for “Rising Stars” or “Established Investigators” and provide five modules of research space.
 - Hire a senior faculty member in hard materials chemistry with five modules of research space.
 - Hire four junior faculty members:
 - One in chemical biology and provide three modules of research space.
 - One in biochemistry, specifically in the area of structure or metabolic processes, and provide three modules of research space.
 - One in carbon or polymeric materials, three modules;
 - One in pharmacology or toxicology linking environment and health and provide three modules of research space.
 - The department identified the total research space needs for these six faculty (25 to 27 modules) and specified the need for competitive startup budgets and teaching loads of 1:1.
- The Department of Geosciences identified the need for four new faculty members in support of the Applied Petroleum program:
 - One full professor, structural geology;
 - One assistant professor in structural or stratigraphy geophysics; and
 - Two clinical associates or full professors in petrophysics or stratigraphy geophysics.

In its approved doctoral proposal, the Department of Environmental Sciences projects the addition of:

- Two research faculty lines.

Year 3 Goal

- All STEM departments will complete strategic plans similar to Chemistry and Biochemistry, and Geosciences.

AOD 5 – Increase Staff Support for STEM

Year 2 Accomplishments

- In partnership with the Human Resources Division (HR) Arts & Sciences identified additional methods of support for faculty research to move toward the attainment of our Carnegie VHR aspirations. These efforts involved interviews of chairs and departmental office staff.
- HR completed a systematic study of staffing in the science departments at universities with research profiles in line with Baylor's aspirations. Based on objective criteria identified in this study, such as numbers of majors, size and complexity of graduate programs, and extramural funding, HR recommended the addition of staff positions in A&S departments and in the A&S Dean's Office.
- The College of Arts & Sciences hired a Post-Awards Grants Manager, Vasana Tibbs, during the summer of 2015. Ms. Tibbs has already demonstrated the value of this special role in advancing the research of A&S faculty.
- The Provost's Office authorized the hiring of a Budget Services Manager, Britt Smith, to enhance the fiscal services provided by our current financial managers, Julie Stahl and Gary Carter, as of July 2016.

Year 3 Goals

- Gain university approval for an administrative associate staff position in Psychology and Neuroscience.
- Hire advanced-level administrative support personnel in the Department of Biology, among other departments, to direct office operations as faculty research grows.
- Hire a new staff member, ideally a person with a Ph.D., to support grant applications for the Department of Chemistry and Biochemistry by identifying funding opportunities, facilitating collaborative funding proposals, budgeting, and coordinating interaction with the Office of Sponsored Programs (grant preparation, submission and reporting). This position was identified by the department in its strategic plan.

- Hire a computer support specialist in the Department of Geosciences to advance its Applied Petroleum program.
- Complete an administrative staff plan for the science departments.
- Complete a technical staff plan for the science departments.

AOD 6 – Creating/Enhancing Research Centers in STEM

Year 2 Accomplishments

- Arts & Sciences replaced older instruments in the Baylor Sciences Building (BSB) and recorded an increase in the use of up-to-date equipment, particularly in the Mass Spectrometry Center. This increase in activity has resulted in a marked increase in scholarly publications.
- A&S implemented a system of a fee-for-services model developed and managed by the BSB Facilities Office, under the leadership of Craig Moehnke and Chris Becker. This system of user fees represents a significant cultural change from centralized financing by the university for all costs of operating the centers. Implementation began with the Center for Microscopy and Imaging, resulting in the collection of \$16,000 this year from users within the Baylor faculty and from external users. Baylor faculty paid these fees with external grant funds, start-up funds, Facilities & Administrative (F&A), and other internal sources.
- The Department of Chemistry and Biochemistry, through its strategic plan, outlined specific needs in the area of facilities, centers, and instrumentation:
 - Upgrade and expand instrumentation in the Center for Microscopy and Imaging, the Molecular Bioscience Center and the Mass Spectrometry Center.
 - Formalize the NMR facility with the hiring of a dedicated instrumentation specialist.
 - Create a graduate assistant position committed to the departmental Core X-ray Laboratory.
 - Establish a dedicated departmental computing cluster to compensate for the outdated, slow, and heavily used university-wide high-performance computer facility (KODIAK). Even though the university is discussing the need for replacement, the timeline is indefinite.

Year 3 Goals

- Expand the system of a fee-for-services model to the Mass Spectrometry Center in the next fiscal year and move to include the remaining centers in the near future.
- Complete renovation of the Animal Facility, hire additional personnel for this research facility in the Baylor Sciences Building, and establish standard operating procedures in

order to achieve AAALAC accreditation. The Office of Vice Provost for Research is making a substantial commitment to these goals, in recognition of the Animal Facility's importance for the university's attainment of Carnegie VHR status.

- Implement one or both of these plans:
 - Consolidate the NMR instrumentation under a single supervisor;
 - Move all NMR instruments in a single space.
- Create a Materials Characterization Facility, to be shared among STEM departments, focusing on nano-scale materials, polymers and surface science.

AOD 7 – Planning for Masters Programs

Year 2 Accomplishments

- No accomplishments this year.

Year 3 Goal

- Develop a questionnaire for departments with masters programs with a focus on long-term plans for their respective programs.