Pathway Goal: Research, Scholarship, and Creative Activity

Action Item #
1-3

Report:
☑ Mid-Year: December 2016
☒ Year-End: April 2017

Action Item Description:
Develop a research and creative activity infrastructure master plan for
(1) ensuring space productivity, and
(2) development of renovated/new space.

Submitted By:
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Working Group Members:
Name                Department
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Provide a written overview of the year-long process for your working group.

The committee continued work on development of a financial model for a research building using student fees and F & A., as well as other assistance (e.g., biomedical engineering). The committee also worked on research metrics assessment for different colleges. These metrics can be coupled to a financial model for space allocations. The financial model will be based on research efficiency with the goal of maximizing research productivity in existing space. The ultimate goal is to improve not only the research expenditures and funding per square foot, but to also increase scholarship measured through graduate output and results dissemination. The committee has started collating existing and new research metrics from various campus constituents in order to define the metrics for research productivity. The Vice President for Research is to solicit feedback from each college to determine the best model to implement. The created research productivity model will be utilized in multidisciplinary research spaces such as the SEB and HRC buildings to ensure the existing research space is efficiently utilized. Because a certain space in multi-disciplinary buildings is utilized by many researchers, individual research expenditures and productivity in these two facilities should be evaluated, instead of a “combined” productivity to assure all users of the space are contributing to the outcome.
The committee also discussed the varying quality of the research space available at UNLV. The goal is to assure that all research spaces (dry or wet labs) are top quality to achieve Top Tier. Meeting long-term research space needs will require the construction of new buildings that would support the needed faculty build up to reach Top Tier. Short term space needs have to be met by:

a) Freeing space that is currently underutilized by faculty members that have not been active for some years. However, these faculty members should be treated with respect given the many years of service and the fact that they have been hired under different requirements. It is suggested that a collective space be created in every college that can accommodate the level of research these faculty members have.

b) Remodeling spaces that currently do not meet or have the quality needed in a research laboratory.

c) Providing flexible collaborative spaces where faculty members can share space. Such an arrangement would require a manager to keep the space operational and safe.

d) Evaluation should be conducted to evaluate current space for their suitability as wet or dry labs and to consider remodeling cost implications. For some spaces, dry lab utilization may be the best option.

The committee also discussed the need for technicians and laboratory managers. There is a great need to provide technician/lab manager support to the research faculty. Many departments do not have technicians to repair equipment or to develop experimental set-ups for the faculty. Often faculty members waste much time repairing the lab and equipment; this time could be used to write new grants, mentor graduate students, or to prepare manuscripts. In many colleges, equipment is used for both teaching and research. While there are laboratory fees that can be used to repair some equipment, many pieces of equipment remain broken or are poorly repaired by faculty and graduate students. This results in time wasted, frustration, and shorter equipment lifetime. There is a need to hire technicians that maintain, repurpose, or repair research equipment.

The committee also discusses how current tenure standards impact long term research performance of faculty. Each college must define metrics for research productivity so that resources can be allocated to support Top Tier. These metrics would also support higher standards for tenure and promotion—this would result in overall increase of the quality of research.

In addition, the committee discussed the need to account for overall productivity of a department. That is, productivity would include not only research and publications, but also the number of students the departments serve. This is vital for departments with a large number of service courses (e.g., Liberal Arts, Chemistry, Biology, Math, etc.). The FTE revenue from these departments is large and should be part of the equation. It was suggested that the overall output of the department be compared to the funding input it receives.

The committee further discussed reduction of teaching load. Reduction in teaching load for research active faculty would be accomplished by hiring Ph.D. level instructor (i.e. faculty in residence) to teach lower level courses. To keep quality teaching, the goal should be to hire Ph.D. level instructor, who love to teach, but are not interested in the research component of a tenure track position.
The committee also addressed the issue of lack of management and delays when remodeling existing space for incoming faculty. Delay in remedying space may delay incoming faculty research by several months or even a year. That has detrimental impacts on acquiring research grants and attracting graduate students. It was suggested that the best outcome will be achieved if the Planning Department is used, instead of utilizing UNLV facilities. It was argued that, in many instances, remodeling could start before the faculty member arrives to campus, if a facilitator, with decision making power, was involved. That person would work directly with the Deans and the newly hired faculty to start planning and to execute the remodeling. The committee emphasized that would only work if the person involved had a background and many years of experience on remodeling projects and construction management. There was much discuss about who would supervise this person. Some faculty thought that the VP for research would be the ideal supervisor for this position. Some thought that the person could work directly with the Deans, and some thought the provost should supervise this person. Notwithstanding, the committee agrees such a person is needed and it would help speed up space planning and remodeling.

2016-17 Accomplishments

1) Research metrics from the College of Sciences and Engineering have been compiled. These metrics have been provided to the Vice President of Research so that similar lists can be generated in different Colleges. Each college will define their own research metrics that will be then utilized to evaluate efficiency.

2) The committee has proposed that metrics be developed to categorize research space (Wet versus dry, worth remodeling or not, multi-disciplinary, flexible, teaching/research, etc.) in order to provide a better understanding of what is available and what space have to be built to achieve Top Tier.

3) The committee has suggested the hiring of laboratory technicians to maintain, repurpose, and repair equipment for research.

4) The committee has also propose the establishment of higher tenure and promotion standards as one of the means to increase research productivity.

5) Overall department productivity metric was also proposed to account for the productivity of large service departments.

6) Committee also discussed means to reduce teaching load that do not impact quality- by hiring Ph.D. level instructors (i.e. faculty in residence),

7) Research space remodeling management was also discussed. An experienced construction manager would speed up remodeling of laboratory spaces, saving incoming faculty much time and therefore increasing productivity.
Top Tier Initiative
Action Item Report

Recommendations

1) Develop a model for faculty research productivity that includes expenditures, graduate output, publications.
2) Develop a model for department productivity that includes research productivity but also teaching FTE.
3) Establish higher tenure and promotion standards for each college.
4) Develop a model for research space allocation based on expenditure, publications, and graduates. For multi-disciplinary spaces, the productivity of individual members should also be considered.
5) Hire an experienced construction manager, with decision making power, to coordinate research space remodeling.

2017-18 Next steps

- What should the goals / activities be for the subcommittee?
- Who should be responsible?

1) Compile Research Productivity metrics suggested by all colleges. Identify common and divergent items.
2) Categorize research space as wet, dry, wet/dry, remodeling potential, etc. for all existing buildings.
3) Develop a model for space allocation based on research productivity. Metrics for collaborative space should also be included in the model.
4) Suggest modification to existing tenure and promotion standards (based on existing of each college) to achieve research goals of Top Tier.

Please review the list below and “X” the appropriate box(es).

☐ Potential resources required
☐ Any reports generated by this working group
☐ Metrics to be used
☒ No additional reference material

Any additional information you wish to share.

We will also be investigating what policies peer institutions have on topics covered above.