

# GUIDELINES FOR RESEARCH SPACE ALLOCATION AND MANAGEMENT AT UMBC

## Overview

Space is a limited University resource and, consequently, it must be managed responsibly and in a way that promotes the advancement of the university's mission and strategic priorities. Research and graduate education are critical missions of UMBC that often require substantial infrastructure, including laboratory and office space. As such, UMBC seeks to provide the appropriate amount and type of space for research activities. The space needs that arise from research activities vary greatly both within and across academic disciplines. As a result, research space has traditionally been managed at the college and departmental level. In this way, informed decisions can be made regarding the allocation, renovation, and creation or discontinuation of research space.

Within this diversity of needs, there exist some overarching principles and goals regarding the allocation of research space. These guiding principles will help each college, department, and center as they develop and apply the criteria to be used within their areas for allocating or assigning both sponsored and non-sponsored research space and in working with administration to efficiently use their existing space or seek support for the creation of new space.

## Definitions

### *Research Space*

All space that is primarily intended and used for conducting research and creative activities, including space designated for:

- Specific research or creative activities projects
- Training of individuals in research or creative activities techniques
- Functions that support research or creative activities such as animal care and use
- Spaces that directly serve one or more research or creative activities labs as an extension of the activities in those labs

### *Unit*

An academic unit whose mission partially or preponderantly involves research. A unit may be a department, program, center, or institute that may report to a college, Office of the Provost, or Vice President for Research.

### *Researcher*

A person conducting research. The Researcher may be a full-time or part-time faculty, an emeritus faculty, a visiting faculty, or have another employee classification.

### *Unit Head*

The person responsible for managing the unit. The Unit Head may be a Department Chair, a Director, or an Executive Director.

### *Academic Leader*

The person to which the unit reports. The leader may be a Dean, a Vice Provost, the Provost, or the Vice President for Research.

## **Roles and Responsibilities**

The following individuals are responsible for managing, allocating, or using research space on the campus in the context of institutional priorities.

Provost and Senior Vice President for Academic Affairs	Steward of all space at the university, including research space, and is responsible for ensuring that this space supports the academic and research mission of the university.
Vice President for Research	Supports and promotes research activity at the university, integrates research into the academic mission of the university, ensures it is compliant with university and government regulations, and consults on research space needs with the Provost.
Academic Leader	Steward of all space allocated to their units and responsible for allocating and advocating for space in support of the programmatic needs and priorities of their units.
Unit Head	Assigns research space to faculty and other researchers under their management based on needs and priorities.
Researcher	Effectively utilizes space under their direction to meet the research and instructional needs of their unit.

## **Guiding Principles**

- As with all types of space on campus, research space is a valuable resource and belongs to the institution. The Provost is ultimately responsible for the allocation of research space.
- Specific criteria for initial space assignment and continued use will be established by the Academic Leader in consideration of programmatic needs and priorities determined by the Academic Leader and Unit Head in consultation with Researchers.

- Decision-making authority may be delegated to Unit Heads for space that is assigned to their units to ensure that those with the most in-depth knowledge of the activities and needs of subsets of Researchers determine appropriate allocations.
- High-quality research space is necessary to recruit, retain, and develop UMBC's faculty, staff and students to their fullest potential.
- Inefficient use of research space limits our ability to invest financial resources in research.
- The University thus must be able to assign, or re-assign, an appropriate quantity and quality of space based upon current use, greatest need, productivity, and strategic priorities. As such, research space assignments are not permanent and may be reassigned as activities change.
- Research space may be assigned for use by specific individual(s) and/or in support of specific activities.
- Unit Heads and Academic Leaders must develop metrics to assist in the evaluation of research space utilization and periodically determine how the current allocation of research space meets their stated programmatic needs and priorities. Although quantitative measures may not be the final determinant of space allocations, they provide an important step in the evaluation process.
- Space that is vacant or deemed underutilized should be reassigned or repurposed. Each Unit Head and Academic Leader should have a defined plan to improve the utilization of this newly released space.
- Optimal use of research space includes shared use of resources and facilities.
- Functionality and condition of research space should be factored into space allocation decisions to minimize the need to pursue major construction or renovations. Space renovations must follow unit approval processes to ensure that utilization meets strategic needs.
- Research space, equipment, and materials must adhere to all health and safety regulations and procedures, as defined by UMBC's Office of Environmental Safety and Health.

- All research conducted in university assigned space must adhere to university conflict of interest policies.
- Research space assignments and continued use must adhere to all university policies and procedures that prohibit discrimination and misconduct.
- University space allocated in support of research and creative activities will be managed consistent with *UMBC Space Management Policy*.  
<https://www.umbc.edu/policies/pdfs/UMBC-Space-Policy-VI-4.10.02.pdf>

### **Considerations for the Allocation or Reassignment of Research Space**

When allocating or reassigning research space, it is important to consider the following questions to optimize existing research space and avoid unnecessary renovation or construction costs:

- Will the new allocation bring the space into alignment with the long-term programmatic needs and priorities of the unit?
- Is the new allocation part of a long-term plan for research space management?
- Will the new allocation create new opportunities?
- Does the new allocation offer the opportunity to “right size” departmental or individual space allocations?
- What is the length of the space commitment? Is this commitment explicit or implicit?
- What one-time and recurring costs are associated with the new allocation?
- Are there opportunities to co-locate similar types of research to share core or common space and equipment?
- To what extent will the space allocation provide opportunities for interdisciplinary collaboration?
- How will space assignments, equipment placement and/or infrastructure plans affect health, fire, environmental, and life safety and compliance?

Whenever possible, space will be assigned with consideration for program proximity, adjacency, continuity, interdisciplinary research collaborations and the associated costs.

### **Commitments to Faculty for Research Space**

Faculty are expected to formulate and conduct a robust program of academic research as part of their professional activities. Therefore, the unit should strive to provide a member of the faculty with research space to adequately support these activities. The Unit Head and/or Academic Leader must balance the needs of individual faculty with the needs of the other faculty and the overall programmatic needs and priorities of their units and the institution.

### **New Faculty**

When department Chairs request searches for new tenure-track faculty members, their proposals to their Dean include estimated startup needs, including research space. These requests typically outline the sorts of space and equipment likely to be needed (e.g., wet lab, fume hood, clean room, etc.). The requests also indicate whether the person to be hired will occupy space being vacated or already vacant within the department, or whether additional space will be required. The Dean includes these estimates in the College's request to approve the search, through the Faculty Hiring Request Organizer (FHRO), and the Dean and Provost typically discuss the allocation of expenses toward the startup package. If hiring the faculty member will require the allocation of research space beyond the College's availability, the Chair and Dean submit a space request for consideration in the university space management process.

Once a preferred candidate has been identified, the Chair works with that candidate to itemize that individual's space and equipment needs, typically within the parameters of the FHRO. The Chair works with the Dean, who works with the Provost, to allocate responsibility for funding any needed renovations, equipment purchases, etc., and as necessary to prepare further requests for the space management process.

A commitment for research space should be as detailed as possible and should include the following elements:

- General characteristics of the space to be provided (e.g. square footage and presence of specialized utilities, such as chemical hoods)
- Location of the space, if it has been identified
- Plan for identifying space in the future, if it has not been identified at the time of hire
- Plans to renovate the space, including a realistic timeline, budget, and fund source
- Time limits for the occupancy of the space, if appropriate

## **Current Faculty**

Each Unit Head and/or Academic Leader must periodically review the research space use of current faculty members. The periodic review should include evaluation of research space use to determine if individual faculty members have a shortage or excess of research space, and/or if specific rooms need reconfiguration or renovation. These reviews of research space use can be done as part of an annual review process for each faculty member; but at a minimum must be completed as part of the Academic Program Review process to gain an overall assessment of the research space condition and needs of the unit. Consideration should be given to the needs of faculty members whose research may have been interrupted for a while (e.g. due to administrative appointment, illness, or programmatic changes in the research-funding agencies).

## **Sponsored Research**

It is the responsibility of the Unit Head and/or Academic Leader to provide adequate space (as identified on the Proposal Approval Form) for the duration of any sponsored project conducted by the faculty. When the unit indicates on the Proposal Approval Form that space is available and specifies the building and rooms, the sponsor is assured that space necessary and appropriate to conduct the research will be made available. The lead time involved in submitting proposals may dictate that units "hedge their bets" in terms of the assignment of space. Therefore, in some cases, the space identification may include the phrase "or equivalent space, as available." All units involved in the proposal must carefully review the research space identification portion of the Proposal Approval Form.

Principal investigators must identify and seek approval for all significant space, infrastructure, configuration, and functional requirements at the time of proposal submission.

## **Reallocation of Research Space**

In some cases, the reallocation of research space may result in the displacement of equipment or other infrastructure. The Unit Head or Academic Leader should develop a working agreement for all aspects of Researcher relocations including properly relocating or disposing of equipment. The Unit Head or Academic Leader is not obligated to compensate Researchers vacating the space for investments that may have been made in the vacated space during the time of occupancy.

## **Emeritus Faculty**

Emeritus faculty shall not be given priority for research space. However, emeritus faculty may be provided with research space at the discretion of the Unit Head or Academic Leader, if space is available and if the emeritus faculty remains actively engaged in research that aligns with the programmatic needs and priorities of their unit.

## **Productivity Measures**

Unit Heads, Academic Leaders, and the Offices of the Provost and Vice President for Research need to understand how research space is used. Quantitative and qualitative metrics help units to assign, allocate, and optimize use of this space for current and anticipated research needs.

Productivity measures for dedicated research space may vary, depending on factors deemed most important or valued by each college, unit or discipline, and may or may not be directly linked to the level of financial activity. For established faculty, the review period may span three to six years. For newer faculty or faculty whose research may have been interrupted due to administrative appointment, illness, or programmatic changes in the research-funding agencies, a modified review period may be appropriate.

Each Unit Head and Academic Leader must develop in consultation with the tenure-track or tenured faculty members in the unit meaningful productivity measures specific to the unit's discipline as a tool for assessing best use of research space assignments. Ideally, these measures will assess research productivity and assignments or establish internal target goals to support unit needs and priorities. Each Academic Leader must review and approve unit-specific productivity measures and periodically review these with the Provost. The Unit Head and Academic Leader must distribute and/or post the productivity measures so that all Researchers are aware of the criteria and process.

For some research areas, it may be appropriate to consider financial data as a method for measuring research space productivity. Metrics showing evidence of proactive participation in research and funded projects may include:

- Total externally sponsored research expenditures (direct and indirect costs) [\$/sf]
- Total research expenditures (direct and indirect costs), regardless of funding source [\$/sf]
- Indirect costs generated by the research [\$/sf]
- Proportion of the research and creative activities supported by external awards
- Potential for other funding – donations, foundation, private

For some research areas, it may be appropriate to consider other quantitative data for measuring research space productivity. Metrics may include:

- Number of funded and non-funded people participating in the research, scholarship and creative activities in these categories:
  - Doctoral students
  - Postdoctoral trainees
  - Professional degree students
  - Master's degree students
  - Visiting scientists
  - Undergraduate students
  - Staff
- Number and dollar value of submitted, pending, and awarded proposals
- Number, frequency, and journal prestige of published papers
- Number of patents or products that resulted from the research

For some research areas, it may be appropriate to consider qualitative information for measuring research space productivity. Metrics may include:

- Quality and impact of the research being conducted
- Alignment of the research activity with strategic priorities
- High-impact and mission-oriented research and creative activity.
- Connections with classroom teaching
- Type of research conducted in the space (e.g. Theoretical, computational, heavy equipment, etc.)
- Relevance of conducting research on campus



## **Amount of Assigned Space**

The quantity and configuration of research space appropriate for a discipline, research or creative activity, and/or Researcher is highly variable. As a guide, Unit Heads and Academic Leaders may wish to reference benchmarking data or institutional models to determine the amount of research lab space to assign for a Researcher. The appendix includes the following resources:

- 2016 Research Space Guidelines for Maryland Public Universities  
<https://umbc.box.com/s/x735no41y0173xkh0futgix2ibzmzhym>
- 2017 Interdisciplinary Life Science Building Benchmarking Report  
<https://umbc.box.com/s/5lqte6enhois9n7pwk23y53ibj1ctiyj>
- 2009 Facilities Master Plan Space Model Assumptions  
<https://umbc.box.com/s/ukds2qdc5fphqrysmk1h2dn8iy6lusb>

## **Space Request Process**

Unit Heads and Academic Leaders will establish specific space allocation guidelines and an internal process for requesting assignment of research space applicable to the units under their authority. These guidelines will be reviewed with and approved by the Provost prior to assignment of space.

The process may include application forms, space allocation committee or review panels, deadlines, evaluation criteria, and memorandum of understanding. If an MOU is employed, it may outline cost, conditions, time limitations, room assignments, and other applicable criteria.

Unit Heads and Academic Leaders may establish a hierarchy for space allocations that must be reviewed and approved by the provost prior to assignment of space. As an example, a Unit Head may institute this hierarchy:

- High priority will be granted to Researchers who have external funding but may have limited facilities to conduct the funded project.
- Higher consideration will be provided to Researchers whose research is deemed to be of high potential for future funding through external agencies.
- Highest consideration will be given to interdisciplinary research teams.

Other factors that may be considered by Unit Heads and Academic Leaders in the evaluation of space requests include:

- Amount and type of space required
- Inadequacy of existing space for the execution of research
- Whether the research focus area aligns with UMBC's vision and mission
- Whether the research focus area aligns with the research priorities and capacities of the research suite or building

The approved process and criteria must be transparent and posted.

If research space needs cannot be fully met within the space allocated to an Academic Leader, a space request can be made in accordance with *UMBC Space Management Policy*.

<https://www.umbc.edu/policies/pdfs/UMBC-Space-Policy-VI-4.10.02.pdf>

### **Periodic Review and Reporting Requirements**

Each Unit Head and/or Academic Leader must periodically review current research space use of their faculty and students to serve as a guide in making decisions regarding allocation of space. For some Unit Heads and Academic Leaders, the periodic review may consider a rolling average of indicators as productivity measures. The periodic review should include evaluation of research space use to determine if individual faculty members have a shortage or excess of research space, and/or if specific rooms need reconfiguration or renovation. These reviews of research space use can be done as part of an annual review process for each faculty member; but at a minimum must be completed as part of the Academic Program Review process to gain an overall assessment of the research space condition and needs of the unit.

To facilitate the periodic reviews, Facilities Management will maintain an overall inventory of space allocated by the university in support of research and creative activities. Unit Heads and Academic Leaders are required to cooperate with Facilities Management staff to review and update the research space inventory on an annual basis. Unit Heads are to report changes in research space allocation to their Academic Leader who will share the information with Facilities Management. Upon request, Facilities Management will provide a comprehensive report of research space use to Unit Heads, Academic Leaders and the Provost.