Research space is a foundational element upon which faculty develop scholarly and productive research and training programs. It is the context for fostering high quality interactions among faculty, students, and staff, which in turn creates an environment that accelerates learning and sustains excellence.

Given the mission critical importance of research space, its allocation is a complex decision that must simultaneously balance multiple factors, including: 1) sufficient space for researchers to do their work with rigor (including housing equipment); 2) flexibility to adapt to increases or decreases in faculty research activity and productivity; 3) the need and substantial benefit for colleagues to work in close proximity in ways that sustain community and foster scientific excellence; 4) the opportunity to competitively recruit new faculty and staff who bring fresh talent and perspective to the campus; and 5) a system with fair and equitable guidelines so as to maintain a high morale and respect among the faculty.

The guidelines and metrics outlined within this document are intended to provide a framework for productive discussion among research faculty, department chairs/unit directors, and administrators, with the goal to facilitate the efficient allocation, utilization, and management of research space throughout the Biological Sciences Division (BSD) at the University of Chicago. The BSD Dean authorizes the allocation of research space to departments (or units) and delegates responsibility to department chairs (or unit directors) for the overall management and allocation of space among the faculty. For example, when a faculty member outgrows their allotted space, it is the chair's responsibility to identify additional space from the department's allocation. It is our hope that this document will inform both the faculty's request for additional space, and the chair's assessment of the request. We envision this as an evolving, working document, whose utility will grow with its case history. An active BSD Research Space Committee with rotating faculty members will recommend changes to the document as needed and will serve to provide an independent evaluation in cases where faculty and chairs fail to reach a resolution.

Further, we hope that this document will facilitate productive discussions among faculty and their chairs as we strive to balance the needs of departments and individual laboratories with our ambitious plan to significantly grow our research faculty over the next decade. To achieve this growth will require better utilization of our current space while we plan for the acquisition of additional space.

The growth expected ahead will require much from each member of the BSD. In particular, the increasing demands on research space will necessitate that faculty be forthright about what their needs are, appreciate the positive attributes of having more densely occupied spaces in terms of fostering interaction, and embrace an esprit de corps in helping make space for new recruits and faculty members who are establishing themselves. While new for the BSD, the use of space allocation metrics tied to number of occupants or funding is not to say that these metrics are valued over scholarship – its use is employed as a pragmatic method to help identify and manage where inefficiencies exist in space allocations. Excellence in scholarship, teaching, and service will continue to be the highest valued qualities of our faculty (Shils report). Adjusting to these changes will require a communal spirit; but with careful application of these guidelines and clear

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communication, the BSD aims to come out ahead as a thriving, enlargened, and enlivened community for excellence in research and training.

In managing these challenges, the guidelines below seek to honor the enduring values at the University of Chicago, keeping at the fore the University's dedication to 1) the pursuit of rigorous scholarship to uncover new knowledge and 2) the training and cultivation of students for future research and professional careers. Simultaneously, the guidelines also seek to honor the specific <u>values</u> of the BSD, especially the commitments to excellence, equity, growing together, and holding ourselves and each other accountable for our actions.

# Summary of Guidelines:

- 1. The Dean ultimately controls the space in the BSD.
- 2. At the Dean's discretion, space is allocated to departments and units, where responsibility for the overall management and allocation among the faculty is delegated to the chairs and unit directors.
- 3. Research space utilization will be reviewed annually or as needed, first using <u>occupancy metrics</u> and, when necessary, funding metrics.

The allocation of space may be reviewed when the metrics significantly exceed or fall under the following levels:

- a. Occupancy of Wet Laboratory Space: 1 lab bench @ 6'-0" should equal 1 Full-Time Equivalent (FTE).
- b. Occupancy of Dry Laboratory Space: 1 dry workstation @ 5'-0" should equal 1 FTE

When occupancy metrics fall below recommended targets, then a chair or unit director may also consider funding metrics. Funding metrics are also useful for comparisons with peer institutions.

- c. Wet Lab: Modified Total Direct Costs (MTDC) per square foot target \$315/SF. \*
- d. Dry Lab: Modified Total Direct Costs (MTDC) per square foot target \$600/SF (We are still assessing appropriate MTDCs per square foot for dry lab space and comparing to our peers. We will continue to evaluate this target over the coming year and thus the target is subject to change.)

The divisional metrics for space allocation will vary somewhat depending on the age, design, and condition of the space. Funding not intended to support research activity within the defined space (e.g., clinical trials) should not be considered in assessing dollars/SF. In addition, Departments and units may implement more stringent guidelines for space usage if approved in advance by the Space Committee.

4. After occupancy metrics and, as necessary, MTDCs are considered, if a faculty member is not meeting either criteria, then the department chair or unit director may take additional criteria into consideration, including (but not limited to): research productivity, type of research, additional sources of funding that are indicative of research activity (start-up funding, gift funding, funding

associated with the space from group members on fellowships/training grants/graduate financial aid), condition of space, etc.

- 5. Assistant Professors whose space is consistent with the guidelines specified in this document will not be subject to space review prior to promotion or tenure but will be eligible for additional space as warranted (e.g., a significant increase in FTEs). Newly recruited Associate and Full Professors will not be subject to space reduction within the first 3 years of their appointments, but will be eligible for additional space as warranted. Upon completion of their 3<sup>rd</sup> year, they will be subject to space review and space will be adjusted if appropriate.
- 6. To protect faculty from year-to-year fluctuations in grant funding, research space metrics will be assessed annually but will use a 3-year rolling average.
- 7. Private offices in our buildings are limited and are therefore assigned by department chairs or unit directors. With rare exceptions approved by the department chair or unit director, the expectation is that private offices are held by faculty, and that faculty will only have one private office. Emeritus faculty members do not automatically retain private offices, but as a professional courtesy, we will attempt to accommodate emeritus faculty members in private offices or workstations when private offices are no longer available.
- 8. If a faculty member's space is relocated, renovations will be considered and provided as appropriate to optimize the space for their research purposes.
- 9. The BSD Space Utilization Guidelines may be revised periodically based on feedback from the faculty, evolving needs of the Division, and/or best practices at our peer institutions.

Note/s:

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\* Given the differences in funding structure relative to NIH-funded programs, chairs in the Departments of E & E and OBA may choose to use occupancy metrics exclusively. Like faculty in other departments, researchers with particular space needs in these departments may work with their chairs to develop appropriate metrics.

#### Additional Information:

Over the past two decades, the number of research faculty and clinicians has remained relatively constant in the BSD; meanwhile, comparative faculty numbers have increased significantly at peer institutes. One observable consequence is that we have not kept pace with regard to total NIH funding relative to peers. A second observable consequence is that our peers have evolved more efficient space management policies relative to UChicago, based on comparison of MTDCs per square foot. Both external comparisons and internal assessments give us confidence that we can address some of our research space needs by more efficient use of underutilized space, without compromising the success of our independent investigators. The challenge is that we will have to accelerate this process relative to our peers. We have come together as an enterprise to embark upon an ambitious plan to elevate all aspects of our tripartite mission (i.e., Elevate 2035). Just as UCM and our physicians have committed to sharing clinical profits to help fund faculty recruitment and support infrastructure, and just as leaders spanning all mission areas have committed to share the cost of new building construction, BSD leadership and the new Research Space Committee commit to working with faculty and chairs to find solutions that balance the needs of our current research groups with the division-wide need to provide space for recruitment of new faculty.

Faculty members of the BSD Space Committee were selected from basic science and clinical departments and all lead active research and training labs spanning experimental, computational, and field research, including research in areas not funded by the NIH. Faculty deliberations have been informed by several senior staff and faculty administrators who have partnered over the past decade in the mediation of space issues among faculty, departments and the division. Many of the issues addressed in this document were discussed among the department chairs and their recommendations were included when possible. Finally, the deliberations of this group benefited from the experiences of the space advisory group in the Department of Medicine, who have been assessing space occupancy metrics for close to two years in an effort to more efficiently utilize the department's research space.

## **Density metrics:**

Density metrics relate research space to the number of occupants ("occupancy metrics") or the grant dollars acquired by the users of that space ("funding metrics"). To optimize evaluation of space throughout the BSD, we will prioritize the use of occupancy metrics, and when needed, use a combination of occupancy and funding metrics as defined below.

## Occupancy Metrics

Lab or Group Occupancy is a useful parameter to assess the efficient utilization of space. The "occupants" included in this calculation are the FTEs (i.e., Principal Investigator, lab manager, research staff, graduate students, post-doctoral fellows) performing research in space allocated to a Principal Investigator (PI). These individuals should be employees of record in Workday or registered students at the University of Chicago. Undergraduates will be counted according to approximate hours worked and capped at 0.5 FTE.

The occupancy of wet research bench space is defined as the number of FTEs that can be

# **BSD Space Utilization Guidelines**

Wet, Dry Lab Space Use 4/23/2025

accommodated within a defined lab bench area outlined within Exhibit A, also considering the intrinsic design and condition of the space. If the building is not listed within Exhibit A, then an approximation or survey of the space will define the occupancy.

Occupancy data are gleamed from multiple sources, including but not limited to, Workday and Academic 360, and will be verified by the faculty and executive administrators.

## **Funding Metrics**

The Modified Total Directs (MTDC) per square foot metric is commonly used as a funding-based metric, and has added value because it allows comparison among peer institutes. Funding that is not intended to support research activity within the defined space should not be considered in assessing dollars/SF (e.g., most clinical trials).

It is recognized that annual space adjustments (up or down) are unsettling, and departments are asked to monitor funding changes over a 3-year rolling average before implementing changes in space assignment.

The standardized MTDC metrics cited above are primarily based on faculty whose research areas are funded by the NIH, and may not apply to our field researchers and other faculty whose areas of study are not covered by NIH. Accordingly, many faculty in the Departments of E & E and OBA, along with a few others, will not be held to the divisional standard MTDC targets but will be assessed using occupancy metrics, and if needed, other appropriate productivity metrics as recommended by department chairs or unit directors, in consultation with the Space Committee.

Faculty with combined wet and dry space will be managed on a case-by-case basis.

Expenditure data (currently from Oracle) will be reviewed by the BSD Research Administration Office and will serve as the primary source of funding information (MTDCs). Data from Aura (Awards) are the primary source Awards data, when needed.

# **Other Considerations:**

After Occupancy Metrics and, if necessary, MTDCs/SF, are considered and a faculty member is not meeting either criteria, then the department chair or unit director may take additional criteria into consideration including (but not limited to): research productivity, type of research, additional sources of funding that are indicate of research activity (start-up funding, gift funding, funding associated with the space from group members on fellowships/training grants/graduate financial aid), condition of space, etc.

## Highest and Best Use:

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The proposed functional use of space should maximize the value and minimize the renovation cost, yielding the "highest and best use." Renovations of existing space should take into consideration the mechanical investment, electrical capacity, plumbing condition, vertical and horizontal delivery of services, acoustic considerations, geographical location and sustainable systems. In general, usable wet lab space is not converted to dry lab space.

### **Responsible Stewardship of Space:**

In most cases the MTDC and occupancy metrics will converge upon a common assessment of space utilization, but not always. There may be instances where the funding exceeds the actual space required by the investigator, in which case, the metrics resulting in the most optimized use of the space should be utilized. These cases will be reconciled at the discretion of the department chair or unit director, in consultation with the Space Committee.

### Space Assignable to Faculty:

Investigator space includes all PI-assignable space. This is determined by the assignment of space as "PI Responsible" within the Archibus Space Information Management System. The executive administrator within the designated administrative unit is typically the current custodian of the space and will be accountable for managing, accounting, and assigning space both specifically assigned to Principal Investigators and common areas, consistent with the space guidelines. The designated administrative unit will make these updates within the Archibus Space Information Management System as they currently do. Faculty are highly encouraged to work closely with their executive administrator to ensure the accuracy of their PI-assignable space.

### New Recruits:

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The space commitments at the time of initial faculty recruitment should be consistent with these guidelines to maintain parity with existing faculty. The division-wide expectations for effective space utilization will be included in the letter of offer for new recruits and will specify that space allocated at the time of recruitment may be increased or decreased in accordance with need and funding levels. Assistant Professors whose space is consistent with the guidelines specified in this document will not be subjected to space review or reduction prior to tenure, but like all faculty, will be eligible for an increase in space as warranted (e.g., a significant increase in FTEs). After tenure, the faculty will be subject to space review and adjustment as warranted. Associate and Professors within their first 3 years after recruitment will not be assessed for space utilization. After 3 years, it is expected that the faculty member will have hired lab members, transferred their grants or obtained sufficient funding, and they will be subject to review. When recruiting established faculty with funding, space should be allocated based on extrapolation of occupancy and MTDC from current extramural funding and realistic assessment of the potential to attract and maintain incremental funding.

The Dean ultimately controls the space in the BSD. The Dean will delegate the oversight and efficient utilization of research space to the appropriate chairs or unit directors. Chairs or directors will assign research space to individual faculty and document the allocations via the Letter of Offer. This space will be move-in ready and delivered as close to the arrival of the recruitment as feasible.

All joint recruitments with external stakeholders (PME, PSD, etc.) will include a Memorandum of Understanding (MOU) with the Provost Office outlining: 1) who is allocated the extramural indirect funding, 2) and or the amount of operating costs charged for occupancy, 3) whether lease costs should be included.

### Reassignment of Space Due to Underutilization or Changing Needs of the Division

To enhance the research productivity of all faculty members through equitable allocation of space, research areas identified as significantly underutilized will be considered for reassignment. Priority for reassignment will be based on the following criteria: (1) research space not supported by active FTEs or indirect cost-bearing grants/extramural awards for over 36 months, (2) research space with a calculated MTDC/NASF significantly below \$315/NASF or the BSD average, and (3) research space with an NASF/FTE ratio considerably higher than the BSD average. Other Considerations (as listed on page 4) may be taken into account by the department chair or unit director before a final decision is reached. The Space Committee will make recommendations in cases where the faculty member disagrees with a space reduction decision from the chair or unit director. With rare exception, the Space Committee will concur with the determination made by the department/unit if the PI does not meet the occupancy metrics or MTDC recommendations. If assessment by the Space Committee fails to result in an agreement, the case will be escalated to the Dean.

In addition, the assigned location of a research space may be changed based on the needs of the Division. If a research space is relocated, the faculty member will be provided six months notice whenever possible.

### Private Office Space:

In the research centric areas, private offices are assigned by department chairs or unit directors. With rare exceptions approved by the department chair or unit director, the expectation is that private offices are held by faculty, and that faculty will only have one private office. In other words, faculty should not have both a clinical office and a separate research office. Emeritus faculty members do not automatically retain private offices, but may request an exception to be reviewed by their department chair. If unassigned office space is available, then this can be assigned by the department chairs and the occupant (i.e., Instructor/high-level staff) will be informed in writing if it needs to be reassigned as needed. Faculty who are fulfilling their expectations as a faculty member and who only hold a private office as their space allocation will not be evaluated by density metrics.

## The Office of Shared Research Facilities (SRF) and Animal Resource Center (ARC):

SRF/ARC space is managed outside the department by the Institutional core program. Space assignments for other cores that remain in the departmental portfolio will be evaluated based upon service revenues, user base and equipment requirements.

#### **Key Definitions**

Private offices – Typically reserved for faculty.

Wet Lab Space – Non-class laboratories and research support rooms used primarily for laboratory experimentation, research, training in research methodology, or structured creative activity that requires special-purpose equipment (such as biological safety cabinets, bench space, sinks, bench-top equipment, fume hoods) and/or special-purpose utilities (e.g. piped services and multiple power outlets). The procedures in these rooms typically involve liquids, often chemicals, and/or research specimens. Space

associated with shared support rooms or shared bench space will be split amongst the faculty using that space.

Dry Lab Space – Rooms used for laboratory application, research, and/or training in research methodology; or professional examination or observation that does not require special-purpose equipment like sinks or fume hoods, nor does it require special piped utility services. The procedures in these rooms would include documentation research, statistical data analyses, behavioral/opinion interviews, or the use of electronic/technology equipment not requiring wet lab services to support that equipment. In loose terms, dry laboratory spaces have similarities to space types often found in office buildings.

Clinical Research Space – Rooms used by clinical research staff to execute investigator initiated clinical trials.

Net assignable square feet (NASF) – NASF is computed by physically measuring from the inside faces of surfaces that form the boundaries of the designated areas. NASF will exclude areas defined as building service, public circulation, mechanical and structural. NASF will include restricted access private circulation aisles used only for circulation within an organizational unit's suit of rooms, auditoria, or other working areas. Quality of research space (location, age, and layout...etc.) will be an additional important measure when considering investigators' ability to meet the research dollar density or FTE targets.

Modified Total Direct Costs (MTDC). Modified Total Direct Costs (MTDC) is defined as total direct costs less: i. Equipment, ii. Internal patient care charges, iii. Central computer charges, iv. Scholarships, fellowships, and other student aid, v. Outgoing subcontracts. Target MTDC/NASF is equal to or greater than \$315/NASF. Philanthropy may be considered in the MTDC metrics if it is funding for a defined research program and is intended for the space in which that research is being performed.

# **BSD Research Space Committee**

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Scott Oakes (Pathology & Vice Dean for Clinical Science Research) Conrad Gilliam (Human Genetics & Vice Dean for Basic Science Research) Iris Romero (OB/GYN & Executive Vice Dean) Laurie Comstock (Microbiology) Yun Fang (Medicine) John Novembre (Human Genetics) Marsha Rosner (Ben May) Neil Shubin (Organismal Biology & Anatomy) Scott DeBlaze (Dean's Office) Connie Lee (Dean's Office)

Building (1/0 Lab Danish Origina)	la la	Dealed	Durke				E	0.0	Tatal
Building (1/2 Lab Bench Config.)	Туре	Desk 1	Desk 2	Bench 1	Bench 2	Bench 3	Equip	Circ.	Total
KCBD - (1) Full bay yields 300 SF, 4 wet lab work	IFTE	Assign	Assign	1	1	0	0	0	2
places with 6 lineal feet of bench per lab staff	Lineal Feet	4	4	6	6	0	0	0	20
member, 4 permanently assigned dry workstations	Square Feet	10.4	10.4	15.6	15.6	0	0	98	150
KNAPP - (1) Full bay yields 290 SF, 4 wet lab work	FTE	Assign	0	1	1	0	0	0	2
places with 6 lineal feet of bench per lab staff	Lineal Feet	4	0	6	6	0	3	0	19
member, 2 small equipment area, 2 permanently	Square Feet	10.4	0	15.6	15.6	0	7.8	95.6	145
assigned dry workstations									
GCIS - (1) Full bay yields 236 SF, 4 wet lab work	FTE	Assign	Assign	1	1	0	0	0	2
places with 6 lineal feet of bench per lab staff	Lineal Feet	4	4	6	6	0	2	0	22
member, 2 small equipment area, 4 permanently	Square Feet	10.4	10.4	15.6	15.6	0	5.2	60.8	118
assigned dry workstations									
CUMMINGS - (1) Full bay yields 164 SF, 2 wet lab	FTE	Assign	0	1	0	0	0	0	1
work places with 6 lineal feet of bench per lab staff	Lineal Feet	4	0	6	0	0	2	0	12
member, 2 small equipment area, 2 permanently	Square Feet	10.4	0	15.6	0	0	5.2	50.8	82
assigned dry workstations									
PECK - (1) Full bay yields 164 SF, 2 wet lab work	FTE	Assign	0	1	0	0	0	0	1
places with 6 lineal feet of bench per lab staff	Lineal Feet	4	0	6	0	0	3	0	13
member, 2 small equipment area, 2 permanently	Square Feet	10.4	0	15.6	0	0	7.8	67.2	101
assigned dry workstations,									
ABBOTT - (1) Full bay yields 164 SF, 2 wet lab work	FTE	Assign	0	1	0	0	0	0	1
places with 6 lineal feet of bench per lab staff	Lineal Feet	4	0	6	0	0	1	0	11
member, 2 small equipment area, 2 permanently	Square Feet	10.4	0	15.6	0	0	2.6	45.4	74
assigned dry workstations			•	•	•	•			

# Exhibit A – Building Lab Bench FTE, SF and Lineal Feet Guidelines:

assigned dry workstations