

**College of Medicine
Space Committee
White Paper on Anticipated Space Needs
June 1, 2018**

General Overview

After a period of declining external funding, College of Medicine programs have seen an increase the past several years. This, coupled with the accelerating pace of growth of the clinical programs and a plan for reinvestment in the basic sciences, has created a situation where the amount of unassigned laboratory and office space is now limited. This necessitates a critical review of currently assigned space, thoughtful development of standards to be consistently applied in making new space assignment decisions, and acknowledgement that some net additional space may be necessary. The current academic health center facilities, including the Reading Campus, total approximately 1.5 million net square feet. The College of Medicine is currently assigned about half of that amount and is located across several buildings.

Historically, the College has benefitted from net increases in space for program growth. This dates back to construction of the Vontz Center, the acquisition of the Reading Campus, the construction of the CARE/Crawley building, as well as the addition of leased space at Stetson. Reading Campus is not fully occupied and is underutilized largely due to its geographic location. There has been a recent loss of some space formerly available to the CoM due to the demolition of Wherry Hall and the redevelopment of the former Health Professions Building into Kowalewski Hall, predominantly now used by the College of Pharmacy. The researchers in the College of Pharmacy have also been moved into the MSB complex on a permanent basis. Additionally, one quadrant of the MSB facility was turned into offices during the MSB Rehabilitation project based on the decisions of prior administrations.

The Space Committee notes: 1) space is limited for future growth as desired by the College and health system, 2) present density makes optimal adjacencies more difficult, 3) current space assignments are likely not optimal, 4) overall facility conditions of the existing labs are generally poor and in need of planned, staged renovation.

Condition Assessment

Laboratory conditions and sizes vary throughout the facilities occupied by the CoM, making equitable assignment of space difficult. Many buildings have older, small individual laboratory layouts with significantly dated accoutrements (casework, plumbing, etc.) and will require renovation. Shared building rooms and built-in equipment such as autoclaves, dishwashers, and cold rooms have not been consistently maintained and no provision in the College has been made for their staged replacement. Classrooms, lecture halls and conference rooms are in need of updates in furniture, AV and IT. Within the MSB mega-complex, wayfinding and security are a challenge given the number of entry points to the building with its connections to the hospital. The faculty, staff and students in the CoM along with UC Health employees and individuals from other affiliate institutions such as Children's, Shriners, and the

Veterans Medical Center all access the facility. There have been recurrent security issues and it seems time for a plan to be developed to both monitor access and to direct visitors to the facilities.

Laboratory/Laboratory Service Spaces and Needs

Generally, what is desired is more contemporary space, with larger, open labs such as are found in CARE. The MSB Rehabilitation project, as the final four phases of a decade long renovation, made an upgrade to the infrastructure and mechanical components of the building. It should be noted that when the plans for this project were finalized more than a decade ago, it was envisioned that the initial Rehab project would be followed by upgrades to the labs themselves; converting existing closed lab spaces with older benches into open labs with new, modular benches, new equipment and a contemporary lab layout with more integrated shared facilities throughout. Funding for this was never identified in the original plans, and subsequently has not been available to address this issue and begin the conversion. As leadership has changed over time, the institutional memory of what was intended by the original planners has been limited to a select few that had involvement at the time and there has not been broad communication within the College. A conversion of labs in the fashion originally envisioned would make a significant positive change to the facility, allow for greater space assignment and improve efficiency, and serve as a recruiting tool for new faculty. Leaders in the past assumed these changes would be done incrementally as individual new faculty were brought in, but it has been difficult for individual departments, divisions, or investigators to use start-up dollars to update the physical plant in this way. Physical space reconfiguration is costly and not a desired use of funds for potential faculty recruits or for retention of existing faculty. Additionally, changes of this scale would ideally be better centrally coordinated to assure consistency across the complex and gain efficiencies wherever possible. Shared laboratory facilities and resources are also in need of upgrade, as the industry recognizes the critical complimentary need of core facilities to support individual labs so that the overall research infrastructure can be maximally utilized (including economies of scale) and aligned with the state of the industry. A configuration to modular spaces would also allow a more facile response to specialized research needs, such as computing and specimen storage. Again, there is little opportunity to accommodate this specialized work given both the lack of appropriately configured space and funding for building upgrades.

Clinical Research Space Needs

As an academic health center, the continued development of clinical, community and population research is paramount. The space needs to support programs serving as a portal for industry; federal and public funding varies considerably from the space needs of basic science research. While there are needs for some additional wet-laboratory spaces and specimen storage as noted above, there is a primary need for dry-laboratory and office space. This space is necessary to accommodate the staff involved in business development, regulatory management, study execution (coordinators), and the attendant need for proprietary document storage and computational needs. Additionally there is the need for device and product storage as well as discrete, segregated space for sponsor monitor use. All this space, ideally, would be within reasonable proximity to both the sites where clinical research subjects are seen and the division, institute or department staff who are responsible for screening and recruitment. A dedicated clinical research facility would be optimal for sponsors, researchers and subjects. At the very least, there should be a formal plan for space more proximal to the UCMC where a

significant portion of this work takes place. Ideally, the clinical care delivery sites, research staff and faculty would be consolidated in the patient care areas. This has been shown to improve enrolment and efficiency. Alternatively, research staff should be either close to faculty offices or close to sites of clinical care delivery-both inpatient and outpatient. Acknowledgement of the specialized needs of the clinical research enterprise needs to be incorporated into any space assignment standards that are developed.

Office/Office Support Space Needs

As clinical departments grow to meet the patient care demands of the health system, a broader dialogue between UC Health, UC Physicians and the University needs to occur to determine who is responsible for providing the faculty and administrative office space associated with such growth. This dialogue needs to include who is responsible for providing space to engender a sense of place for current and any planned institutes or centers. Growth of clinical programs is often accompanied by a growth in clinical trials research, which drives the need for the kinds of space detailed immediately above. Funding for this research, and the staff performing it, often straddle both the University and health system, making it difficult to precisely discern the specific use of certain spaces, particularly in departments with highly integrated clinical and research programs. This is where the broader dialogue among the senior stakeholders becomes important. Some confusion exists with the evergreen (practice plan) leases, and it is often unclear who pays for space and who does not. The Committee understands that a process has been initiated to update the University/health system joint space use agreement. This involves an assessment of each party's current use of the other's space. While a space audit has occurred on the University side, it is the Committee's understanding that the requisite assessment on the health system side has languished. Ultimately, understanding what space the CoM has access too is foundational to planning and the Committee's work in making space assignment recommendations, so the completion of the joint agreement exercise is a necessary and important step that needs to come to a timely conclusion. There are currently very few unassigned offices available within the MSB-complex. The spaces of the highly integrated programs based at Stetson, also seem to be at or near capacity. It seems reasonably clear that not all office space growth can be accommodated, and that the CoM cannot be viewed as the safety net for all department office needs irrespective of the use of the space (i.e. clinical versus academic). It appears that in the final analysis, net new office space is needed. If such space is off-site, accompanying criteria need to be established as to priorities for location and the overall amount of space individual programs receive. Additionally, a broader dialogue must be initiated throughout CoM regarding the assignment of office space moving forward, including how to standardize or define qualifications for private office assignment vs shared or "hotel"-type space across Departments in order to better align with the CoM Space Usage Guideline.

Instruction Space Needs

There may be opportunities for the College of Medicine to increase the size of its medical school class and undergraduate classes. Similarly, certain in-demand graduate-level programs may be targeted for growth. While there are reasonable numbers of small to medium sized classrooms across the academic health center colleges that might accommodate some of the growth, large classroom space is limited. When the programming was being done for the buildings over a decade ago, the leadership did not believe that class size growth would be part of the future. As such, proposals to widen stairwells and hallways as part of the MSB Rehab project were not pursued. Adding new classrooms now would be

problematic. Three classrooms were ultimately added on the E level, where egress concerns were not an issue, when it became apparent that the College would in fact be developing an undergraduate program. Any future additions of such space will be difficult to accommodate. This is problematic for the undergraduate program and may also inhibit the development or expansion of revenue-generating Master's programs.

The Committee understands that there is an initiative to more centrally review the use of teaching spaces "across" the academic health campus, and is supportive of that effort. However, a critical assessment of the true local need for dedicated teaching spaces within the CoM is necessary. Accreditation requirements for student space must always be taken into consideration. This will require some final senior level decisions about targeted program sizes, accompanied by instruction leadership decisions about optimal class sizes, teaching approaches, and an honest assessment of the use of existing spaces with due consideration to more effectively scheduling currently available spaces. In addition, UCCOM is undergoing their LCME Self-Study to prepare for their Survey Visit in October 2019 as part of the reaccreditation process. As part of this Self-Study process, students conduct an independent analysis which will include questions regarding the adequacy of study/lounge/locker space (which includes a secure area for personal items, call room and locker space. Note that the call room is to be located on the hospital side when the students are assigned to a rotation in their 3rd or 4th year). Results of this analysis will be available by November 2018. Additionally, the AAMC Graduate Questionnaire (GQ) data will be available by September 2018, which will further inform whether existing resources are sufficient in these areas or need improvement.

Medical Education confirmed that the medical class size for the 2018-19 academic year will be increased by five students, bringing the total to 180 students. This increase can be accommodated as follows:

1. Adding an additional dissecting table to the Gross Anatomy laboratory.
2. Adding an additional small group table to G870 for *Brain, Mind, and Behavior* lab and computer testing. This is currently under construction.
3. All three lecture halls (7051, 5051, and E351) have the seating capacity to accommodate the increase.
4. The five additional students can be distributed among the current 15 Learning Communities without any need to increase the number of small group discussion rooms (currently 15 of the 16 rooms are in use).
5. The additional five students can be accommodated for clinical skills using the current 16 simulation center examination rooms.

Any further increase in enrollment would be limited by the following instructional space constraints:

1. The G-level labs have room for three additional small group tables, for a total of 192 students.
2. The Gross Anatomy lab would not be able to accommodate any additional increase beyond 180 students.
3. Currently, only 15 of the 16 small group discussion rooms are being used for Learning Communities. The class size could be increased to 192 students with the formation of a 16th Learning Community and make use of all the existing small group discussion rooms.
4. Lecture hall 7051 can accommodate 222 students. Class size would be limited by lecture halls 5051 and E351, both of which have a seating capacity of 184.

5. Additional students could be accommodated by 16 simulation center examination rooms with increased scheduling of small groups (n=4).

Finally, the term “simulation”, in the context of various kinds of training, comes up quite a bit. The Committee understands that there are some on-going discussions occurring related to this, even beyond the College of Medicine, but it is not clear what the status of those discussions is, and who is charged with coordinating and communicating them within CoM.

Showcase/Public Spaces

The College of Medicine has access to many spaces that were intended to be showcase spaces and public gathering spaces. These include the CARE/Crawley atrium, CVC atrium, Vontz atrium and the Kresge Auditorium. While CARE/Crawley and Vontz atriums remain in reasonable condition, the CVC atrium and common areas require updates, as do some of the conference spaces that are centrally scheduled, both in CVC and throughout the College. The Vontz auditorium is underutilized, and in need of some updates. The Kresge Auditorium has an outdated audiovisual system and it is not able to be dual purposed as a classroom with its current elevated stage. It is in a high-profile location and needs to be space that truly is state-of-the-art. It is also the largest space available and has historically been utilized for events geared toward the public, and in its present condition it does not reflect positively on the CoM.

Recommendations (not prioritized)

1. A plan should be developed, and funding identified, to begin a staged conversion of all laboratory spaces to open, modular, contemporary laboratories.
2. A plan should be developed, and funding identified, to begin a staged replacement/upgrade of all shared research support rooms, to include items such as, but not limited to, autoclaves, dishwashers, cold rooms and tissue culture rooms.
3. A plan should be developed, and annual operating funds identified, to provide for routine maintenance of all shared resources, support rooms and their equipment.
4. A plan should be developed, and annual operating funds identified, to provide for routine maintenance of all common areas, classrooms, and conference rooms.
5. A plan should be developed, and funding identified, to begin a staged replacement of all accoutrements in classrooms and shared conference spaces.
6. A plan should be developed, and funding identified, to redesign the current Kresge Auditorium space and assess options to make the Vontz Auditorium more useful to the academic health center.
7. A comprehensive assessment of all CoM education programs should be undertaken to inform the development of a master plan for instruction space, to include accommodation of all contemporary education methodologies and accreditation requirements, and include assessment and recommendation of all ancillary space that will be necessary to accommodate the numbers and types of students planned.

8. Long-term strategy should be developed to increase space to accommodate the growing needs of the clinical research programs, with an eye toward reasonable proximity of clinical research teams to the sites of subject screening and enrolment in trials.
9. A comprehensive study should be undertaken to identify needs and develop an approach to more shared clinical record and specimen storage options.
10. The University should engage with the CoM, and coordinate with UC Health, to plan a staged comprehensive upgrade to MSB Complex security, signage, and wayfinding.
11. The Space Committee as a group should be informed of current initiatives related to Simulation, planned use of French East, and any plans or processes in progress that have space implications.
12. The UC/UC Health space audit and joint operating agreement evaluation process should be expedited, and results shared with the Committee as soon as possible.
13. The Evergreen/Practice Plan lease process should be better codified and disseminated, and a consensus developed as to the relative priority of functions that should be given preference for limited “on-site” space.