

Cultivating Educational Transformation through Strategic Planning & Wellbeing

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Introductions

Paul Lund is highly experienced in the programming, planning, design and management of collegiate facilities, including new stand-alone facilities and various renovations to accommodate academic programs in existing facilities.

He has a passion for designing buildings that not only meet the programmatic goals, but contribute to the campus and community in a meaningful way.



Paul R. Lund
AIA, LEED AP BD+C

Principal

Course / Learning Objectives

1. Prioritize the alignment of new learning spaces with strategic planning and pedagogical changes at your institution.

2. Discuss how to incorporate biophilia and connectedness in your institution's educational environments to enhance wellbeing and cognition.

3. Strategize for creating buy-in around a new model of faculty offices that promote a more collaborative and efficient work environment.

4. Identify features of a flexible suite for researchers.

AGENDA

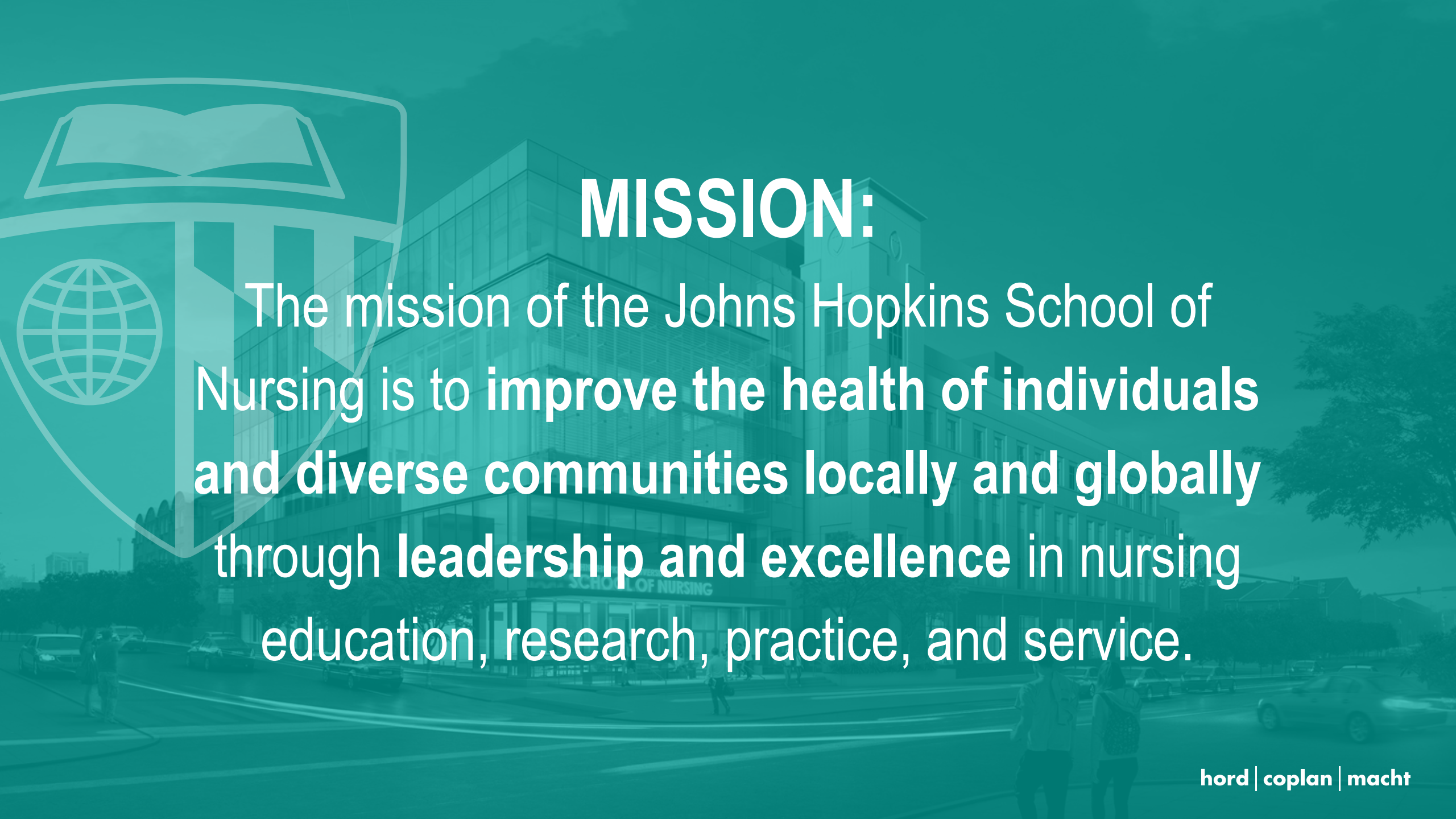
01 JHU School of Nursing – Legacy & Strategic Plan

02 Programming & Planning Process

03 Group Exercise

04 Planning & Design of a Transformational Academic Environment

Q & A



MISSION:

The mission of the Johns Hopkins School of Nursing is to **improve the health of individuals and diverse communities locally and globally** through **leadership and excellence** in nursing education, research, practice, and service.

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JHU Strategic Plan



10 x 2020 GOALS ALIGNMENT

GOAL 2 Strengthen our capacity for faculty-led interdisciplinary collaboration and launch a set of innovative cross-cutting initiatives that will contribute substantially to the world of ideas and action.

- Provides expanded faculty work environments that increase the ability for faculty and staff to collaborate amongst themselves, with other disciplines and students

GOALS 3 Enhance the impact of Johns Hopkins Medicine, the Bloomberg School of Public Health, and the School of Nursing as the world's pre-eminent academic health sciences enterprise by deepening collaboration among these entities and with disciplines in other parts of the university and across the globe.

- Provides additional study and collaboration spaces—that were previously lost to simulation space—for students that are on par with the School of Medicine and School of Public Health
- Creates new event space for prospective students and parents, other health science entities, community outreach, and potential revenue generation

GOAL 5 Build on our legacy as America's first research university by ensuring that at least two-thirds of our PhD programs stand among the top 20 in their fields.

- Provides a new collaborative work/study environment for the PHD Program
- Provides additional classrooms and overall classroom environments that are right-sized and flexible to accommodate all learning and teaching styles

GOAL 6 Attract the very best faculty and staff in the world through a welcoming and inclusive environment that values performance and celebrates professional achievement.

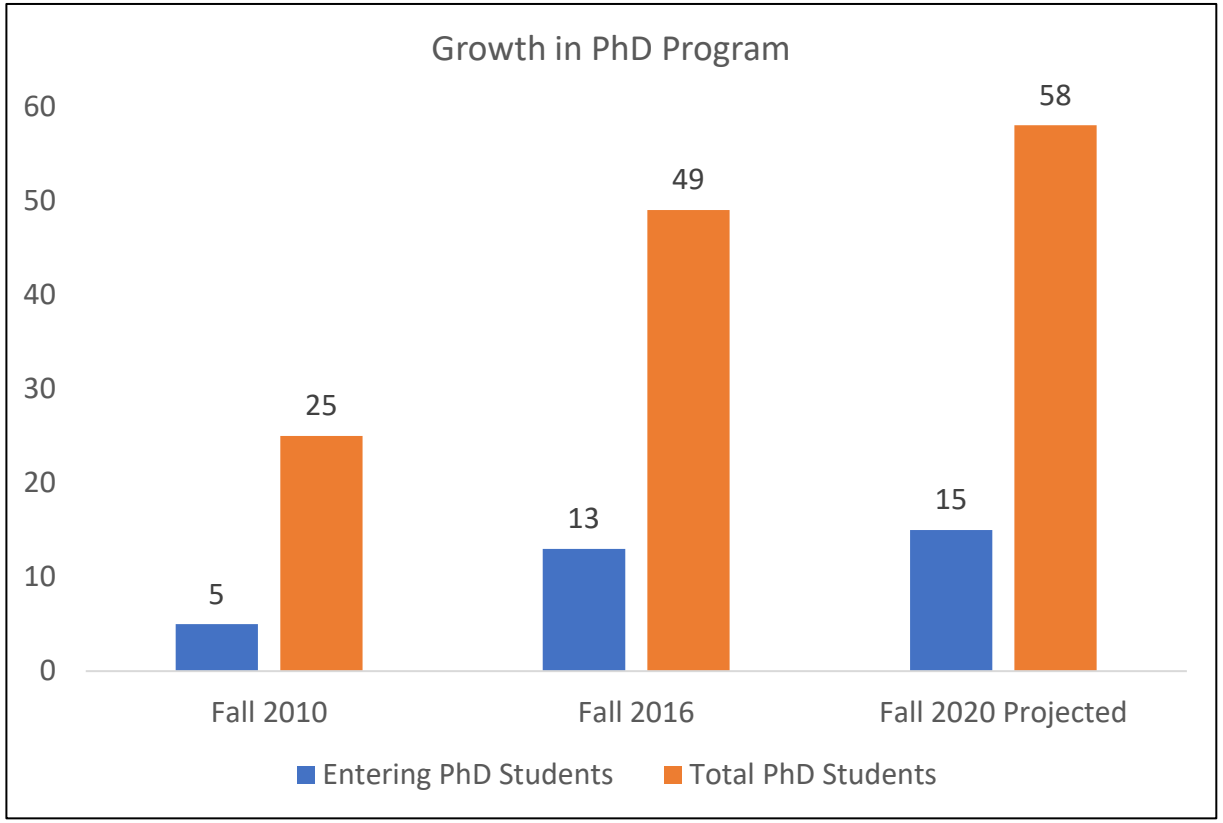
- Provides new faculty and staff work environments to assist in attracting top-tier candidates

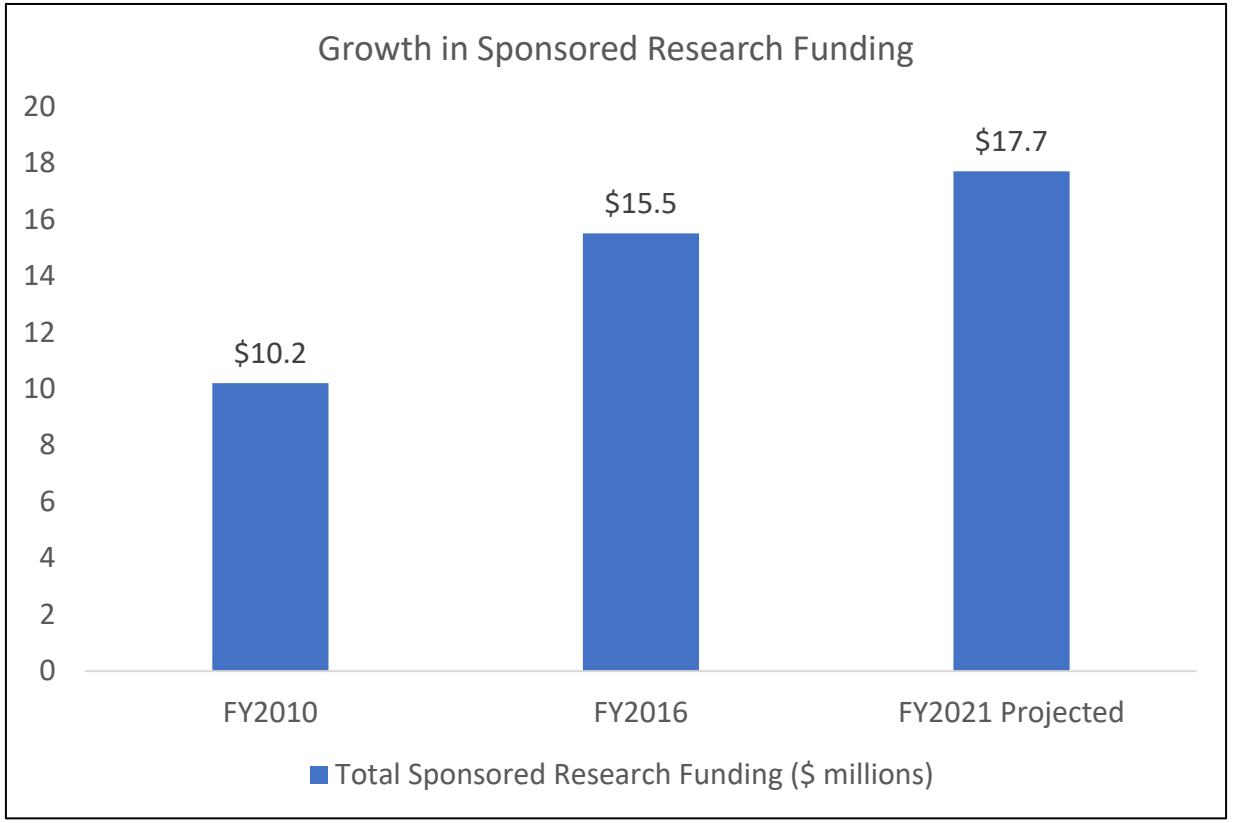
GOAL 7 Enhance and enrich our ties to Baltimore, the nation, and the world, so that Johns Hopkins becomes the exemplar of a globally engaged urban university.

- Provides a new open and welcoming collaborative environment at the front door
- Provides telepresence facilities to connect JHU Nursing to Global Partners

GOAL 9 Reinforce our position as the leading university recipient of competitively funded federal research support, while increasing the amount of annual research investment from other sources with appropriate cost recovery.

- Provides appropriate research space to accommodate the existing research teams, future Centers, and students in a flexible environment


Growth in PhD Program
60
50
40
30
20
10
0
5
25
13
49
15
58
Fall 2010
Fall 2016
Fall 2020 Projected
Entering PhD Students
Total PhD Students


Growth in Sponsored Research Funding
20
18
16
14
12
10
8
6
4
2
0
$10.2
$15.5
$17.7
FY2010
FY2016
FY2021 Projected
Total Sponsored Research Funding ($ millions)



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Framework for Discovery



DISCOVERY OF PURPOSE – Data Collection Campus



DISCOVERY OF PURPOSE – Guiding Principles

Four Main Goals:

1) Reinforce the Essence of JHU SoN – Excellence without Elitism
Emphasizing the Reasons Students, Staff and Faculty Choose Hopkins (Recruitment and Retention)

- Excellence & Tradition in Healthcare
- Leadership in Research
- Global Minded
- Sense of Community and Support
- Diversity and Inclusiveness
- Faculty Treat Students as Individuals

2) Reinforce & Strengthen the "Student Centric" aspects of JHU SoN

- "Home" for the students
- The very best learning/teach styles
- Welcoming, lively and creative place for study & collaboration

3) Increase SoN Connections within the building & the Medical Campus

- Collaborative (students, staff, faculty, researchers, community)
- Partnering (Research, Conferences, Institutes, Student Organizations)
- Showcasing (Transparency & visibility; Information Presentation)
- Hosting (New Building Allowing SoN to be a destination for events)

4) Create a Vision that can be implemented

- Supportable
- Cost Effective
- Phased Approach
- Executable Project

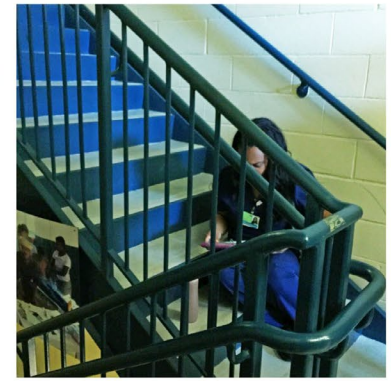
PROJECT GOALS

1. PROVIDE SIGNIFICANT NEW STUDY/COLLABORATION SPACE

Current Issue:
- Students currently have no places to study in groups, even as much of their work is group oriented

Impact:
- Students are utilizing other schools minimizing the serendipitous collaboration with other SoN students and faculty
- Dilutes the academic vibrancy of SoN

Proposed Solution:
- Acoustically Private Rooms with White Boards and Technology
- Requires 3,700 GSF



2. CREATE IDENTIFIABLE HUB FOR SCHOOL

Current Issue:
- There is currently no place for a Cohort or Class to gather for non-classroom events or presentations

Impact:
- Undermines the student experience by not having SoN students feel part of a larger SoN

Proposed Solution:
- Create Central Gathering Space near Front Entry that connects several levels, allows for flexible study & event use, & showcases life and mission of school
- Requires 4,800 GSF



3. EXPAND CONFERENCING FACILITIES

Current Issue:
- SoN has worldwide clout and can attract diverse leaders to help advance the state of healthcare
- Ability to host such events severely constrained now

Impact:
- SoN loses conferences that influence the conversation of healthcare education & practice to other peer institutions
- Limits SoN's ability to realize its full international leadership

Proposed Solution:
- Create a second main conference room near entry & Hub
- Provide proper check-in, break-out and catering facilities
- Requires 4,500 GSF



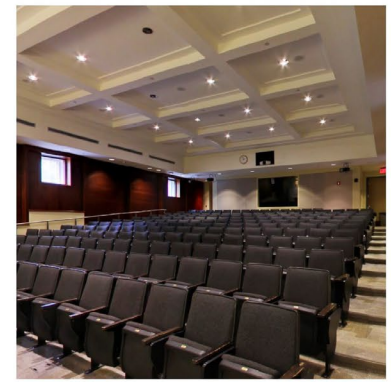
PROJECT GOALS

4. UP-TO-DATE LEARNING SPACES

Current Issue:
- More current (and now very common) teaching styles cannot be accommodated
- Classrooms sized to new Graduate level cohort size (DNP for example) do not exist

Impact:
- Pedagogical development is delayed for both the instructor and student
- Prevents all students from reaching their peak potential

Proposed Solution:
- Renovate some existing classrooms for appropriate flexibility & provide additional classrooms at 30-50 person size
- Requires 2,900 GSF

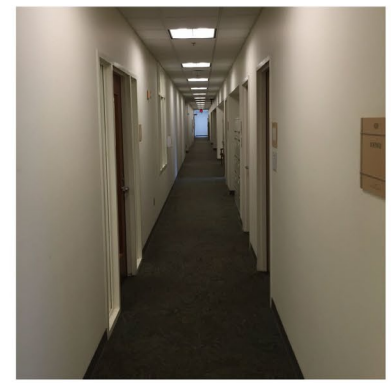


5. IMPROVED FACILITIES FOR RESEARCH

Current Issue:
- SoN is the national leader in research and is a major draw for prospective students and is not evident in the facility
- Research Teams and funded Centers cannot currently be organized together
- Current floor plate layout & dimensions not conducive to proper grouping

Impact:
- Students & visitors have no visible access to research activity
- Student access to research experience is limited

Proposed Solution:
- Create larger research suite utilizing larger floor plate of addition
- Provide a central “think tank” space that puts research on display
- Requires 2,400 GSF



6. REPLACE SoN & STUDENT HOUSES

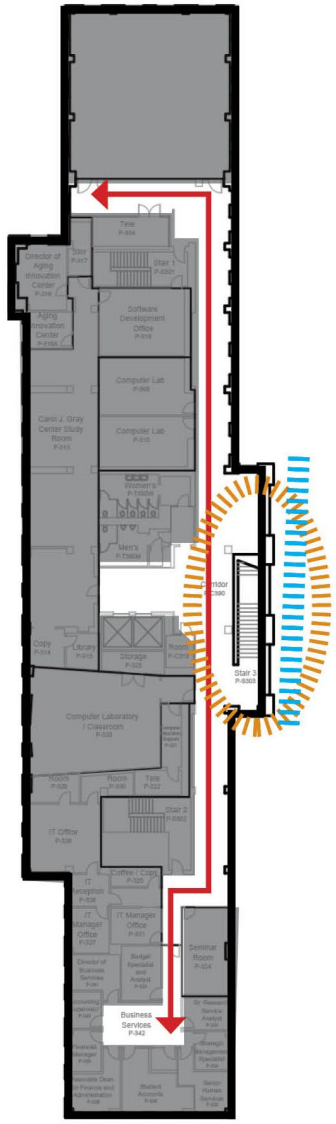
Current Issue:
- Buildings were built for residential use and is inefficient in both space and energy use.
- Amount of deferred maintenance identified over the next 10 years is a significant for the usable space

Impact:
- Departments are remote and disconnected
- Workspaces are non-conducive to team work and collaboration.

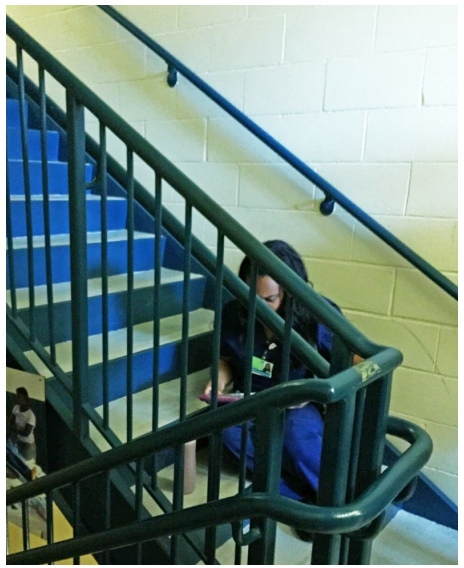
Proposed Solution:
- Relocate the buildings’ SF into the new addition



DISCOVERY OF PURPOSE – Informal Learning/Seating Type Analysis







	EXISTING		TARGET MIX AFTER RENOVATION & ADDITION	
SPACE TYPE	STUDENT AREAS: 6	SF / PPL	STUDENT AREAS: 20	SF / PPL
PUBLIC GROUP / INDIVIDUAL STUDY ZONES	12 RM#: C002 465 SF; 80 RM#: JAYS 2,017 SF; 32 RM#: C290 1,038 SF; 42 RM#: C390 1,163 SF; 8 RM#: C306 270 SF	4,953 SF 174 PPL	12 RM#: C002 465 SF; 40 RM#: Cafe 1,140 SF; 80 RM#: HUB 2,829 SF; 16 RM#: C2__ 1,225 SF; 32 RM#: C3__ 1,271 SF; 12 RM#: C3__ 522 SF; 32 RM#: C290 1,038 SF; 42 RM#: C390 1,163 SF	9,386 SF 266 PPL
COLLABORATIVE GROUP STUDY ROOMS		0 SF 0 PPL	10 RM#: 1__ 274 SF; 10 RM#: 1__ 275 SF; 6 RM#: 1__ 149 SF; 6 RM#: 1__ 152 SF; 6 RM#: 1__ 137 SF; 6 RM#: 1__ 142 SF; 6 RM#: 2__ 139 SF; 6 RM#: 2__ 138 SF; 6 RM#: 2__ 128 SF; 8 RM#: 2__ 189 SF; 8 RM#: 3__ 177 SF	1,900 SF 78 PPL
QUIET INDIVIDUAL STUDY ZONES	50 RM#: 313 1,766 SF	1,766 SF 50 PPL	50 RM#: 313 1,766 SF	1,766 SF 50 PPL
		6,719 SF 224 PPL		13,052 SF 394 PPL

EXISTING SPACES

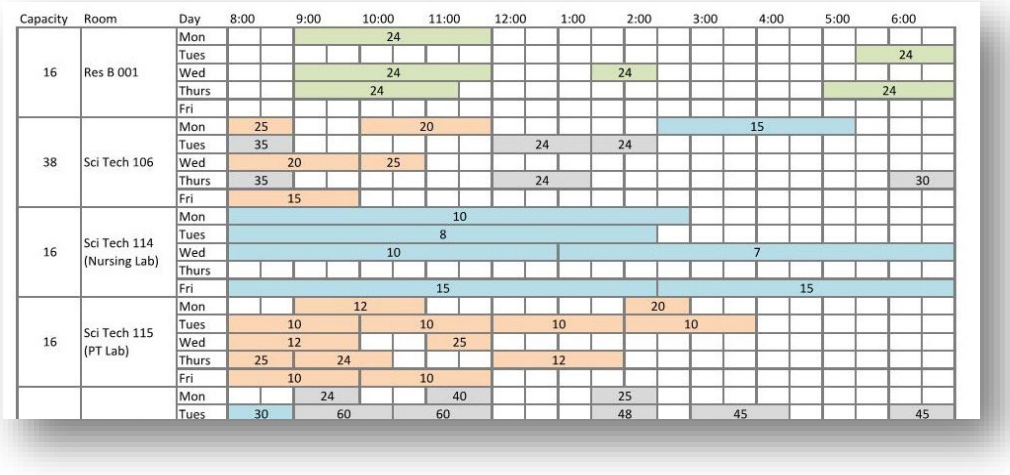
EXISTING SPACES PLANNED TO BE REPLACED BY AREAS OF PINKARD BEING RENOVATED AS PART OF THE PROPOSED PROJECT

SPACES ADDED

NOTE:
1. CHART ABOVE DOES NOT INCLUDE EXISTING SPACES IN THE "STUDENT HOUSES" CURRENTLY USED AS STUDY SPACE BY STUDENTS.

DISCOVERY OF PURPOSE – Data Collection Utilization

Capacity	Room	Day	8:00	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00
16	Res B 001	Mon		24									
		Tues											24
		Wed		24					24				
		Thurs		24								24	
		Fri											
38	Sci Tech 106	Mon	25		20					15			
		Tues	35				24		24				
		Wed	20		25								
		Thurs	35				24						30
		Fri	15										
16	Sci Tech 114 (Nursing Lab)	Mon	10										
		Tues	8										
		Wed	10					7					
		Thurs											
		Fri	15							15			
16	Sci Tech 115 (PT Lab)	Mon		12					20				
		Tues	10		10		10		10				
		Wed	12			25							
		Thurs	25	24			12						
		Fri	10		10								
		Mon		24		40			25				
		Tues	30	60		60			48		45		45



DISCOVERY OF EXPERIENCE – Stakeholder Engagement





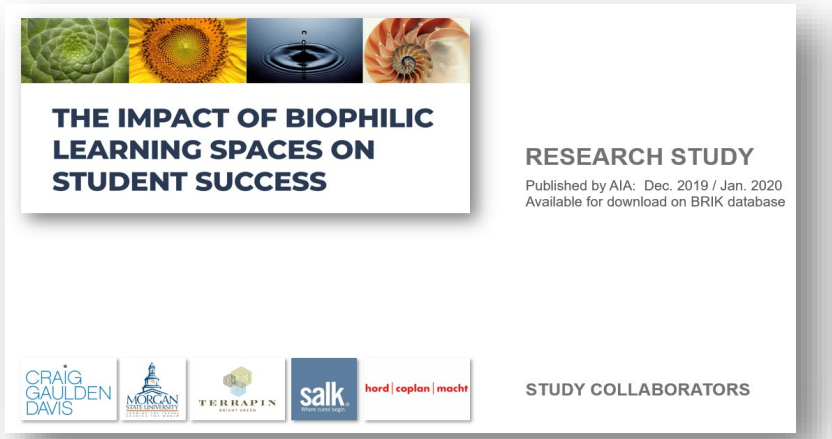



Strategic Plan Johns Hopkins Nursing
2011-
2015




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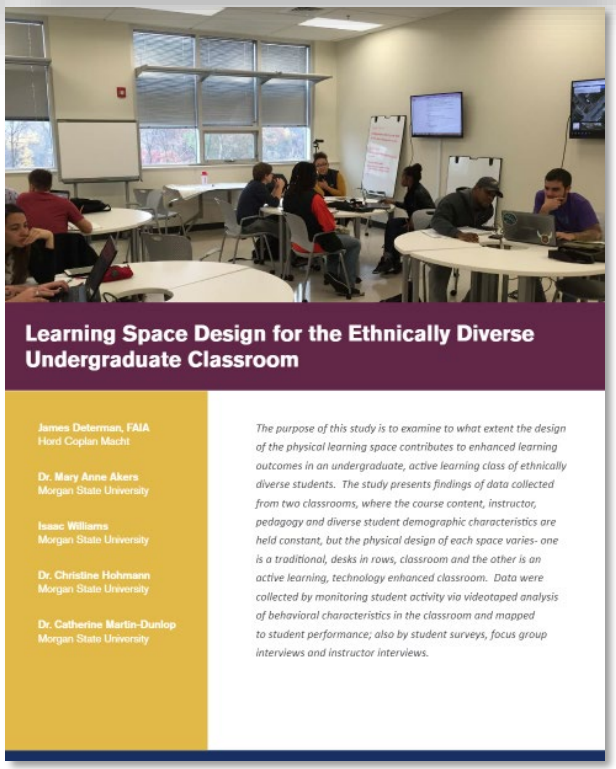
DISCOVERY OF EXPERIENCE – Strategic & Best Practices

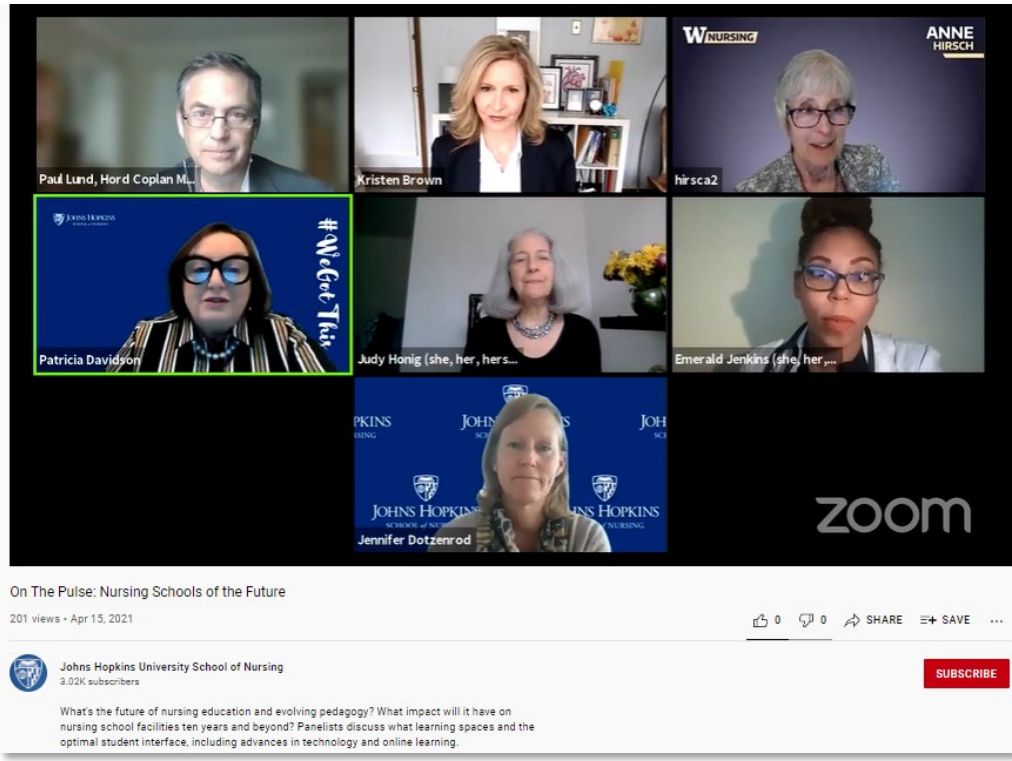




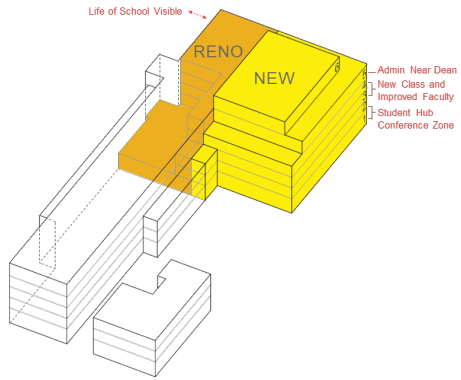
Visioning & Validating
Using Best Practices & Research







DISCOVERY OF EXPERIENCE - Prioritization & Evaluation



SCENARIO 1:

5 Story Addition

New Mechanical Penthouse

Renovation of North End of Pinkard

$43M TO 47M

RESPONSE TO SoN GOALS:
GOALS A +B:

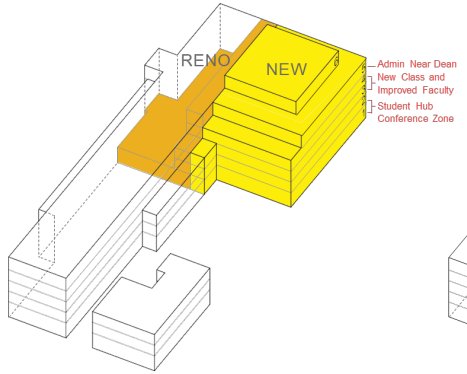
- Creates hub that is student centric
- Showcases school initiatives
- Promotes inclusiveness
- Maximizes opportunity for transformation

GOAL C:

- Creates new image for the school
- Makes life of school visible
- Improved conferencing facilities

GOAL D:

- Maximizes use of SoN House land
- Creates flexibility for future phases



SCENARIO 1A:

5 Story Addition

New Mechanical Penthouse

Limited Renovation of North End of Pinkard

$36M TO 40M

RESPONSE TO SoN GOALS:

GOALS A +B:

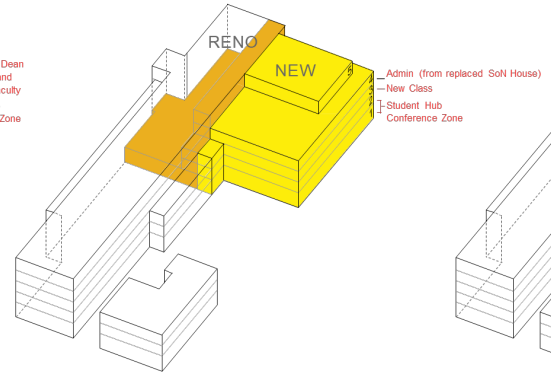
- Creates hub that is student centric
- Showcases school initiatives
- Promotes inclusiveness
- Significant opportunity for transformation

GOAL C:

- Helps transform image of school, although perhaps less so if facade @ North end of Pinkard is not altered as in Scenario 1
- Improved conferencing facilities

GOAL D:

- Maximizes use of SoN House land
- Creates flexibility for future phases



SCENARIO 2:

4 Story Addition

New Mechanical Penthouse

Renovation of North End of Pinkard

$30M TO 34M

RESPONSE TO SoN GOALS:
GOALS A +B:

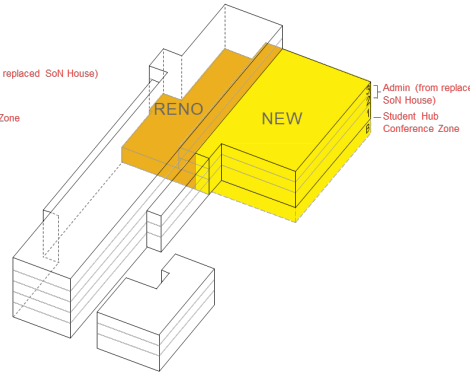
- Similar to 1 & 1A, student centric hub can be created
- However, more limited transformation of faculty & classroom areas

GOAL C:

- Transformation less visible to rest of medical campus

GOAL D:

- Does not maximize use of SoN House land, and thus, is arguably a less cost effective option



SCENARIO 3:

3 Story Addition and Basement

Limited Renovation of North End of Pinkard

$28M TO 31M

RESPONSE TO SoN GOALS:
GOALS A +B:

- Some transformation of ground floor possible

GOAL C:

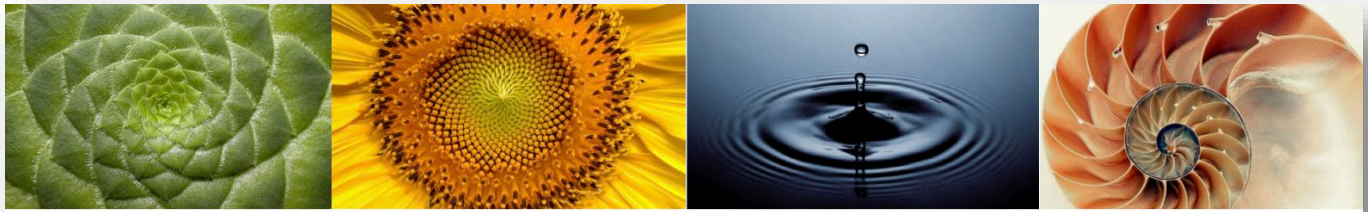
- Transformation less visible to rest of medical campus

GOAL D:

- Underutilization of SoN House land
- Future phase flexibility limited & dependent on building up in future which is very difficult

RESEARCH STUDY

Published by AIA: Dec. 2019 / Jan. 2020
Available for download on BRIK database



THE IMPACT OF BIOPHILIC LEARNING SPACES ON STUDENT SUCCESS

STUDY COLLABORATORS

CRAIG GAULDEN DAVIS

MORGAN STATE UNIVERSITY
GROWING THE FUTURE LEADING THE WORLD

TERRAPIN BRIGHT GREEN

salk
Where cures begin.

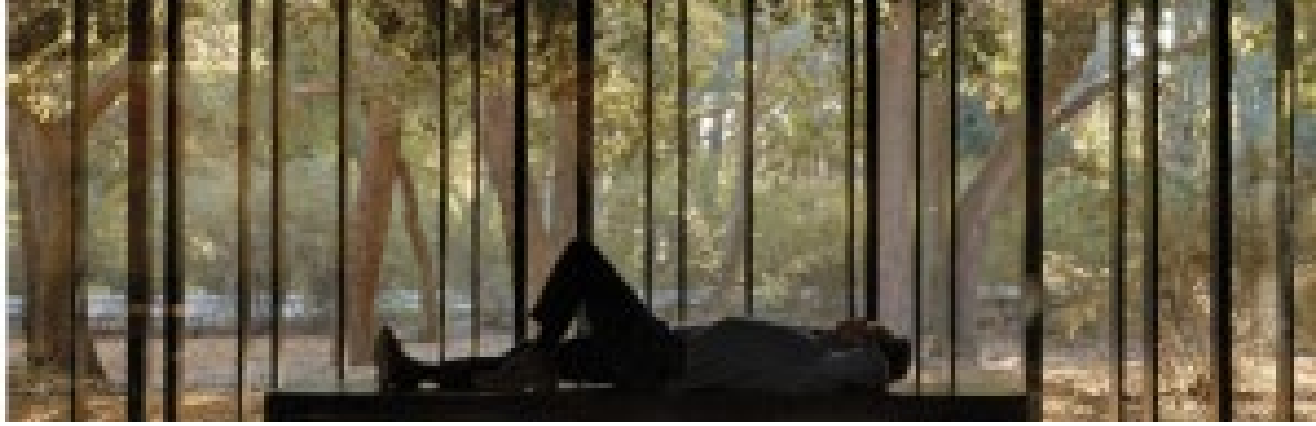
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WHAT IS BIOPHILIA?

WHY DO CERTAIN PLACES MAKE US FEEL GOOD?

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NATURE IN THE SPACE

01 **Visual Connection with Nature**

02 **Non-Visual Connection with Nature**

03 **Non-Rhythmic Sensory Stimuli**

04 **Thermal & Airflow Variability**

05 **Presence of Water**

06 **Dynamic & Diffuse Light**

07 **Connection with Natural Systems**

Browning, B. (2014)





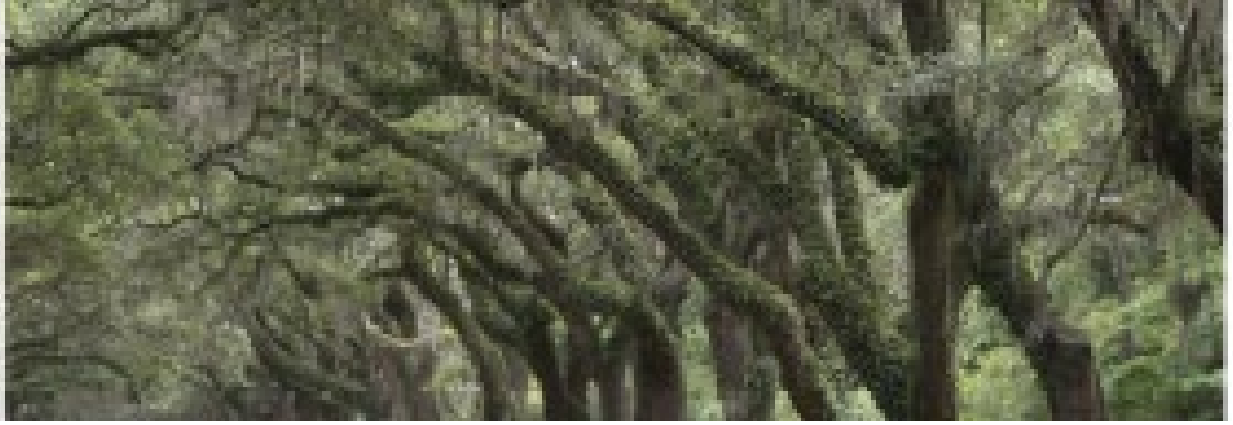
NATURAL ANALOGUES

08 Biomorphic Forms & Patterns

09 Material Connection with Nature

10 Complexity & Order

Browning, B. (2014)





NATURE OF THE SPACE

11 **Prospect**

12 **Refuge**

13 **Mystery**

14 **Risk/Peril**

Browning, B. (2014)

		14 PATTERNS		STRESS REDUCTION	COGNITIVE PERFORMANCE	EMOTION, MOOD & PREFERENCE
NATURE IN THE SPACE	1	VISUAL CONNECTION WITH NATURE	****	Lowered blood pressure and heart rate	Improved mental engagement/attentiveness	Positively impacted attitude and overall happiness
	2	NON-VISUAL CONNECTION WITH NATURE	**	Reduced systolic blood pressure and stress hormones	Positively impacted on cognitive performance	Perceived improvements in mental health and tranquility
	3	NON-RHYTHMIC SENSORY STIMULI	**	Positively impacted on heart rate, systolic blood pressure and sympathetic nervous system activity	Observed and quantified behavioral measures of attention and exploration	
	4	THERMAL & AIRFLOW VARIABILITY	**	Positively impacted comfort, well-being and productivity	Positively impacted concentration	Improved perception of temporal and spatial pleasure (alliesthesia)
	5	PRESENCE OF WATER	**	Reduced stress, increased feelings of tranquility, lower heart rate and blood pressure	Improved concentration and memory restoration Enhanced perception and psychological responsiveness	Observed preferences and positive emotional responses
	6	DYNAMIC & DIFFUSE LIGHT	**	Positively impacted circadian system functioning Increased visual comfort		
	7	CONNECTION WITH NATURAL SYSTEMS				Enhanced positive health responses; Shifted perception of environment
NATURAL ANALOGUES	8	BIOMORPHIC FORMS & PATTERNS	*			Observed view preference
	9	MATERIAL CONNECTION WITH NATURE			Decreased diastolic blood pressure Improved creative performance	Improved comfort
	10	COMPLEXITY & ORDER	**	Positively impacted perceptual and physiological stress responses		Observed view preference
NATURE OF THE SPACE	11	PROSPECT	***	Reduced stress	Reduced boredom, irritation, fatigue	Improved comfort and perceived safety
	12	REFUGE	***		Improved concentration, attention and perception of safety	
	13	MYSTERY	**			Introduced strong pleasure responses
	14	RISK/PERIL	*			Resulted in strong dopamine or pleasure responses

PREFERRED SCENARIO 1
RENOVATION & ADDITION

SCENARIO 1:

5 Story Addition

New Mechanical Penthouse

Renovation of North End of Pinkard

RESPONSE TO SoN GOALS:

GOALS A + B:

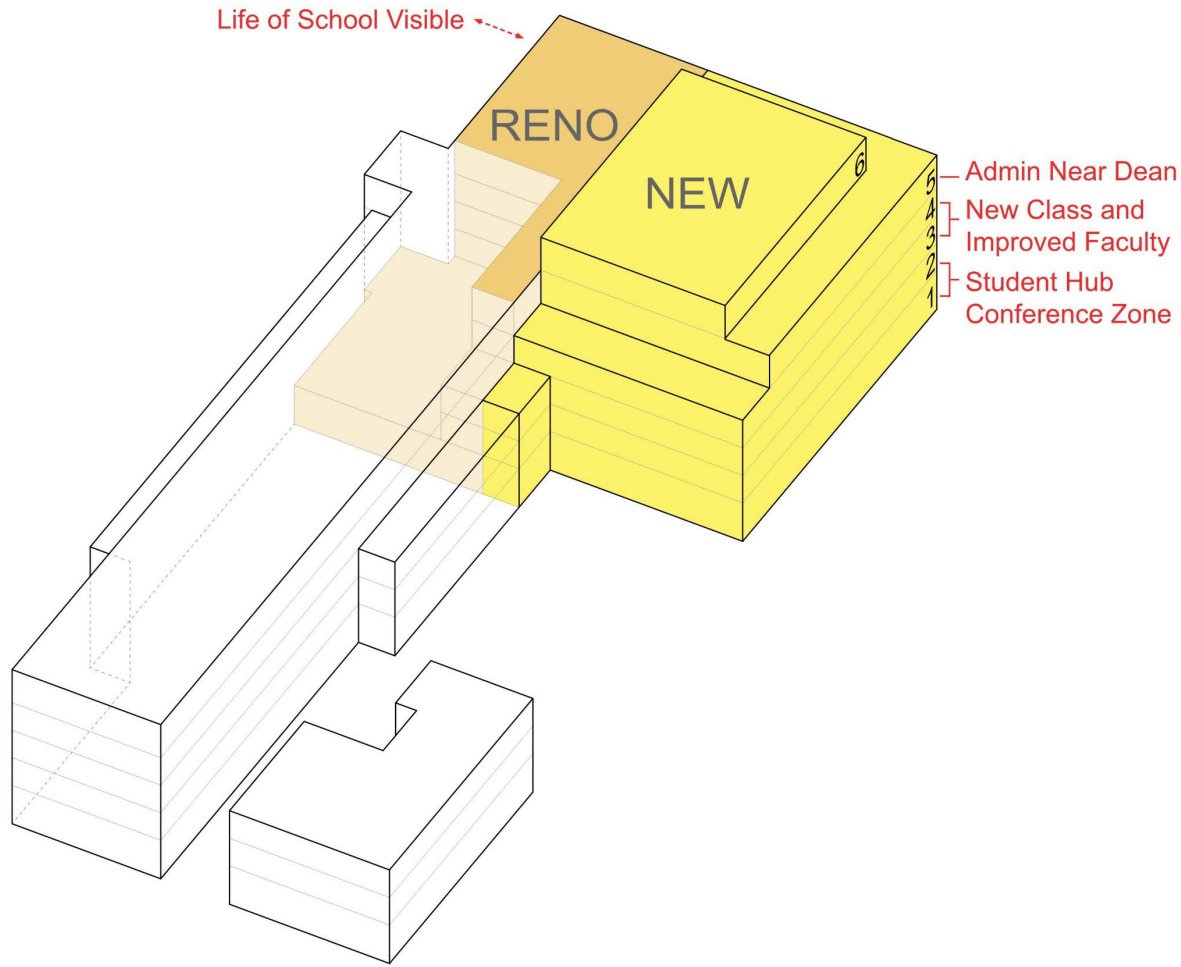
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- Showcases school initiatives
- Promotes inclusiveness
- Maximizes opportunity for transformation

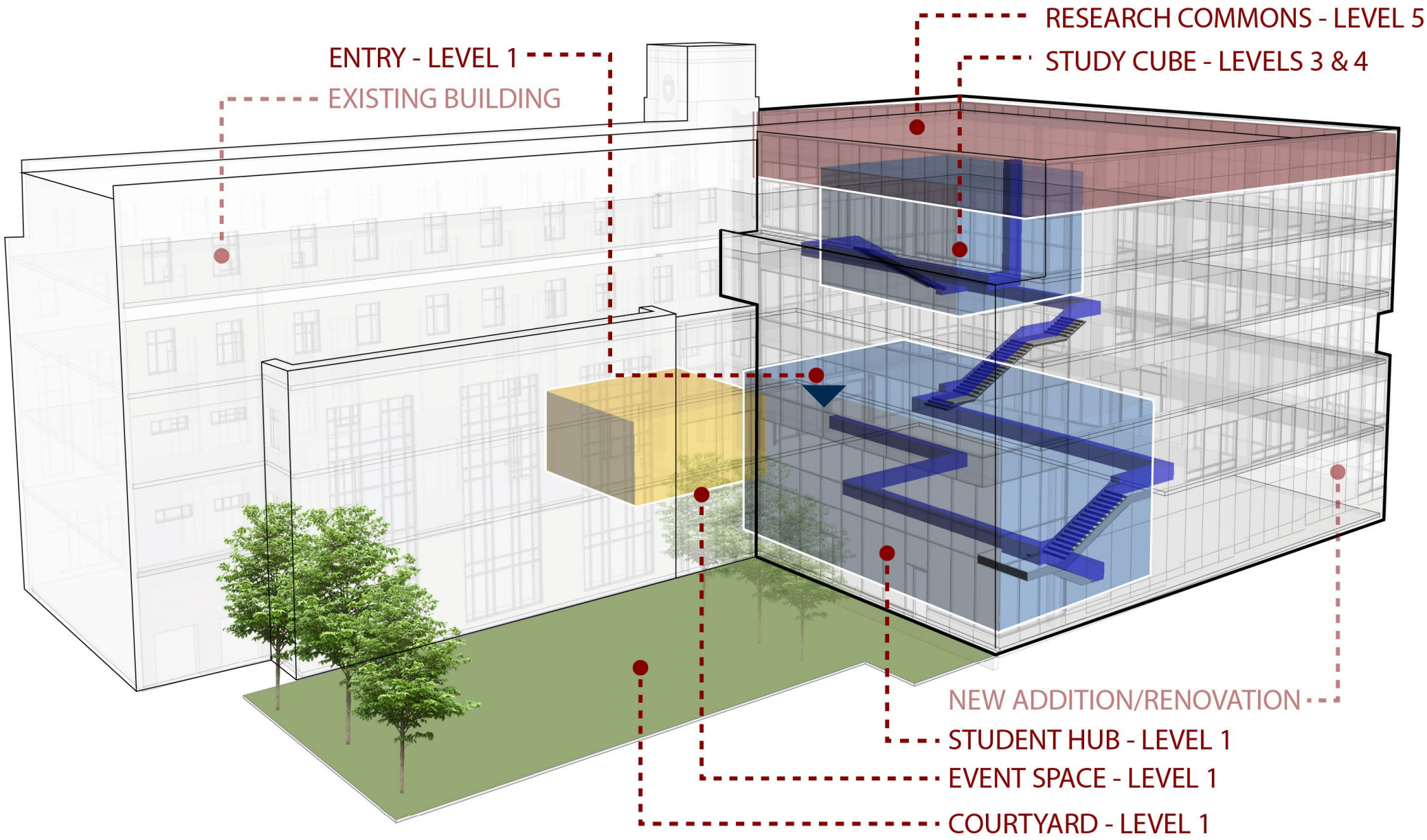
GOAL C:

- Creates new image for the school
- Makes life of school visible
- Improved conferencing facilities

GOAL D:

- Maximizes use of SoN House land
- Creates flexibility for future phases

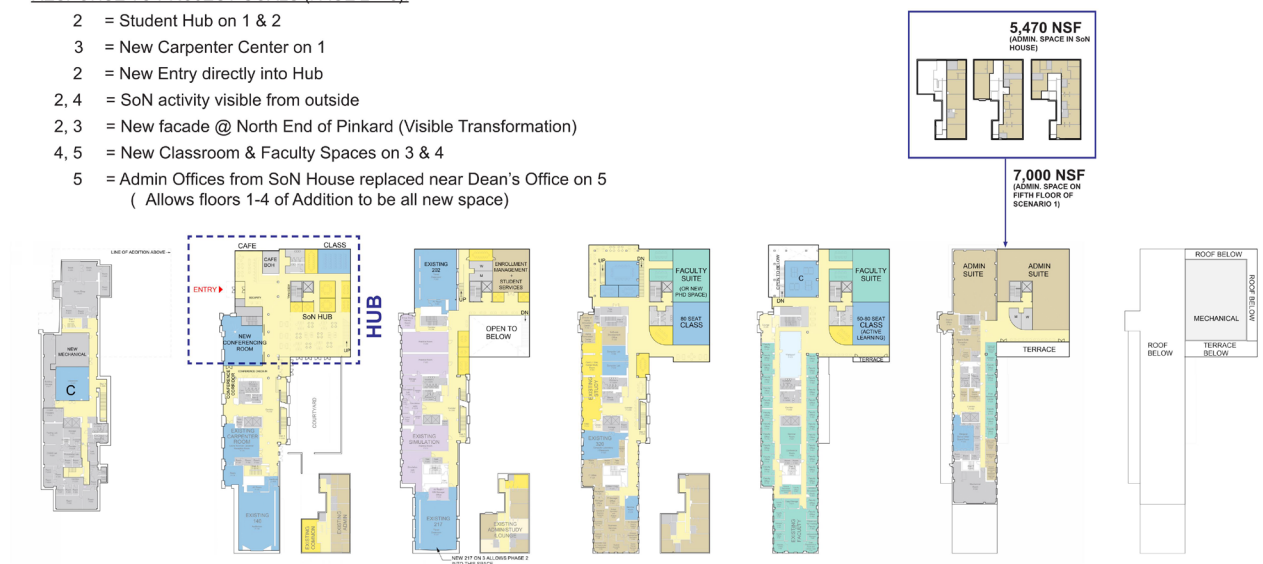



RESEARCH COMMONS - LEVEL 5
STUDY CUBE - LEVELS 3 & 4
ENTRY - LEVEL 1
EXISTING BUILDING
NEW ADDITION/RENOVATION
STUDENT HUB - LEVEL 1
EVENT SPACE - LEVEL 1
COURTYARD - LEVEL 1

SCENARIO 1

RESPONSE TO PROJECT GOALS (PAGE 2 + 3):

- 2 = Student Hub on 1 & 2
- 3 = New Carpenter Center on 1
- 2 = New Entry directly into Hub
- 2, 4 = SoN activity visible from outside
- 2, 3 = New facade @ North End of Pinkard (Visible Transformation)
- 4, 5 = New Classroom & Faculty Spaces on 3 & 4
- 5 = Admin Offices from SoN House replaced near Dean's Office on 5
  (Allows floors 1-4 of Addition to be all new space)



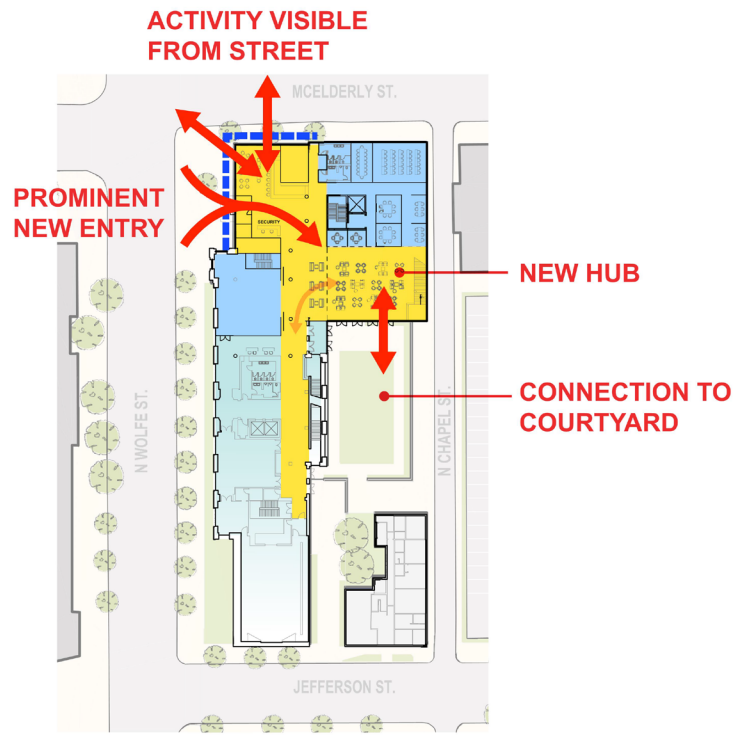
BASEMENT	GROUND FLOOR	SECOND FLOOR	THIRD FLOOR	FOURTH FLOOR	FIFTH FLOOR	SIXTH FLOOR
4,680 GSF Reno 0 GSF New	6,480 GSF Reno 8,250 GSF New	3,650 GSF Reno 5,440 GSF New	3,650 GSF Reno 7,890 GSF New	2,770 GSF Reno 7,700 GSF New	3,580 GSF Reno 6,680 GSF New	0 GSF Reno 5,100 GSF New

LEGEND

- Support Space
- Classroom
- Simulation Lab
- Faculty
- Administration
- Common/Study
- Circulation

SCENARIO 1: RESPONSE TO PROJECT GOALS (PAGES 2+3): 2 + 3

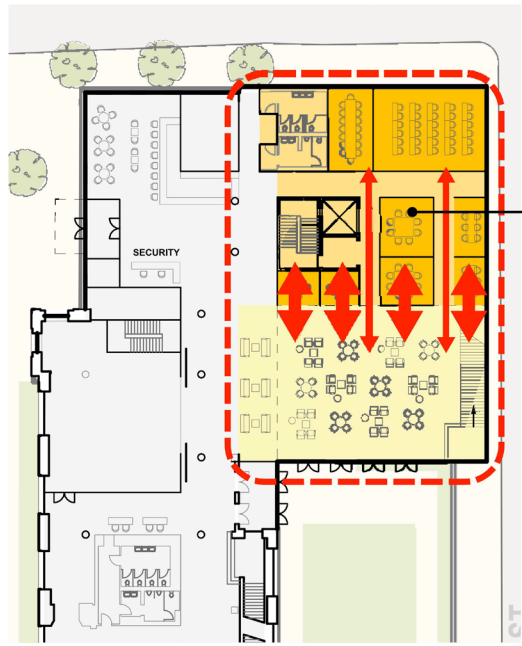
SHOWCASING LIFE OF THE SCHOOL: A NEW HUB FOR SoN



GROUND FLOOR

SCENARIO 1: RESPONSE TO PROJECT GOALS (PAGES 2+3): 1, 3, + 4

STUDENT CENTRIC



GROUND FLOOR





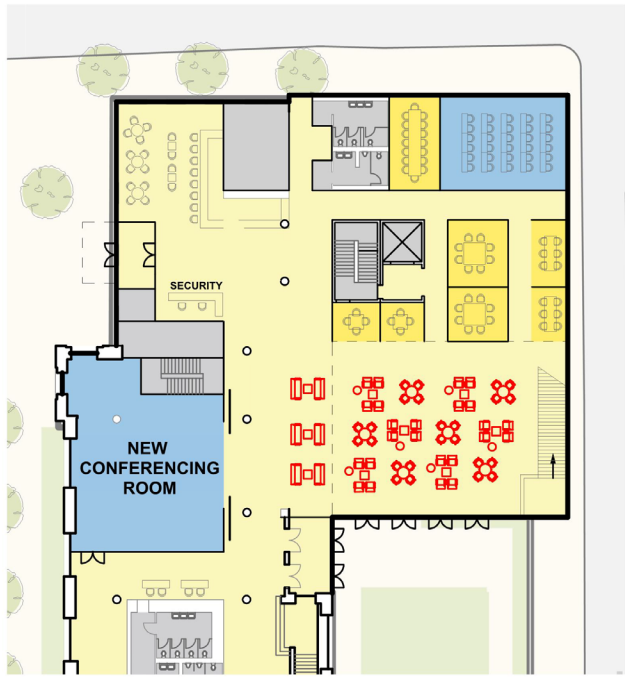
SCENARIO 1

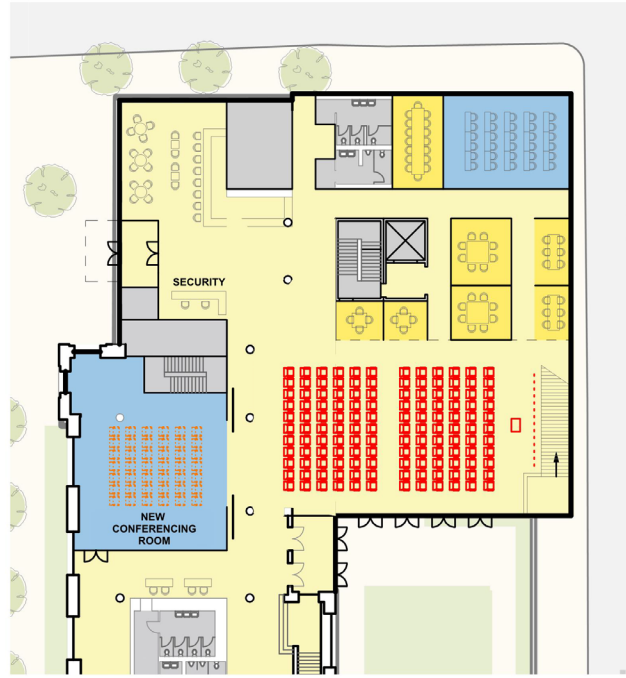
LOOKING WEST FROM STAIR INTO NEW HUB + NEW CONFERENCING ROOM



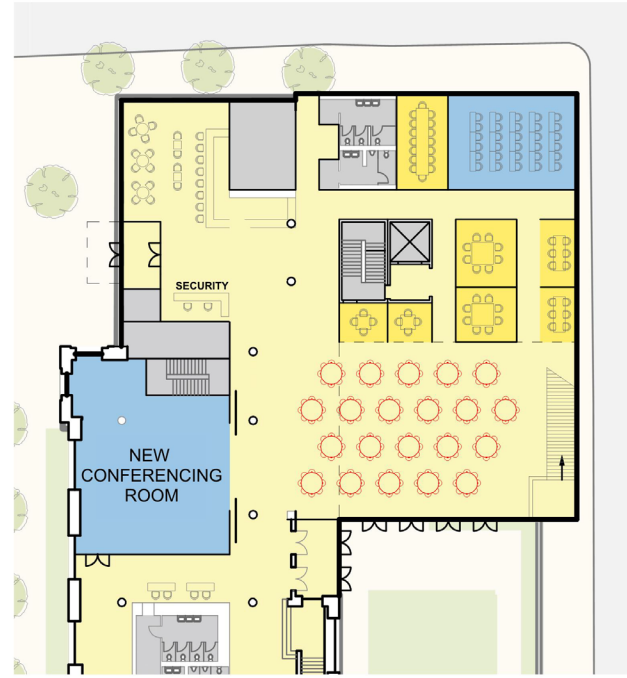
SCENARIO 1: RESPONSE TO PROJECT GOALS (PAGES 2+3): 2 + 3

FLEXIBLE USES OF NEW HUB





POTENTIAL FOR OVERFLOW SEATING IN NEW CARPENTER ROOM



OPTION 1

ACTIVE STUDY CENTER

OPTION 2

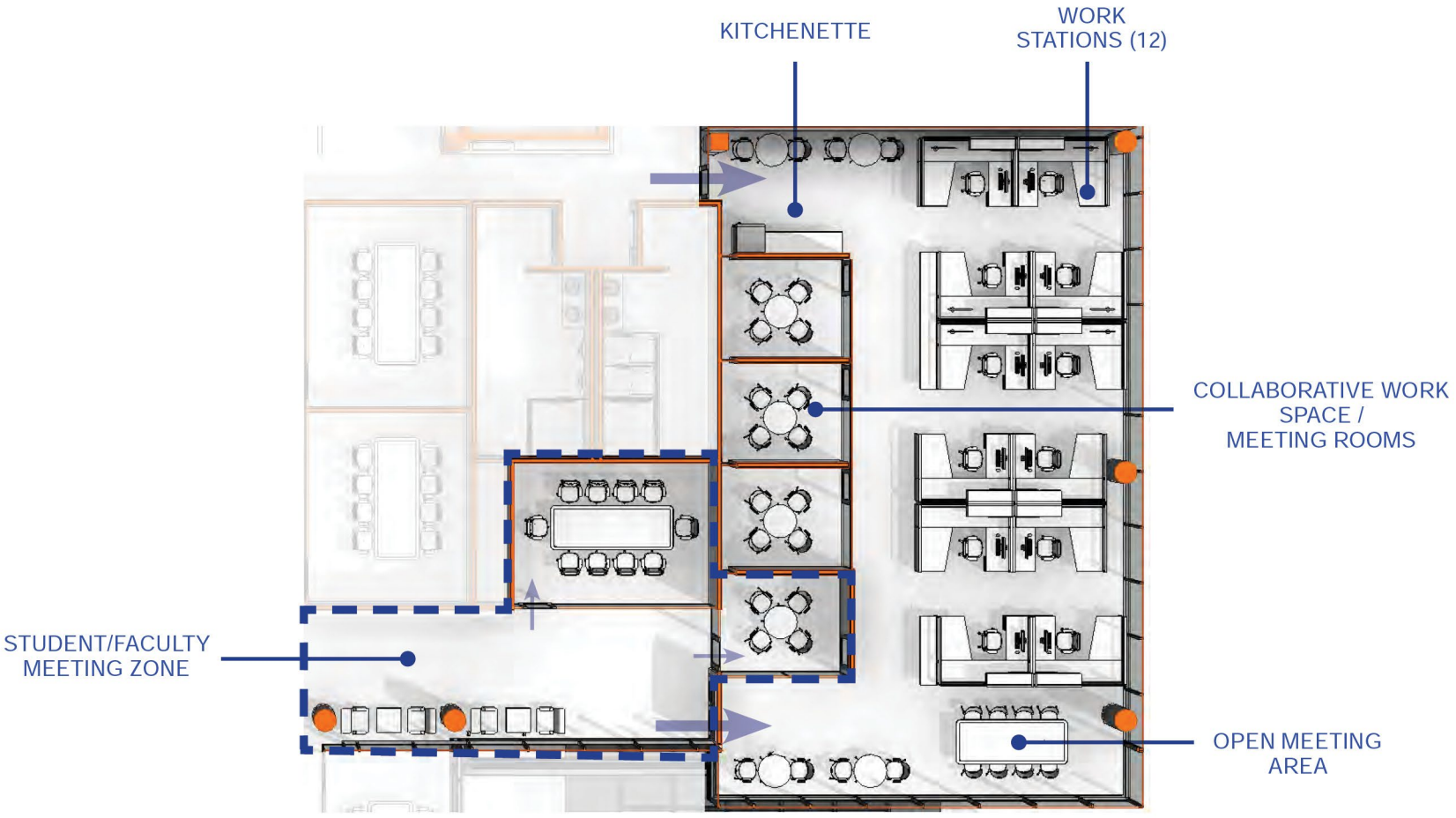
LECTURE / EVENT

OPTION 3

BANQUET

GROUND FLOOR

WORKSPACE ENVIRONMENTS



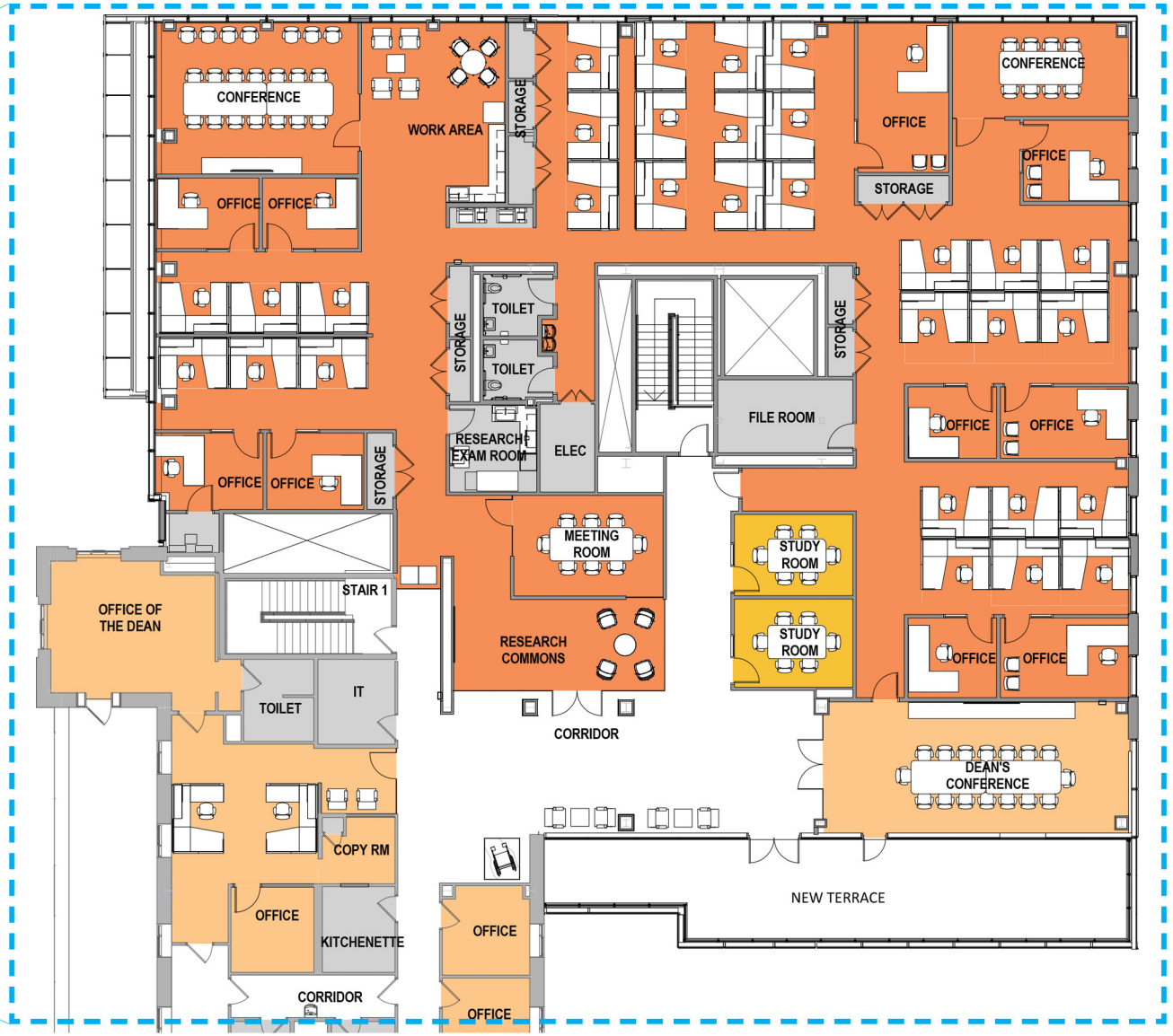




RESEARCH COMMONS

JOHNS HOPKINS UNIVERSITY SCHOOL OF NURSING





RESEARCH COMMONS

CLEAR, BRANDED MAIN ENTRY





WORKSPACE ENVIRONMENTS

TYPICAL WORK DAY, HOME BASE



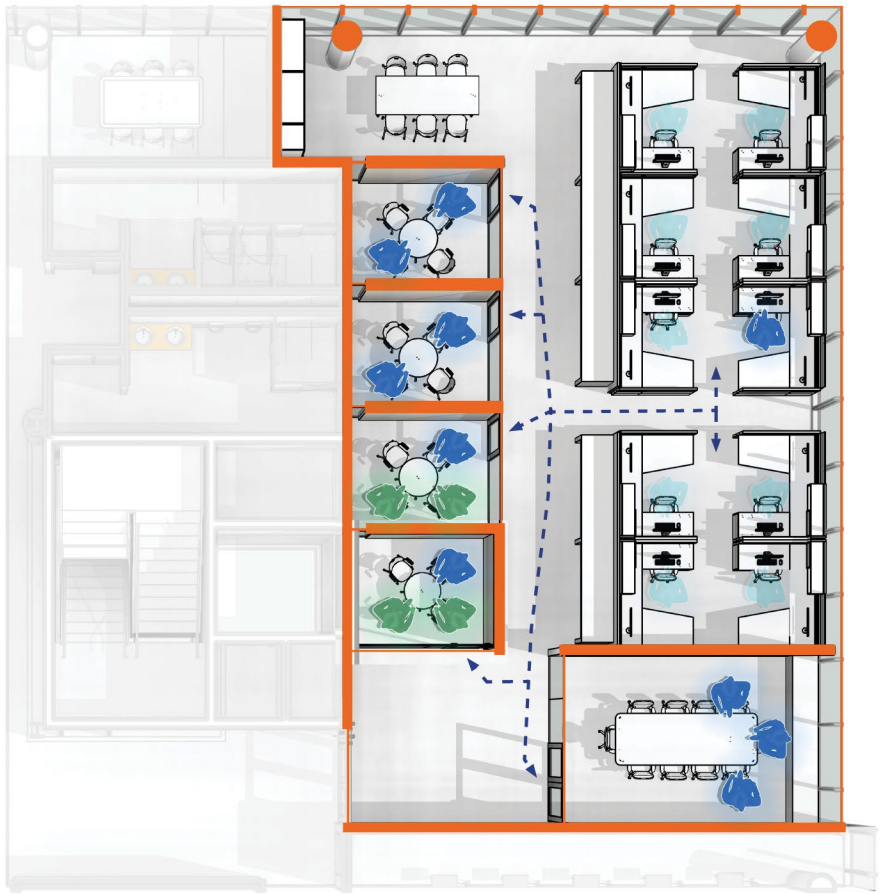
WORKSPACE ENVIRONMENT



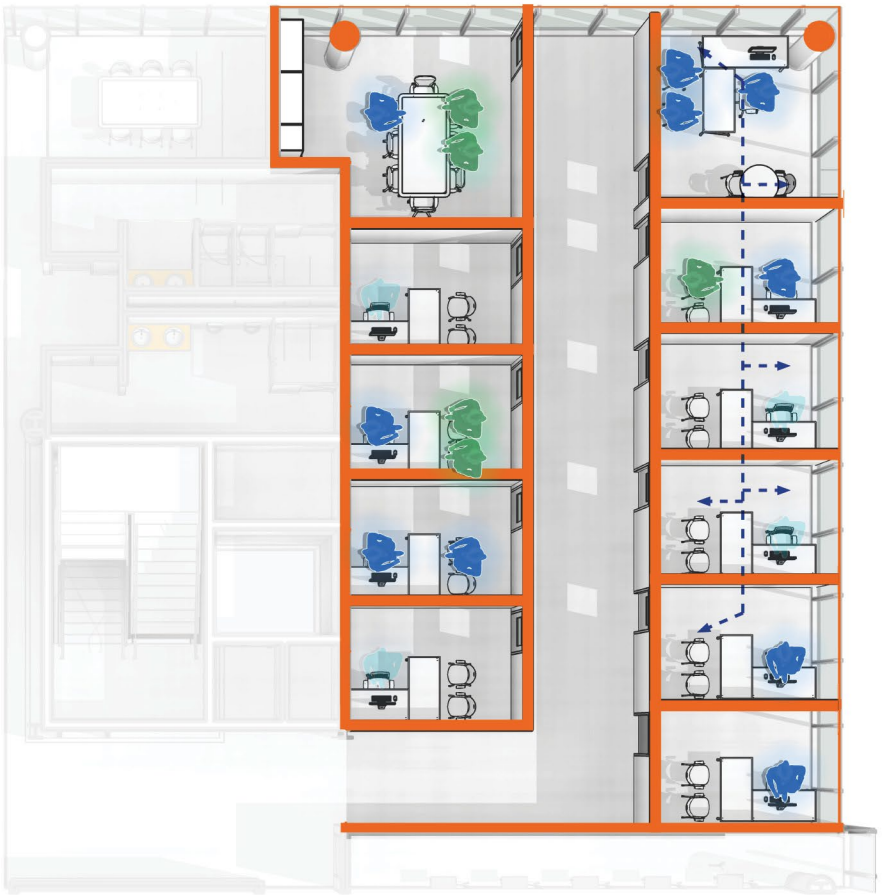
PRIVATE OFFICES

WORKSPACE ENVIRONMENTS

SMALL GROUP MEETING



WORKSPACE ENVIRONMENT



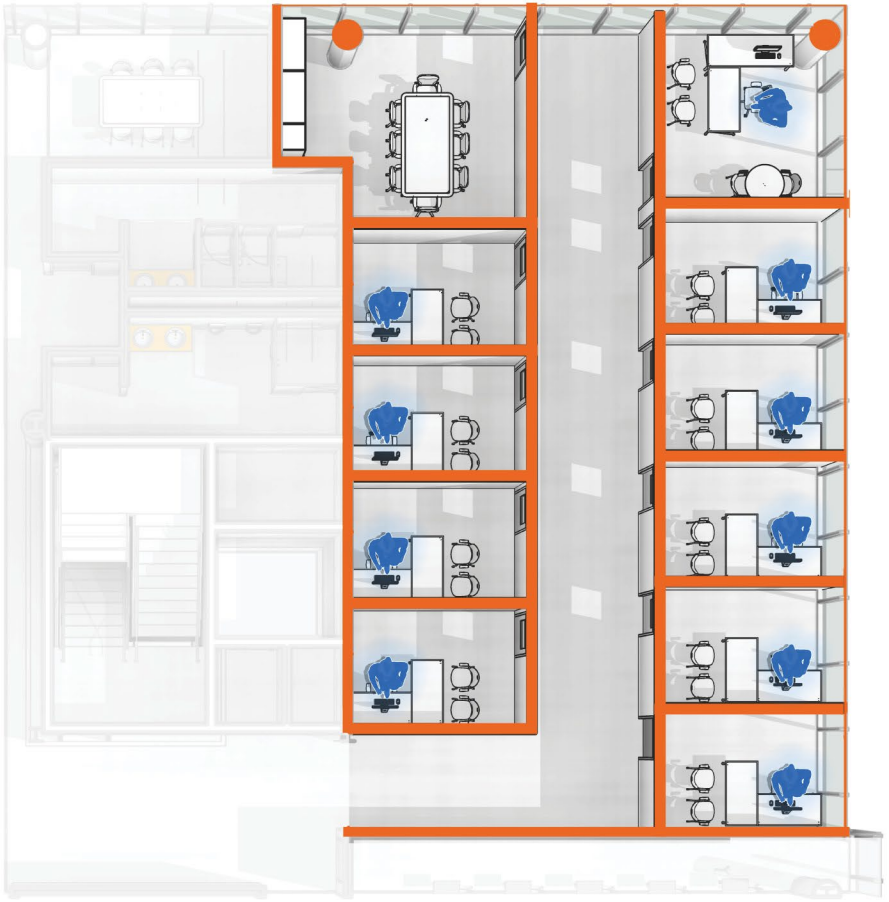
PRIVATE OFFICES

WORKSPACE ENVIRONMENTS

GRANT WRITING, QUIET WORK



WORKSPACE ENVIRONMENT



PRIVATE OFFICES

RESEARCH COMMONS

SCALABLE RESEARCH TEAMS

EACH RESEARCH TEAM HAS:

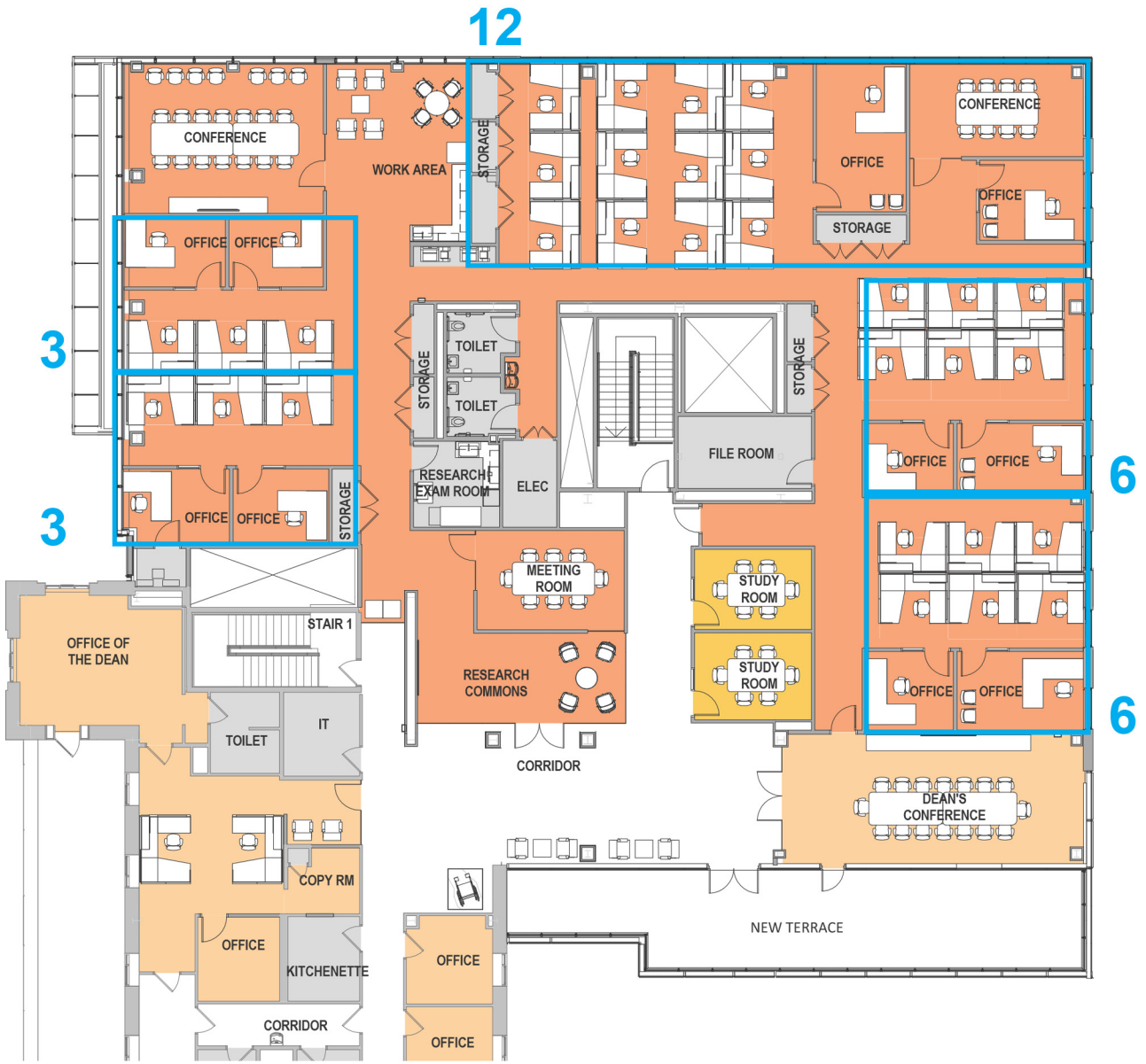
2 PRIVATE OFFICES FOR PRINCIPAL INVESTIGATORS

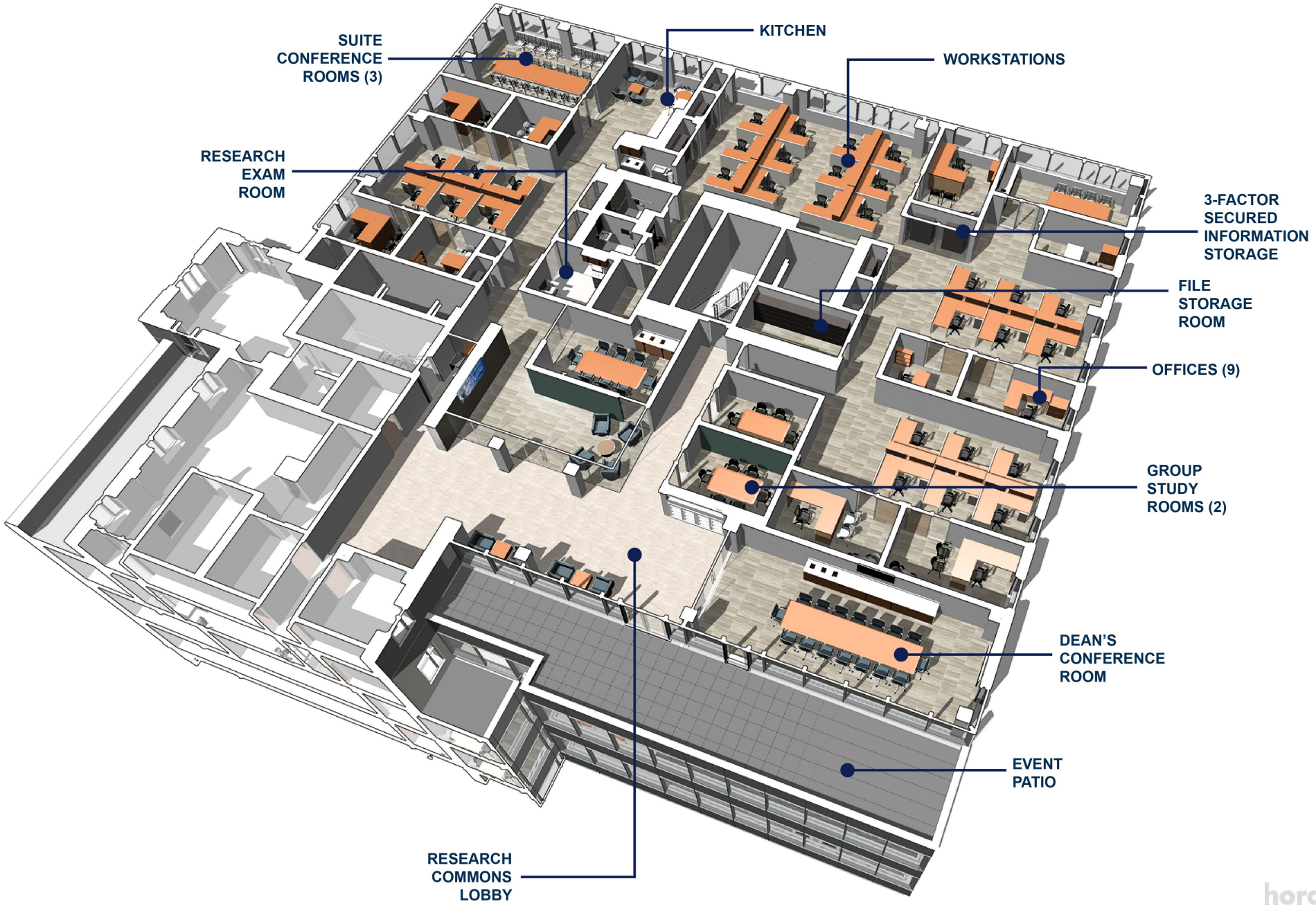
3 - 12 WORK STATIONS

DOUBLE LOCKED STORAGE

ACCESS TO:

- MULTIPLE CONFERENCE ROOMS
- EXAM ROOM
- WORK AREA
- SUITE RESTROOMS





hord | coplan | macht

Activity with audience

DESIGN FOR THE STUDENT EXPERIENCE



CAFE



RECEPTION



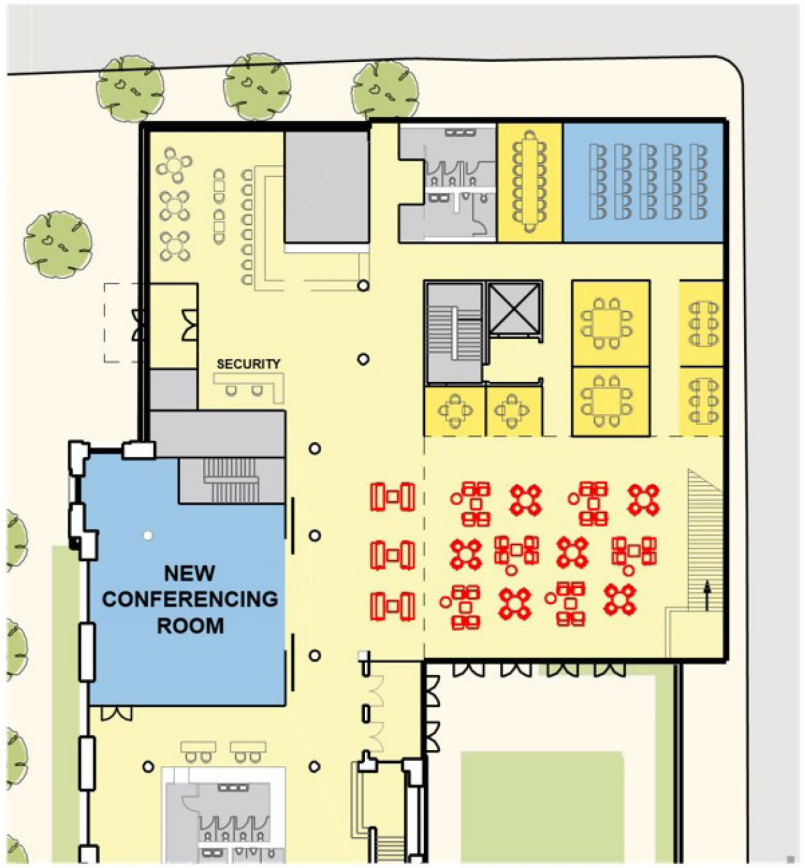
STUDENT HUB



STUDENT HUB

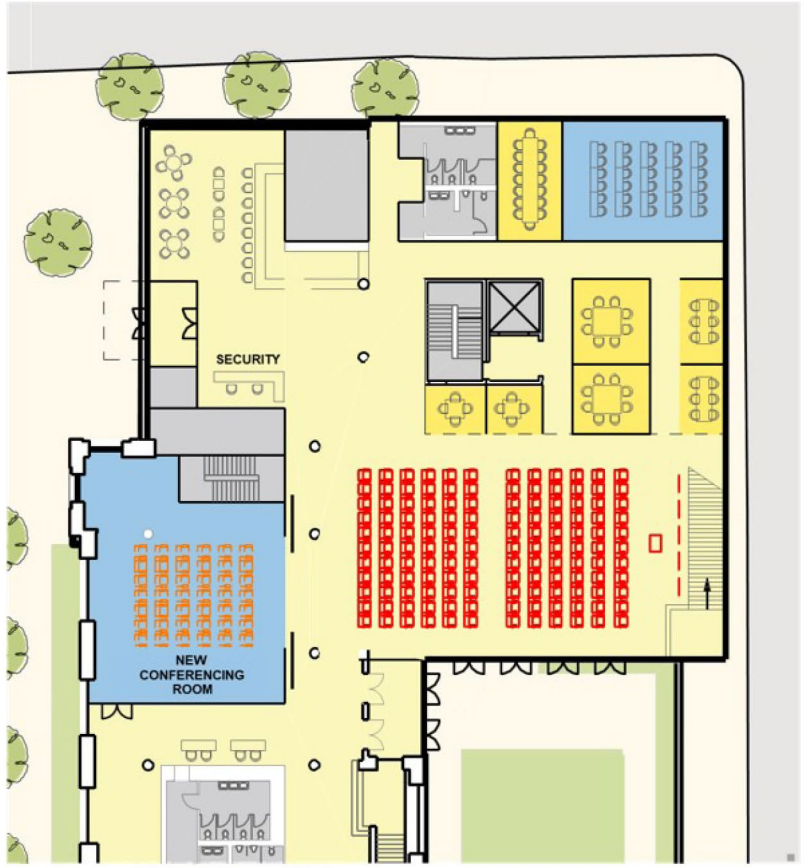


FLEXIBLE USES FOR A STUDENT HUB



OPTION 1

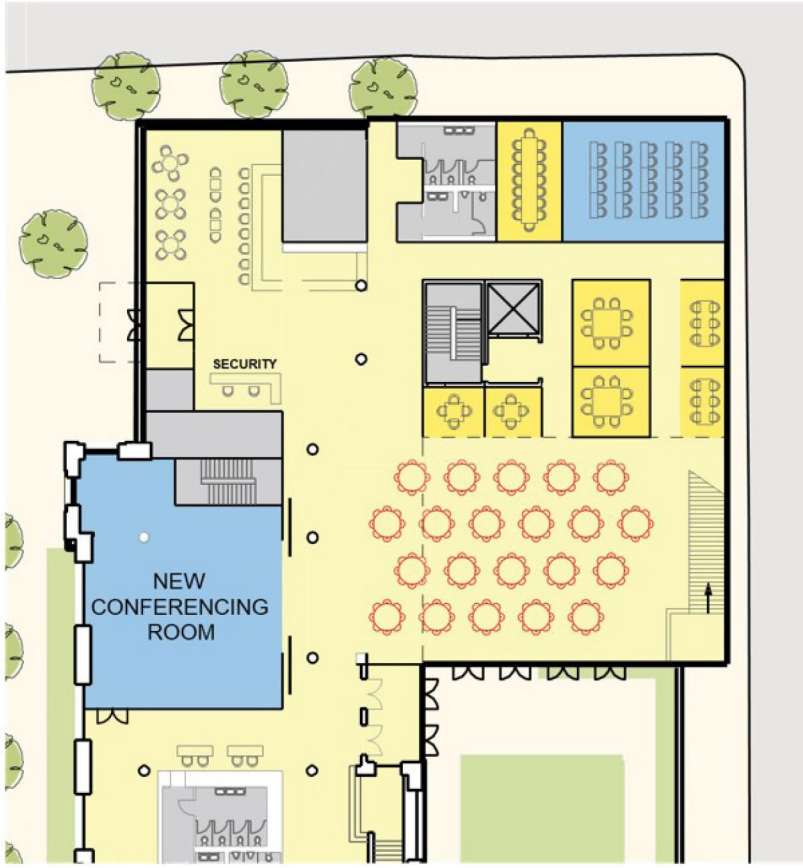
ACTIVE STUDY CENTER



POTENTIAL FOR
OVERFLOW SEATING IN
NEW CARPENTER ROOM

OPTION 2

LECTURE / EVENT



OPTION 3

BANQUET

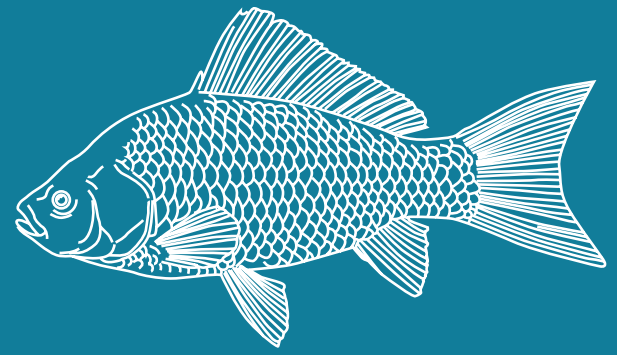
STUDY CUBE











THANK YOU!

hord | coplan | macht