

University of California San Francisco  
**COMPREHENSIVE PARNASSUS HEIGHTS PLAN**  
FINAL REPORT

OCTOBER 2019, AS UPDATED IN JUNE 2020



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Prepared by Perkins Eastman  
Issued: October, 2019





We are very pleased to present the Comprehensive Parnassus Heights Plan (CPHP), a bold and transformative vision for the long-term revitalization of a campus that has served San Francisco for more than a century. The release of this plan marks a milestone for UCSF's birthplace—the site where colleges united to form a health sciences university bound by a culture of collaboration across research, education, and patient care. This plan envisions a reinvigorated Parnassus Heights campus that both strengthens the neighborhood's economic and cultural vitality and allows us to deliver world-class health care and research to San Francisco, the Bay Area, and the global community for decades to come.

The CPHP will bolster UCSF's ability to provide high-quality, cost-effective health care through a cohesive, integrated campus that embraces smart urban planning. The plan includes a new patient-centered hospital and modern outpatient space, research, and teaching spaces. Importantly, it also incorporates planning elements that seek to improve mobility, increase campus housing, and create significantly more open spaces and greater community access. The Parnassus Heights campus of the future will reflect San Francisco's innovative spirit, expanding on the university's history of setting the standard for care delivery, education, and research, while allowing UCSF to invest in a shared future that also serves our neighbors and the city.

We are grateful for the collaboration and input of so many engaged stakeholders, including representatives from adjacent neighborhoods, the broader San Francisco community, and the UCSF community. The CPHP benefitted from an inclusive process that sought perspectives and expertise through the Parnassus Heights Master Plan Steering Committee, four faculty/staff working groups, many campus meetings, and four large-scale surveys, in addition to the Community Working Group, a neighborhood survey and several community open houses. The input from

the community was captured in the Community Ideas report, which is part of the CPHP. We appreciate all who contributed to re-envisioning the campus, a process that has been shepherded and summarized in this plan by the Perkins Eastman planning and design firm.

We are excited to begin the transformation of Parnassus Heights, a process that will be guided by the continued collaboration and guidance of our stakeholders over many decades. What the CPHP offers is a once-in-a-lifetime opportunity to create a destination campus that supports an innovative ecosystem of human-centric science, where our scientists, clinicians, learners and staff can do their best work and where patients, and visitors and neighbors can experience the best that UCSF has to offer. The CPHP will guide our future decisions regarding new construction, demolition, and renovation, beginning with our near-term priorities described on page 113. As we begin this work, we will continue engaging our stakeholders to develop a campus with new benefits and features, as described in Section 2, that serve the changing needs of our neighbors, UCSF, and the community we share.

On behalf of Chancellor Sam Hawgood and the entire leadership team, we invite you to learn more about our vision for Parnassus Heights. Together we will enter a new era, capitalizing on our collective vision and expertise to the benefit of our UCSF community, our neighbors and our city, and everyone we are privileged to serve.

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**Daniel H. Lowenstein, MD**  
Executive Vice Chancellor and Provost  
Dr. Robert B. and Mrs. Ellinor Aird Professor of Neurology

**Paul Jenny**  
Senior Vice Chancellor  
Finance and Administration  
October, 2019



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## EXECUTIVE SUMMARY

The campus vision encourages the consolidation of campus functions and clarifies uses while addressing space needs, creating opportunities for growth and convergence.



For illustrative purposes only: image does not represent architectural design.



# EXECUTIVE SUMMARY



## 1. Service Corridor

Develop back-of-house utility and material distribution systems for efficient campus operations (alignment to be determined).

## 2. Renovations

Support sustainable growth.

## 3. "Campus Heart"

Create the campus heart at Saunders Court and connect to the West Side of campus.

## 4. New opportunities

Support convergence between missions with new buildings and linkages.

## 5. New public spaces

## 6. Restored 4th Avenue

## 7. Housing

Explore long-term housing opportunities on the West Side.

## 8. Streetscape

Improve Parnassus Avenue.

## 9. Community

Integrate programs with the surrounding neighborhood.

## 10. Gateway

Locate programs that activate Irving Street.

## 11. Clinical East End

Consolidate clinical services in the East End and support a holistic patient/visitor arrival experience.

## 12. New hospital

Future location for the new hospital building at the Helen Diller Medical Center.

## Legend

- Existing buildings
- Opportunity sites  
(Not representative of design)



## EXECUTIVE SUMMARY

The vision provides the opportunity for new amenities and “Park to Peak” connections via an activated, public ground plane. The expansion of public spaces shown below is estimated to be a three-fold increase over today’s condition.





# EXECUTIVE SUMMARY



## 1. Service Corridor

## 2. Pedestrian connections

Connect the campus to Mount Sutro via a pedestrian connection at the service corridor.

## 3. "Campus Heart"

Create the campus heart at Saunders Court and connect to the West Side of campus.

## 4. Promenade

Enhance campus public space with a large central promenade bridging the Campus Heart to the West Side.

## 5. Trail

Coordinate with planned trailheads to Mount Sutro.

## 6. Forest views

Maintain visual connection to Mount Sutro.

## 7. Forest

Continue stewardship of the Mount Sutro Open Space Reserve.

## 8. Open space visual connection

## 9. Community

Provide a home for community amenities.

## 10. Neighborhood

Keep Avenue houses in place to serve as a buffer between the campus and adjacent neighborhood.

## 11. Lodging

Explore lodging for patient families.

## 12. Millberry Terrace

## 13. Park-to-Peak

Enhance connections to Golden Gate Park.

## 14. Across Parnassus Avenue

Explore a bridge and a tunnel.

## Legend

- Existing buildings
- Opportunity sites  
(Not representative of design)
- Public spaces







# **1 CAMPUS CONTEXT**

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**1.1 A CHANGING SAN FRANCISCO**

**1.2 PARNASSUS HEIGHTS TODAY**

**1.3 CHANGING MOBILITY**

**1.4 PLANNING PROCESS**

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## CAMPUS CONTEXT

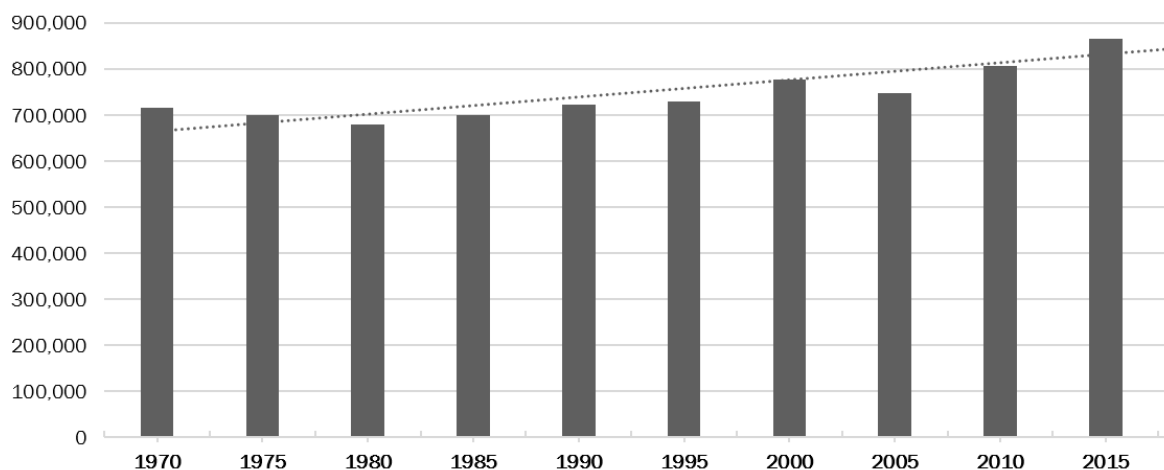
### 1.1 A CHANGING SAN FRANCISCO

As a global center of biotech and digital innovation and financial capital of the West Coast, San Francisco is a destination city known for its beauty, cultural diversity, and economic opportunity. UCSF is a powerful contributor within the City's economic and social landscape. As a top job creator and the second largest employer in the City and County, UCSF contributes to San Francisco's energy and "innovation ecosystem," attracting world-class talent to live, work, and study.

Due in part to surging economic growth, San Francisco is undergoing a transformation, including growing socioeconomic and health disparities, increasing cost of living and reduced housing affordability, and a public transportation infrastructure at capacity. The demands of a growing population have placed intense strain on many of the region's existing systems forcing the City to rethink its approaches to housing, transportation, and neighborhood growth.

**42,700** Bay Area jobs  
created by UCSF  
**\$8.9 BILLION** estimated  
economic output by  
UCSF in the Bay Area  
**\$273.5 MILLION** in charity  
and uncompensated care  
provided by UCSF Health

UCSF stakeholders and members of the community have expressed a strong interest in responding to these evolving challenges. Robust new approaches and solutions will be crucial to continue to thrive in the social, economic, health care, and academic sectors of the Bay Area.



1.1. San Francisco's population has grown by 23.5% since the 1970's.



## PARNASSUS HEIGHTS TODAY 1.2

### 1.2 PARNASSUS HEIGHTS TODAY

The Parnassus Heights campus site is located near the geographic center of San Francisco and was one of the first major building sites in the western portion of the City. Golden Gate Park is located to the north, with the Mount Sutro Open Space Reserve comprising the southern portion of the campus. Adjacent to the Parnassus Heights campus site are mixed residential neighborhoods. Irving Street, marking the northern campus boundary, includes the N-Judah Muni line from downtown to Ocean Beach. Parnassus Avenue runs through the center of the campus, dividing it

across a bustling street, where Muni runs several bus routes and UCSF operates its campus shuttles.

Medical Center Way leads from Parnassus Avenue through the Mount Sutro Open Space Reserve to the Aldea housing community. Clarendon Avenue marks the southern edge of the Parnassus Heights campus site.

The Parnassus Heights campus has breathtaking views and is itself visible on the foot of Mount Sutro from many areas of the City. The 107-acre campus is located in a microclimate that has frequent marine fog and wind.



1.2. UCSF Parnassus Heights campus site context.

## 1.2 PARNASSUS HEIGHTS TODAY

### **Campus Conditions and Challenges**

Since the 1990s, UCSF's physical expansion and investment have focused on the 60-acre Mission Bay campus site. As a result, the advancement of the clinical, educational, and research enterprise at the Parnassus Heights campus site has occurred without corollary investment in its physical environment. As shown in Figures 1.5 and 1.6, buildings on the site have an average age of more than 50 years, and many have limited long-term viability.

The discrepancy between the practice of cutting-edge health sciences and the physical condition of the campus is clear.

Today, the Parnassus Heights campus site must confront the following challenges:

- Future advances in learning, discovery, and healing are dependent on close collaboration and creative partnerships that the current campus design does not facilitate;
- The current physical state of the campus and limited infrastructure supporting research, educational, and clinical activities are compromising the ability to recruit and retain faculty, clinicians, learners, and staff;
- There are insufficient comfortable, landscaped areas and public spaces that could provide quality of life improvements, workplace satisfaction, or therapeutic benefits to all user groups;
- The current campus design contributes to a sense of isolation from the neighborhood and



1.3. Parnassus Heights campus site in context.



## PARNASSUS HEIGHTS TODAY 1.2

lacks an iconic “front door” experience and a sense of welcome;

- Older buildings have low floor-to-floor heights and do not meet the current standards for contemporary specialized research and clinical care;
- Support infrastructure is at risk of failure, vulnerable to increased environmental stressors, and very costly to maintain;
- The Parnassus Heights campus is subject to a “space ceiling” adopted by the Board of Regents of the University of California, as part of the 1976 Long Range Development Plan (LRDP) in response to neighborhood concerns around campus growth. The space ceiling controls expansion with a 3.55 million gsf limit that includes all non-residential buildings within campus boundaries.



1.4. Overcrowded lab spaces in the Health Sciences West tower.

### **Existing Building Challenges**

Building codes for accessibility, fire and life safety, seismic performance, and other requirements have become more stringent over the past 50 years. Some older buildings on the Parnassus Heights campus have not kept up with these advances and are currently being evaluated to assess the dependencies in bringing them up to these standards.

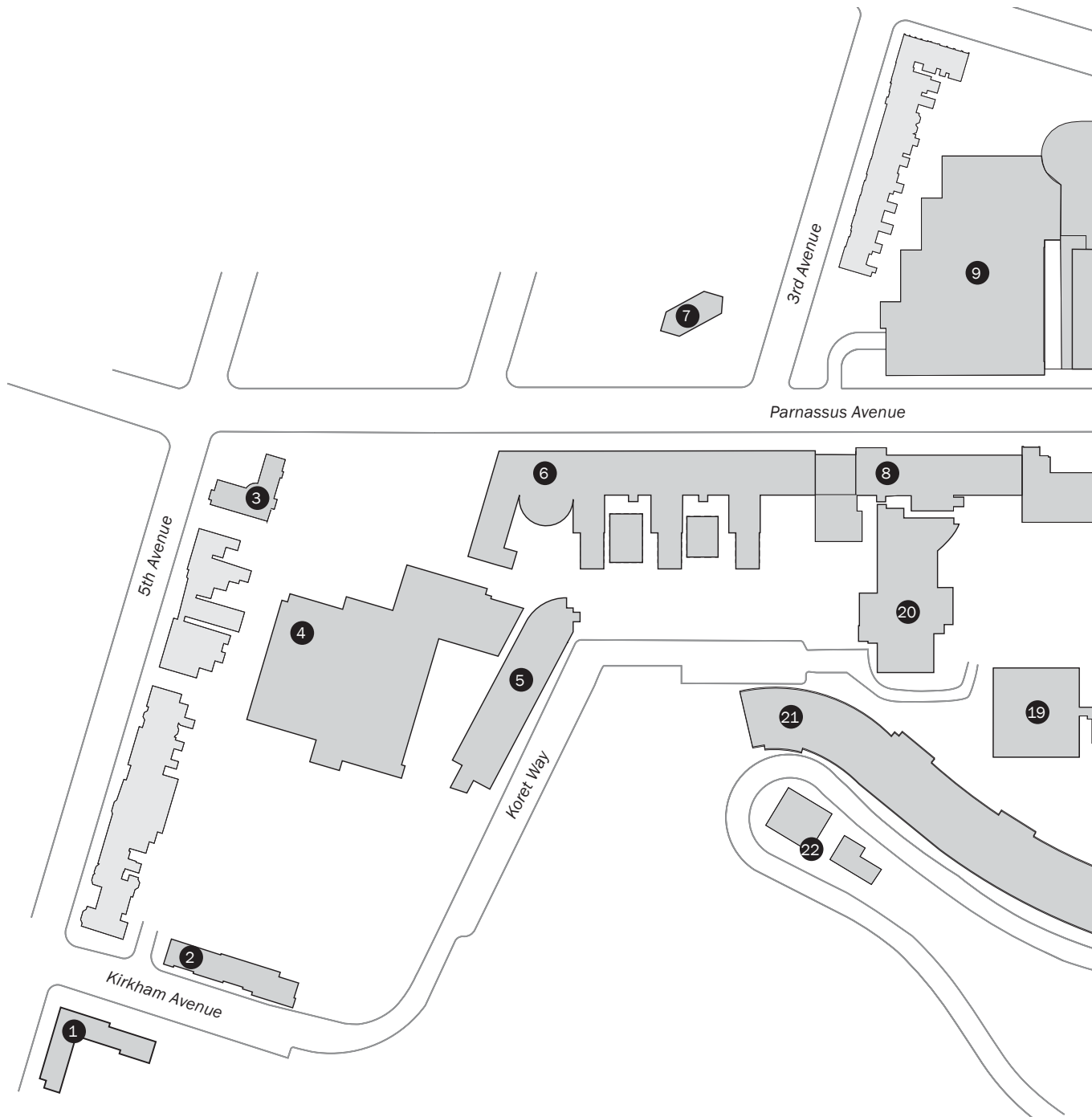
Similarly, in response to advancing technology, spatial requirements for research and clinical spaces have also grown and shifted. The increase in equipment sizes, associated code requirements, and new trends for improved work environments put pressure on existing spaces.

Planning for the future requires UCSF to strategically rethink its existing space portfolio. Low floor-to-floor heights, small floor plates, and older infrastructure constrain existing buildings' potential. In addition to technical feasibility, comprehensive decision making must be conducted to assess the trade-offs between intensive renovations and new building projects on a site-by-site basis. The ability to conduct building modifications without risk to power or other service interruption is a prerequisite and has been found to add significantly to cost and complexity.

Some buildings are considered candidates for “wholesale” (entire building) renovation (see Figure 1.6). This is based on technical review and discussion with UCSF stakeholders and is subject to further assessment. Other buildings may better support the campus vision as opportunity sites for new structures, helping to create new locations for growth and to decant and relocate existing campus programs within the campus footprint.

## 1.2 PARNASSUS HEIGHTS TODAY

The average age of buildings on campus is 50+ years old. The Parnassus Heights campus comprises 71 buildings over a total area of 107 acres and accommodates a daily population of approximately 17,400 people.



1.5. Existing buildings at Parnassus Heights.

## PARNASSUS HEIGHTS TODAY 1.2



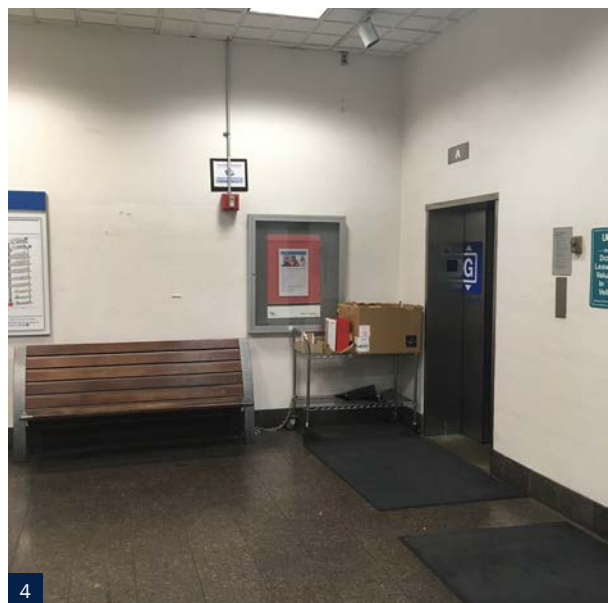
- 1. Proctor, 1956**  
9,900 gsf
- 2. Kirkham Child Care, 2009**  
7,200 gsf
- 3. Faculty Alumni House, 1915**  
7,200 gsf
- 4. Dental Clinics, 1979**  
135,000 gsf
- 5. Koret Vision Research, 1986**  
43,100 gsf
- 6. UC Hall, 1917**  
148,200 gsf
- 7. Lucia Child Care Center, 1978**  
7,200 gsf
- 8. Clinical Sciences, 1933**  
108,000 gsf
- 9. Kalmanovitz Library, 1991**  
148,800 gsf
- 10. Millberry Union, 1955**  
415,400 gsf
- 11. Medical Building 1 (ACC), 1972**  
602,000 gsf
- 12. LPPI, 1941**  
104,800 gsf
- 13. Moffitt Hospital, 1955**  
397,100 gsf
- 14. Medical Sciences, 1954**  
392,400 gsf
- 15. Long Hospital, 1982**  
365,800 gsf
- 16. Central Utility Plant, 1998**  
39,300 gsf
- 17. Parnassus Services, 2005**  
88,800 gsf
- 18. Health Sciences East, 1964**  
204,700 gsf
- 19. Health Sciences West, 1964**  
237,400 gsf
- 20. School of Nursing, 1972**  
88,100 gsf
- 21. Dolby Regeneration Medicine, 2010**  
69,100 gsf
- 22. Environmental Health & Safety and Annex, 1971 and 1953**  
8,700 gsf

Areas rounded to the nearest 100 gsf and exclude accessory structures, Avenue houses, and Aldea housing.



## 1.2 PARNASSUS HEIGHTS TODAY

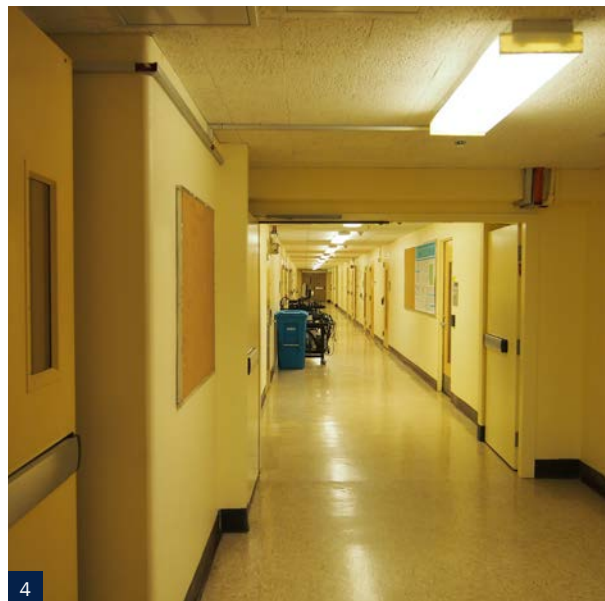
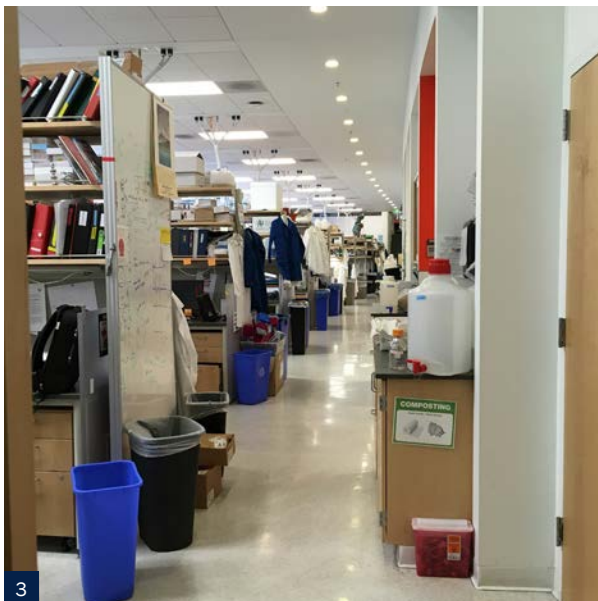
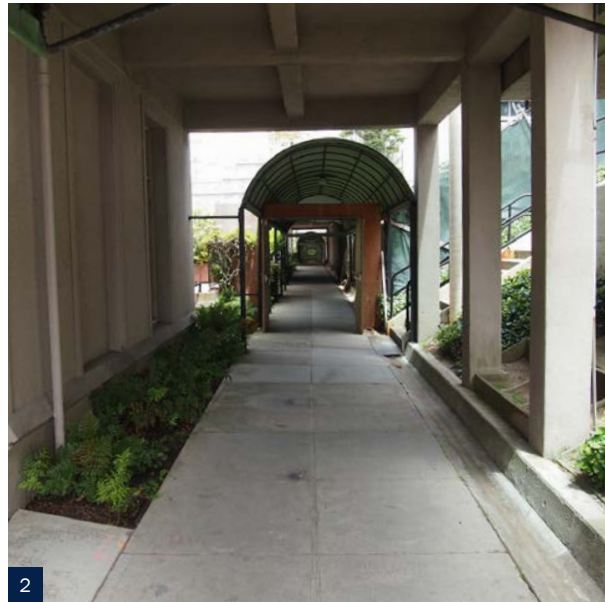
The arrival experience at the Parnassus Heights campus site is not optimized. Entries are confusing and unattractive.



1. A wall to the neighborhood
2. Poor wayfinding
3. Existing “front door” at MSB is hard to see
4. Uninspiring entry sequence at Irving Street

## PARNASSUS HEIGHTS TODAY 1.2

Most buildings are aging and difficult to navigate.  
They fall short of world-class, contemporary space standards.



1. Aging buildings and infrastructure
2. Lack of connection with nature, even outside
3. Need for contemporary space
4. Uninspiring interiors, lack of views

## 1.2 PARNASSUS HEIGHTS TODAY

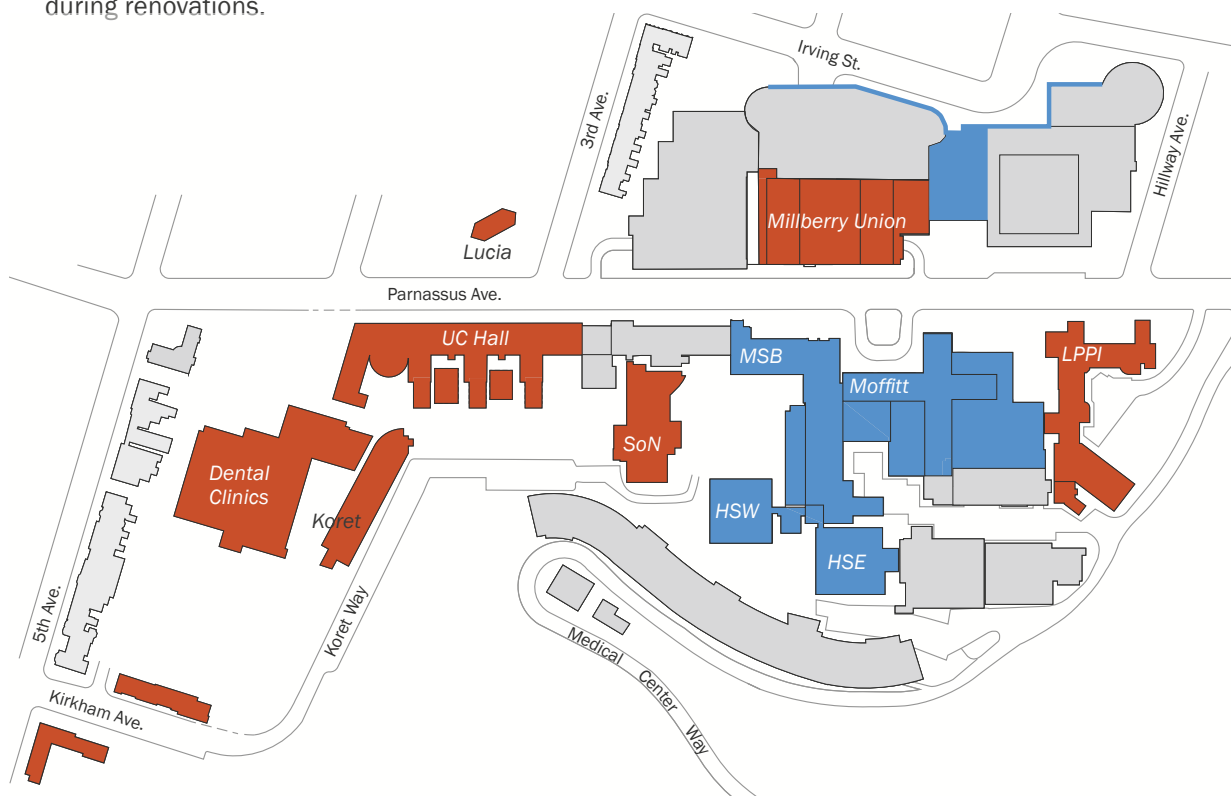
### Considerations for Potential Renovations

Building renovation scenarios should account for:

- Cost impact of seismic upgrades, deferred maintenance, and infrastructure, and feasibility of compliance with life safety and performance codes;
- Program use, activities requirements, and floor plate efficiency;
- Ability to upgrade mechanical and electrical systems for contemporary uses;
- Aesthetics and historical value; and
- Availability of 'swing' space to accommodate temporary relocations on or off campus during renovations.

Buildings are deemed to have limited usable life when:

- Renovations required to comply with seismic and life safety standards are beyond replacement cost;
- The site can better accommodate other uses that strategically respond to campus long-term needs; or
- Building physical characteristics (e.g., floor-to-floor heights or floor plate sizes) make them less viable for specialized activities.



1.6. Existing campus buildings with potential for major renovation or possible demolition.

#### Legend

- Potential major renovation
- Assumed limited usable life



## CHANGING MOBILITY 1.3

### 1.3 CHANGING MOBILITY

The way we choose to travel and how we best access goods and services is quickly evolving. Today, this includes ridehail services such as Uber and Lyft and micromobility services such as shared bikes and scooters. In the future, this may include autonomous vehicles. As a major destination, Parnassus Heights is facing pressure to adapt to new technologies.

In 2018, UCSF prepared a *Future of Mobility* study, beginning a long-term exploration of ways the campus can manage risks and take advantage of opportunities associated with new technologies and trends:

- UCSF is affected by increasing use of ridehail services by patients, visitors, and employees traveling to and from work, class, or non-emergency health care.
- Robots are currently being used within building for deliveries at the UCSF Medical Center at Mission Bay. These and other emerging alternatives for delivery such as small sidewalk robots and autonomous trucks may eventually come to Parnassus Heights.

#### **Parnassus Heights Circulation Challenges**

The campus circulation strategy goals include directing the high volume of patients and visitors from the Millberry Union garage and transit stops on both Parnassus Avenue and Irving Street to their clinical destinations and providing safe and convenient access across Parnassus Avenue for all users.

One challenge is managing the balance of transportation uses on Parnassus Avenue,

including Muni buses, UCSF shuttles, passenger drop-off, commercial loading, and pedestrian crossings. Additional parking and circulation challenges include:

#### **Garages**

- At more than 50 years old, both garages will require seismic upgrades to remain viable during the Plan duration. Low floor-to-floor heights make re-purposing the garages to other uses difficult. Both need upgrades to lighting, improved wayfinding, and re-striping to enhance customer experience.
- The entrance and exit for the Ambulatory Care Center (ACC) garage at the intersection of Carl and Arguello streets creates visibility challenges.
- The ACC garage helix ramp requires internal intersections and complex turning movements. It would benefit from safety improvements.

#### **Passenger Pick-up/Drop-off**

- There is insufficient drop-off area for patients and their families to access clinical services.
- On-street loading areas on Parnassus Avenue are congested.

#### **Transit and Pedestrian Experience**

- Pedestrian crosswalk and connections across Parnassus Avenue should be improved, especially mid-block.
- The vehicular entrances to the Millberry Union garage and unattractive facades detract from the pedestrian experience on Irving Street.
- Waiting for Muni on Irving Street is an unpleasant experience.

#### **Commercial Loading**

- Most of the existing campus loading docks are operating at or over capacity, resulting in congestion.

## 1.4 PLANNING PROCESS

### 1.4 PLANNING PROCESS

The CPHP is the result of a highly participatory and inclusive engagement effort embracing a wide variety of stakeholders' viewpoints on the future vision for the Parnassus Heights campus site.

#### UCSF Internal Process

The CPHP process was led by the Parnassus Master Plan Steering Committee (PMP), which comprised faculty and senior administrators across the campus and UCSF Health. PMP members helped define the programmatic strategy and vision for the Parnassus Heights campus and oversaw the preparation of the Plan. They guided:

- **4 Faculty Working Groups** (Research Space, Education Space, CoLabs, Digital Hub) to develop the vision, concepts, and specific space needs for the various programmatic areas. Summaries of their recommendations can be found in Chapter 4, with the full reports in Appendix B.
- **3 Visioning Workshops:** Blue Sky Ideas (July 2018), Design Alternatives (November 2018), Preferred Alternative (January 2019). These workshops were attended by a broad array of Campus and UCSF Health stakeholders.
- **1 Town Hall Meeting** attended by more than 300 participants in person and watched by more than 200 livestream viewers online, showcasing the vision for the proposed plan.
- **3 Surveys** with broad internal participation to gather further input. A Research Faculty survey received 1,200 responses, the Employee and Student Survey received 1,800 responses, and the UCSF Health "Hospital of the Future" Survey received 940 responses.
- **1 Community Relations Subcommittee** that oversaw the external community engagement process.

- **1 Resilience Scan Workshop** in partnership with 100 Resilient Cities and Perkins+Will, assessing the CPHP's resilience to potential shocks and stresses.

#### Public Process

UCSF engaged its external community to provide input into the Parnassus Heights campus re-envisioning effort to identify potential improvements that would further neighborhood goals for the physical environment in the areas surrounding the campus. The re-envisioning comprehensively evaluated improvements to building design and functionality, public spaces and pedestrian connectivity, as well as vehicular traffic flow. Hundreds of community members were engaged through a public survey, community working group meetings, and three open houses.

The Community Working Group, comprising 24 members included community leaders, neighbors, merchants, city representatives, and UCSF staff. The external engagement process was organized in three phases:

#### **1. "Discovery" Phase (May - September 2018)**

This phase focused on introducing the community to the CPHP concept and educating them on the process, as well as soliciting initial feedback from neighbors on potential campus improvements.

Activities included a neighborhood survey (1,100 responses), an informational postcard and a presentation at UCSF's quarterly Community Advisory Group meeting in September.

#### **2. "Alternatives" Phase (October 2018 - February 2019)**

During this phase, neighbors were presented with three plan options and gave feedback on the alternatives.



## PLANNING PROCESS 1.4



1. Community Open House, October 2018 Executive Vice Chancellor and Provost Dan Lowenstein presents.

2. Community Working Group walking tour, December 2018

3. Town Hall, April 2019

## 1.4 PLANNING PROCESS

The Community Working Group was launched with five meetings through this period, a community open house event was held in November, and there was a presentation at UCSF's quarterly Community Advisory Group meeting in December. Community Working Group members also participated in a campus tour.

### 3. "Future Direction" Phase (March - June 2019)

This phase focused on refining the plan and finalizing the Community Ideas Report, a document memorializing the community feedback received on the plan and included as Appendix B.

The Community Working Group met two more times, there were two community open house events, and there were two more presentations to UCSF's Community Advisory Group in March and June.

Community Working Group members identified potential improvements that would further the community's goals for the physical environment surrounding the Parnassus Heights campus.

The Community Ideas report offers information, ideas and strategies on the topics of transportation/mobility, housing, open space, and the public realm. It also highlights design elements, programs, and amenities that could benefit the neighborhood. Key ideas are summarized in the call-out box on the next page and the full report is available as Appendix C.



1.7. Community Ideas report.

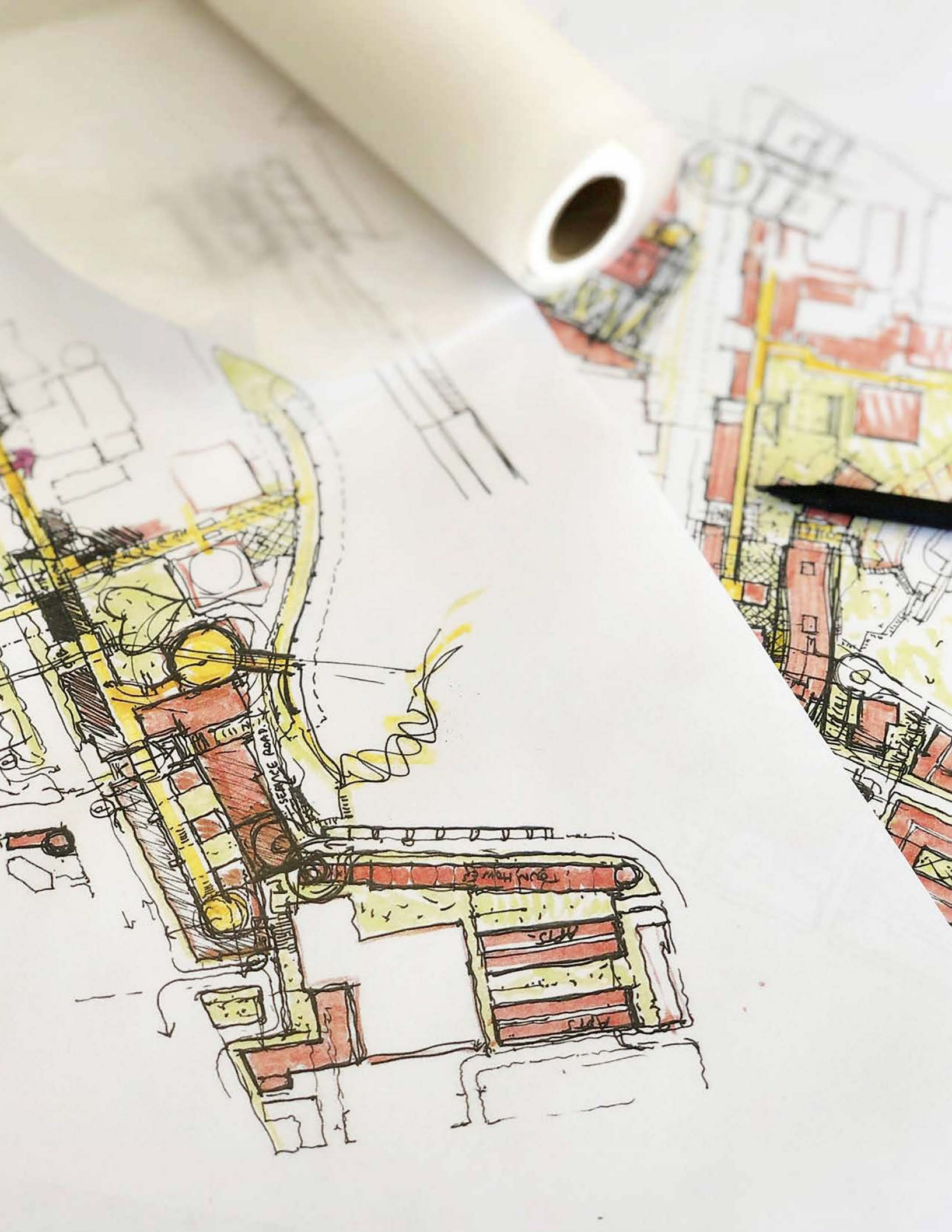
### COMMUNITY IDEAS SUMMARY

Ideas from the community include:

- **Housing**  
A range of on-campus housing options provided to students, staff, and faculty. There is an interest in reducing transportation demand by offering more units.
- **Campus Design**  
A campus that is more clearly articulated and better organized functionally. There is an opportunity to take greater advantage of the topography and views to, through, and from the site.
- **Connectivity with Nature**  
A greener campus with more landscaping, trails, and open spaces throughout. There is strong support for the “Park-to-Peak” connection from Golden Gate Park to Mount Sutro.
- **Multi-Modal Mobility**  
A “pedestrian-first” campus, with vehicular traffic balanced between Parnassus Avenue and Irving Street.
- **Public Realm**  
A network of public spaces on campus with improved streetscapes and neighborhood connections.
- **Programs & Amenities that Benefit the Neighborhood**  
Activities and facilities at UCSF that support increased integration with the neighborhood and with the city at large.









## **2 COMMUNITY BENEFITS**

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- 2.1 PRACTICAL SOLUTIONS FOR A DYNAMIC NEIGHBORHOOD**
- 2.2 LOCAL ECONOMIC IMPACT & CHARITY CARE**
- 2.3 COMMUNITY PROGRAMS & SERVICES**
- 2.4 COMMUNITY HEALTH & WELLNESS**

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## COMMUNITY BENEFITS

As a public university, UCSF seeks to improve people's lives through its worldwide mission of delivering the best patient care, research and teaching—beginning in the city it proudly calls home. From free children's health screenings to care for the low-income, unhoused and under-insured to biotechnology breakthroughs that are curing some of the most pernicious diseases, we serve an ambitious public mission that spans more than 150 years of San Francisco history.

To meet the evolving needs of the city, community and the University, UCSF is following an inclusive planning process to create a Parnassus Heights campus that contributes to the vibrancy and livability of the neighborhood and the broader community. The vision outlined in this multi-year plan reflects input from neighbors, community thought leaders, city agency partners, patients and families, and members of our faculty and staff. Importantly, the Community Working Group played

a key role in identifying the mutual benefits and shared opportunities that a revitalized Parnassus Heights campus could deliver to our neighbors and the city. These benefits are summarized in the Community Ideas report available in Appendix C.

The Parnassus Heights plan's forward-thinking urban planning and design ideas will reshape this historic campus, creating in the process a more valuable asset to the community and the city while addressing some of the everyday challenges facing San Francisco's neighborhoods.

The Parnassus Heights campus will continue to leverage and integrate the latest transportation solutions and spur local job and economic growth. In addition, the future campus will be a community hub for social, recreational, cultural and educational programs and services. The following are some of the benefits and solutions that we will explore together with our stakeholders and community partners.



2.1. High school student Elshaidaye Asefa served as an intern for the Science and Health Education Partnership Program, a partnership between UCSF and the San Francisco Unified School District that began in 1987. Photo by Steve Babuljak.

## PRACTICAL SOLUTIONS 2.1

### 2.1. PRACTICAL SOLUTIONS FOR A DYNAMIC NEIGHBORHOOD

- **Improving mobility**  
Improving mobility for pedestrians, public transit, cars, and alternative modes of transportation by creating a new, inviting, user-friendly entry experience from the N-Judah line stop on Irving Street up to Parnassus Avenue.
- **Enhancing Parnassus Avenue**  
Relieving traffic congestion on Parnassus Avenue by redirecting delivery trucks to the back of campus via a service corridor through a newly opened 4th Avenue.
- **Accommodating pedestrians**  
Offering a safer, sheltered, and more convenient way to cross Parnassus Avenue via a proposed pedestrian bridge.
- **Embracing open space**  
Tripling the amount of publicly accessible open space, including a new east-west promenade, an improved “campus heart” with an expanded Saunders Court, better connections between Mount Sutro and Golden Gate Park, and terraces and pocket parks that invite the community onto campus.
- **Increasing campus housing**  
Adding nearly 1,000 campus housing units to ease the city’s housing pressures and create new opportunities for neighborhood businesses.



2.2. Children get dental check ups at the School of Dentistry’s “Give Kids a Smile Day,” one of the many free health screenings that UCSF offers the community. Photo by Barbara Ries.

## 2.2 LOCAL ECONOMIC IMPACT & CHARITY CARE

### 2.2 LOCAL ECONOMIC IMPACT & CHARITY CARE

- **Supporting local hiring**  
Spurring job opportunities for San Francisco residents through UCSF's ongoing commitment to its Community Construction Outreach Program (CCOP), a voluntary local hiring initiative that creates economic opportunities, increases local employment in the construction trades and engages local unions and the city in innovative partnerships<sup>1</sup>.
- **Providing access to care for all**  
Providing \$273.5 million in uncompensated and charity health care for patients in FY2018.

### 2.3 COMMUNITY PROGRAMS AND SERVICES

- **Expanding public access**  
Welcoming community members to the Parnassus Heights campus by increasing access to natural landscapes, vistas to the ocean and the Golden Gate Bridge, and an extended public realm with a variety of indoor and outdoor public spaces for fitness, recreation, dining and enjoyment.
- **Hosting public events**  
Enhancing opportunities for social and cultural activities, such as the Farmer's Market, Chancellor's concert series, music in the library, art exhibits and community-wide celebrations and events.
- **Engaging youth**  
Creating opportunities for more hands-on science activities for youth, including the Science and Health Education Partnership which serves K-12 students in 90 percent of

San Francisco Unified School District schools and is a national model.

- **Highlighting science**  
Highlighting UCSF's leadership in the life sciences by putting science on display with exhibits and events that showcase the work of the nation's top scientists, scholars, and students.

### 2.4 COMMUNITY HEALTH AND WELLNESS

- **Ensuring emergency services**  
Serving community health needs to San Francisco's west side neighborhoods with a 24/7 emergency room, outpatient services and advanced adult specialty care.
- **Keeping pace with the community's care needs**  
Increasing our capacity to serve current and projected demand for specialty health care across the city and the region by opening a new, modern, seismically safe, and environmentally sustainable hospital.
- **Delivering holistic care**  
Adopting a holistic, "whole-patient" hospital approach — from leading-edge diagnostic tests and therapies to an optimal healing environment that addresses social, psychological, spiritual, and behavioral components of health in one place.
- **Bringing care to community**  
Hosting "Give Kids a Smile Day" at the UCSF Parnassus Dental Center, just one of many examples of outreach events that UCSF faculty, staff and students conduct on a volunteer basis.

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1. As a result of the CCOP, more than 460 San Francisco resident trade workers contributed over 300,000 hours towards the construction of UCSF Medical Center at Mission Bay. UCSF expects a similar, if not greater opportunity for the new hospital on Parnassus Avenue.



## COMMUNITY HEALTH & WELLNESS 2.4

As UCSF begins to advance the Comprehensive Parnassus Heights Plan, we will continue to collaborate with the newly convened Advisory Committee for the Future of UCSF Parnassus Heights. We look forward to partnering with the committee's community leaders, neighbors, merchants and representatives of city agencies and non-profits to explore approaches and solutions that will help UCSF and the community realize the shared opportunities of the new Parnassus Heights campus.



2.3. UCSF physical therapy students Ashlen Paustenbach, left, and Elizabeth Avazian, right, cheer as Jonathan Ferrigno, 7, balances during a challenge at the annual Cole Valley Fair in San Francisco. Photo by Noah Berger.



## **3 ORGANIZING CONCEPTS**

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- 3.1 A LEGIBLE CAMPUS**
- 3.2 A COMPACT CAMPUS**
- 3.3 AN INTEGRATED CAMPUS**
- 3.4 A WELCOMING CAMPUS**
- 3.5 A WORLD-CLASS CAMPUS**

## A LEGIBLE CAMPUS

Parnassus Heights will comprise **intuitive wayfinding**, thoughtful adjacencies for efficient workflows, and **easy navigation** between buildings. It will include generous spaces for reception, arrival, and assembly.

The future campus design will allow for **effortless orientation** of the first-time visitor and patient, learners, and employees.



## A LEGIBLE CAMPUS 3.1



Visible



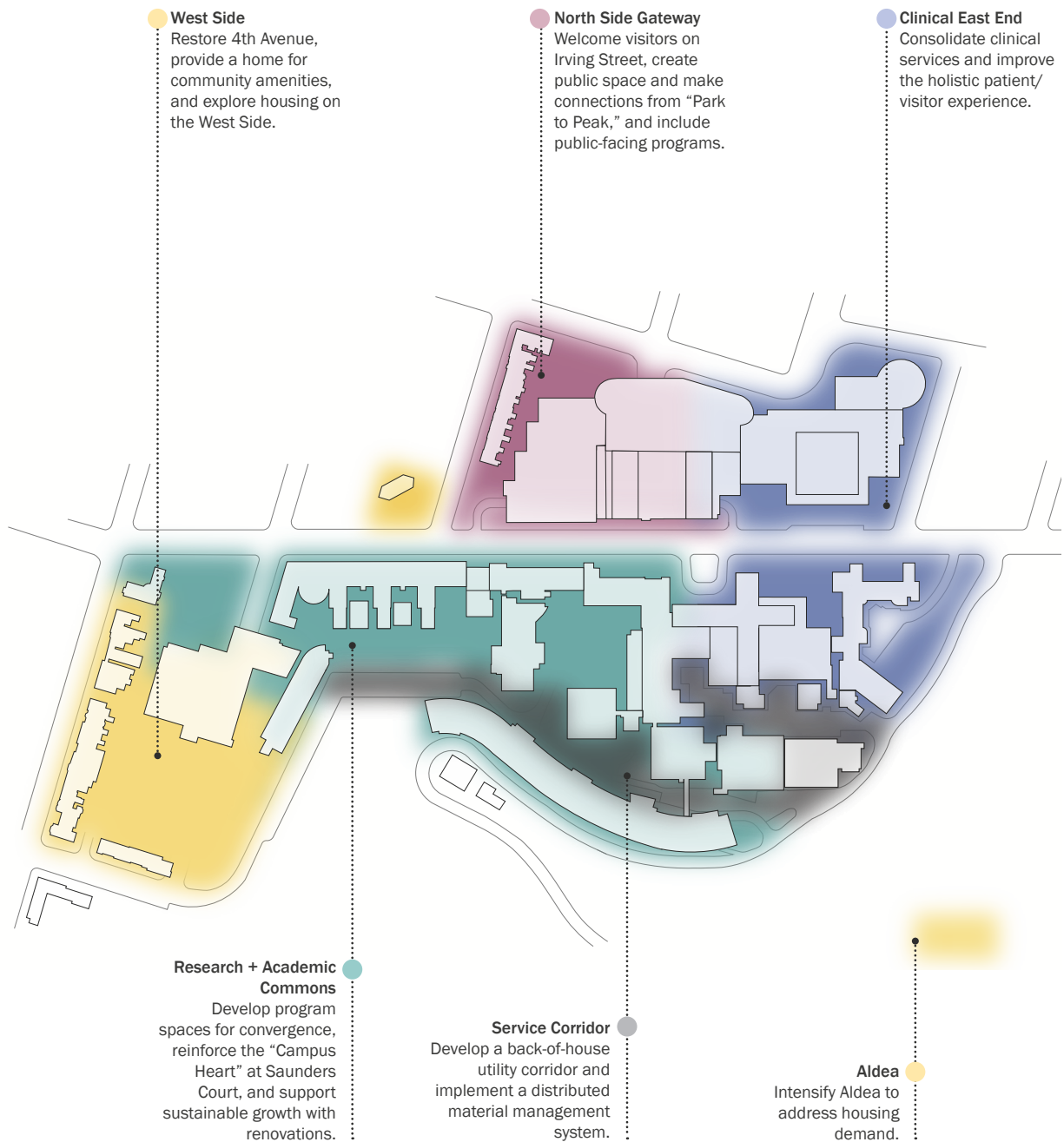
Intuitive



Organized

## 3.1 A LEGIBLE CAMPUS

The campus districts consolidate complementary activities for intuitive navigation and efficiency.



## A LEGIBLE CAMPUS 3.1

Refreshed garage facades, improved vertical circulation, and clear wayfinding enhance the arrival experience for all visitors.



- 1. Concept**  
Improved entry and aesthetic enhancements at Irving Street.
- 2. Today**  
Garage entrances with imposing facades on Irving Street.



## A COMPACT CAMPUS

A rich sense of the **campus commons** is central to the Parnassus Heights culture. Making the most of the site and magnificent vistas to the coastline, park, and Golden Gate Bridge, the future campus will leverage steep topography with a variety of terraces and outlooks, and use elevators and escalators for **multi-functional connections**.

Buildings will continue to connect at multiple levels to foster **meaningful collaboration** and chance encounters cherished by UCSF faculty, learners, and staff.

## A COMPACT CAMPUS 3.2



Urban



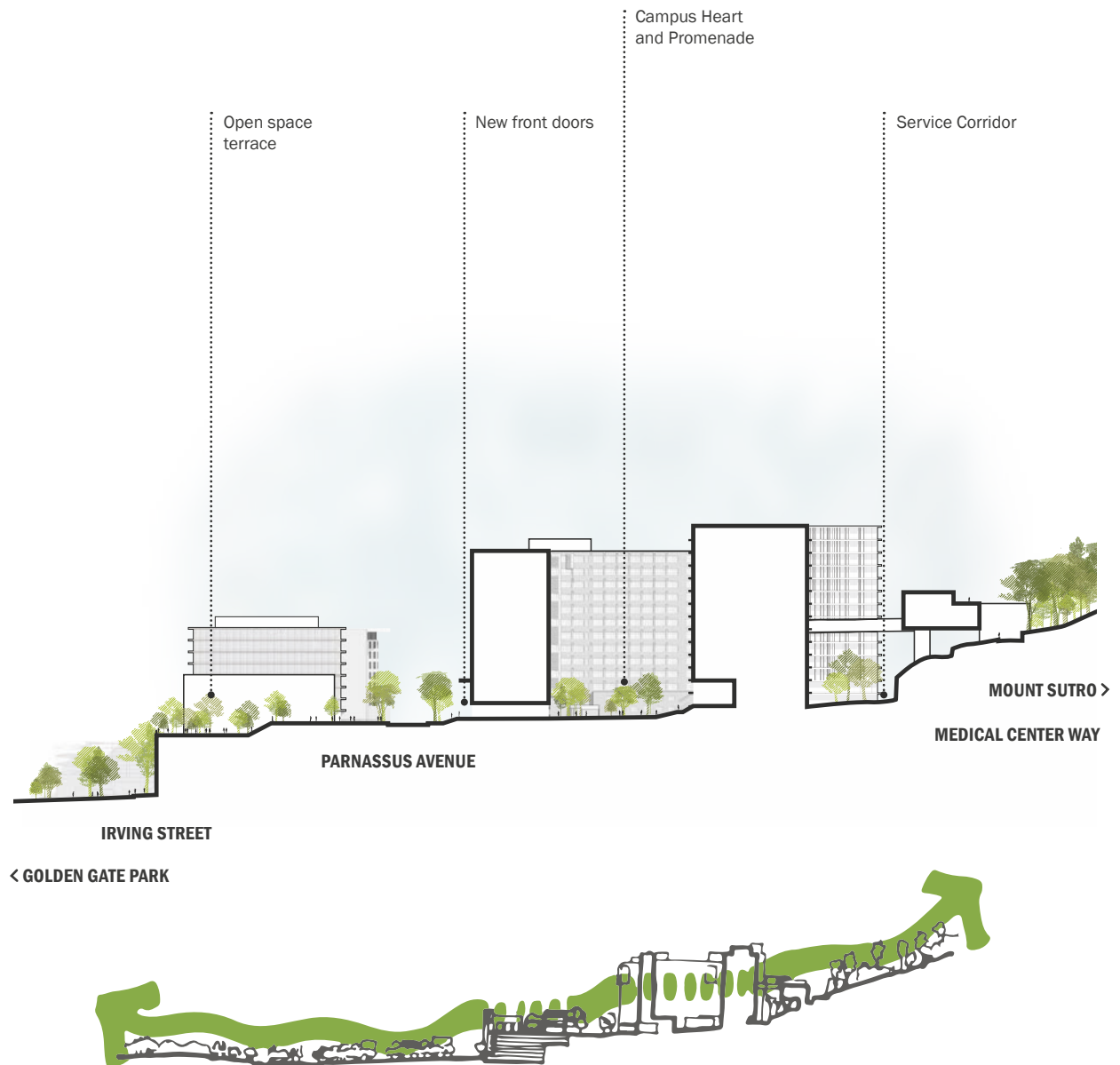
Vertical



Interconnected

## 3.2 A COMPACT CAMPUS

A compact campus enables sustainable growth within the existing campus footprint. The campus will be equally defined by its state-of-the-art buildings, as by its framework of open spaces.





## A COMPACT CAMPUS 3.2

A new east-west promenade takes advantage of the elevated topography, improves functionality, and creates unique viewpoints to foster serendipitous encounters.



**1. Concept**  
Campus promenade seen from the West Side at an extended 4th Avenue.

**2. Today**  
Steep staircase to Koret Way, alongside the Dental Clinics.

## AN INTEGRATED CAMPUS

Parnassus Heights will include state-of-the-art, **cross-disciplinary** spaces for collaboration and social gathering to foster an **interactive** academic health center and research community.

New spaces will display UCSF's **world-class leadership** in health care, education, and scientific discovery.

On-campus connections and pedestrian passages will serve as informal gathering places promoting **convergence** across all disciplines.

## AN INTEGRATED CAMPUS 3.3



Pedestrian



Connected

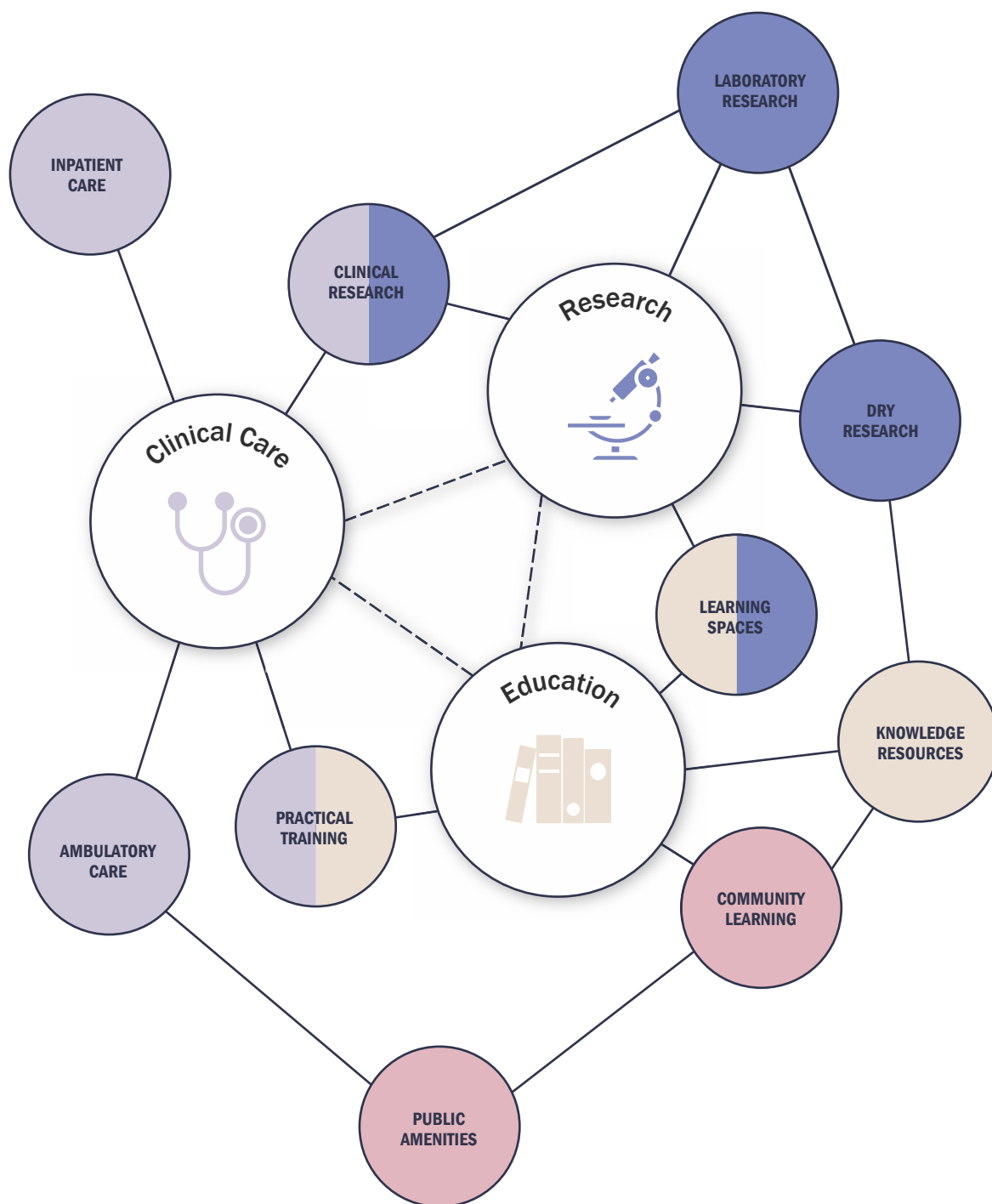


Cross-disciplinary



### 3.3 AN INTEGRATED CAMPUS

The future campus will highlight UCSF's achievements in health care, education, and scientific discovery and integrate it with the surrounding community.



The various programs connect the missions and foster convergence.

## AN INTEGRATED CAMPUS 3.3

Saunders Court is expanded as the “heart” of campus, a place of social gathering that fosters an interactive academic health center and research community.



### 1. Concept

Saunders Court is a central meeting place and the start of an expanded promenade leading to the West Side.

### 2. Today

The School of Nursing building blocks the expansion of Saunders Court and views to the west.

## A WELCOMING CAMPUS

Parnassus Heights reflects its **context** with links between the neighborhood, Golden Gate Park, and the Mount Sutro Open Space Reserve.

The campus has building forms that provide access to natural landscapes and light, an **expanded public space**, refreshed street environments, and a variety of indoor and outdoor places to gather and relax.

The campus landscape will include climate-sensitive gathering places with **year-round functionality** to minimize the effects of fog and wind.



## A WELCOMING CAMPUS 3.4



Convivial



Comfortable



Contextual

## 3.4 A WELCOMING CAMPUS

The campus surroundings, from Golden Gate Park to the Mount Sutro Open Space Reserve, are celebrated through landscapes that permeate the campus from “Park to Peak.”



### TODAY'S CONDITION

**Mount Sutro**  
61 acres of managed forest with public, multi-use trails

**Urban campus**  
Limited access to green spaces

**Golden Gate Park**  
Public urban park, heavy use



### FUTURE LANDSCAPES

**Integrated landscapes, with blurred boundaries**  
The campus connects from “Park to Peak,” introducing adapted landscapes that transition from the natural to the urban.



## A WELCOMING CAMPUS 3.4

The public space expands to welcome visitors with a variety of comfortable indoor and outdoor spaces, designed for year-round functionality.



1

For illustrative purposes only; image does not represent architectural design.



2

### 1. Concept

The roof of the Millberry garage becomes a public terrace with climate-sensitive design.

### 2. Today

The food court obstructs views from Parnassus Avenue and surface parking occupies a central location on campus with views over the park and Golden Gate Bridge.



## A WORLD-CLASS CAMPUS

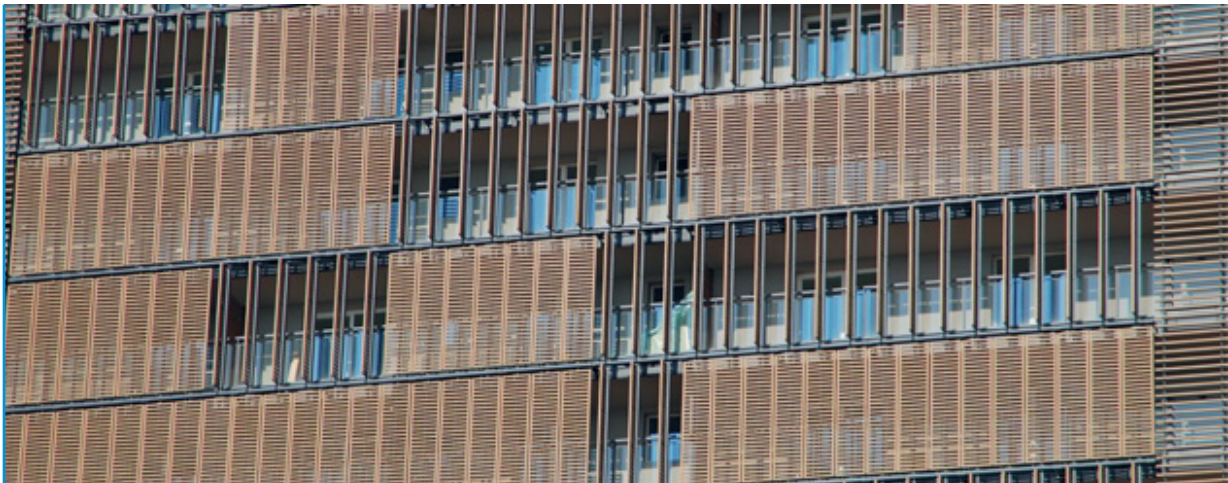
Parnassus Heights will embody a **contemporary architectural vision** for UCSF's clinical, research, and teaching missions.

The campus will modernize existing facilities to create **healthy and sustainable** environments and apply a resilient, **long-term** approach to the campus evolution.

## A WORLD-CLASS CAMPUS 3.5



Contemporary



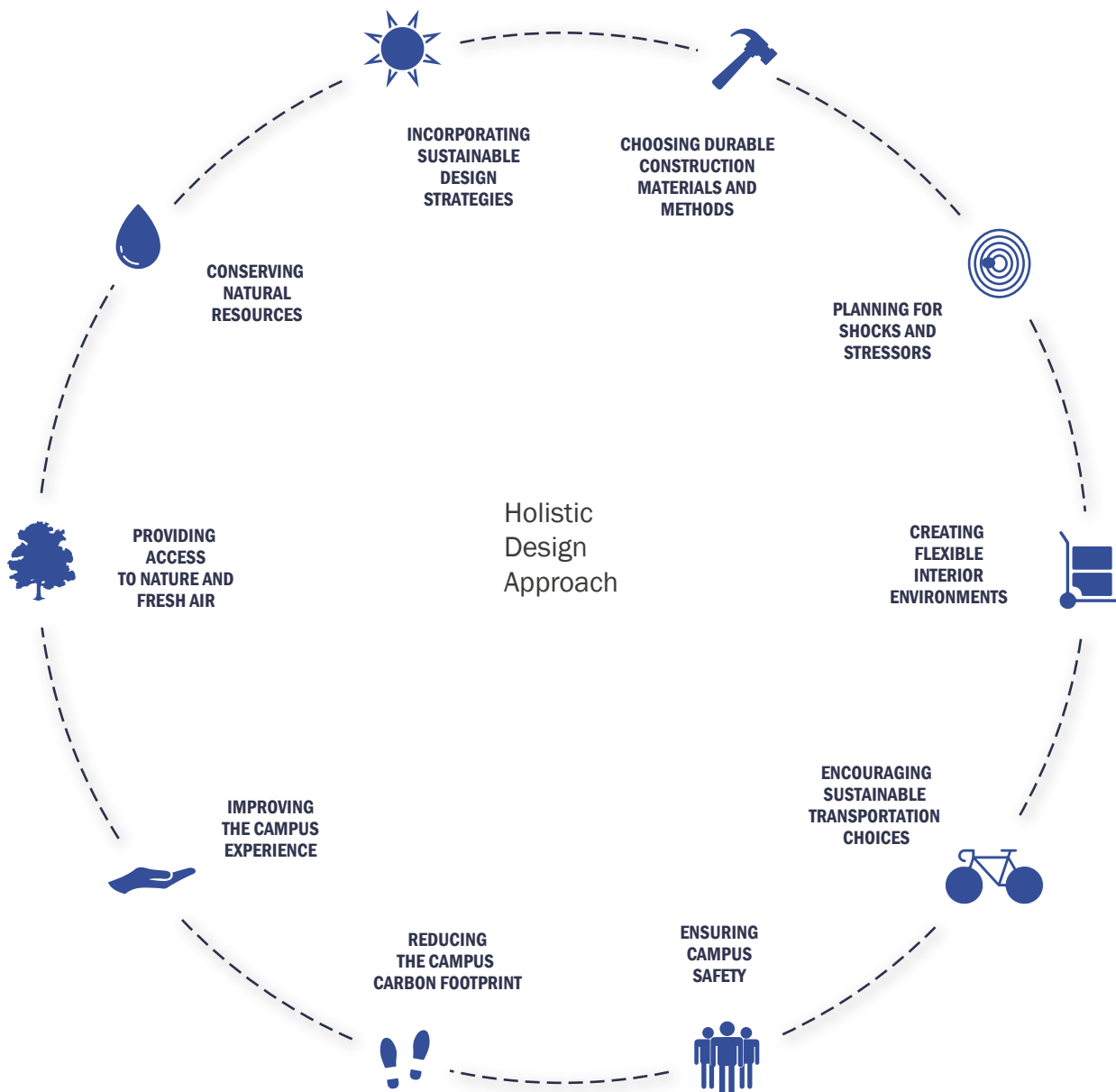
High performance



Resilient

## 3.5 A WORLD-CLASS CAMPUS

New building approaches will prioritize sustainable systems to promote healthy, resilient spaces and support UCSF's long-term campus vision.





## A WORLD-CLASS CAMPUS 3.5

Existing buildings can be renovated to meet contemporary standards and create modernized, refreshed work environments.



### 1. Concept

A refreshed Medical Sciences building and an east-west campus connection allow more transparency around the “campus heart.”

### 2. Today

The Medical Sciences building is very opaque and looks dated.



## **4 NEW PROGRAMS & APPROACHES**

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### **4.1 WHY PARNASSUS HEIGHTS?**

### **4.2 WORKING GROUP FINDINGS**

**RESEARCH SPACE**

**EDUCATION SPACE**

**DIGITAL HUB**

**COLABS**

### **4.3 NEW PROGRAM APPROACHES**



## NEW PROGRAMS & APPROACHES

This chapter highlights the unique opportunity at Parnassus Heights to build upon the strength of the scientific community co-located with the UCSF Helen Diller Medical Center, improving the physical environment and further enabling ongoing inter-professional collaboration.

The new world-class hospital at Parnassus Heights for adult care will be open by 2030 and be a key part of UCSF Health, a growing regional health system that includes UCSF Medical Center at Mission Bay. As a core element of the campus, building the new hospital is a key opportunity to reflect the context and vision described in the Plan.

Section 4.2 summarizes findings from campus researchers, faculty, staff, and clinicians and their recommendations for a sustainable, re-envisioned Parnassus Heights. Their reports, formally presented to the Parnassus Master Plan Steering Committee in 2018 and 2019, provide a high-

level framework for future education and research platforms, as well as preferred programmatic and operational approaches. The recommendations from all four working groups are aligned on the need to better organize, co-locate, and improve the functionality of spaces, as well as provide new methods to share resources and facilities. Full reports from each group are available in Appendix B.

Section 4.3 presents selected new programs or approaches to support the Parnassus Heights vision by improving the ability of those on campus to **discover, heal, learn, and live**. It describes proposed quality of life improvements for the UCSF community, as well as strategies for housing, child care, and other campus amenities. This section also brings forward ways in which the campus might best relate to, and take advantage of, the opportunity afforded by a new hospital building.



4.1. The compact campus at Parnassus Heights offers a unique opportunity for convergence among missions.

## WHY PARNASSUS HEIGHTS? 4.1

### 4.1 WHY PARNASSUS HEIGHTS?

The Parnassus Heights campus site is the location of the leading hospital for highly specialized tertiary and quaternary adult care in the western half of the United States. UCSF is devoted exclusively to health sciences, and the Parnassus Heights campus site is host to some of the best science in the world from basic and quantitative biomedical sciences to translational and clinical research.

The site's compact physical design contributes to the success of activities conducted within the campus. Broad inquiry and learning in human-centric science benefits from frequent opportunities for collaboration. The current medical center, comprising Moffitt and Long hospitals, has convenient connections on every floor to the research and learning facilities in the Medical Sciences Building and is near the Health Sciences East and West towers. Parnassus Heights research teams are made up of clinicians, learners, faculty, and staff who leverage the

full assets of the campus and the proximity to one another to create a wide variety of working partnerships (see Figure 4.1).

Resulting convergence among UCSF's clinical, academic, and research activities encourages the frequent personal connections that can foster collaborations in learning and discovery. Funding from the National Institutes of Health (NIH) for science, clinical trials, and other industry-sponsored studies can benefit from proximity to the hospital, while patients benefit from innovative clinical care.

The re-envisioning of the campus site is an opportunity to highlight the future hospital at Parnassus Heights where new technologies, including telemedicine, robotics, and intra-operative imaging will be embedded and leading clinicians and scientists are focused on translating discoveries into treatments and cures for conditions ranging from diabetes to neurological diseases to organ failure.



4.2. Key activities at Parnassus Heights.

## 4.2 WORKING GROUP FINDINGS

### 4.2 WORKING GROUP FINDINGS

#### Research Space Working Group

UCSF convened a Research Space Working Group (RSWG) with representatives from its four schools. The RSWG conducted a review of Parnassus Heights research activities and assessed research space condition and utilization, quality and function of associated infrastructure, and areas of programmatic strength. The process also incorporated a large survey with research staff and faculty and “benchmarking” to compare spaces at Parnassus Heights with national and international peer institutions.

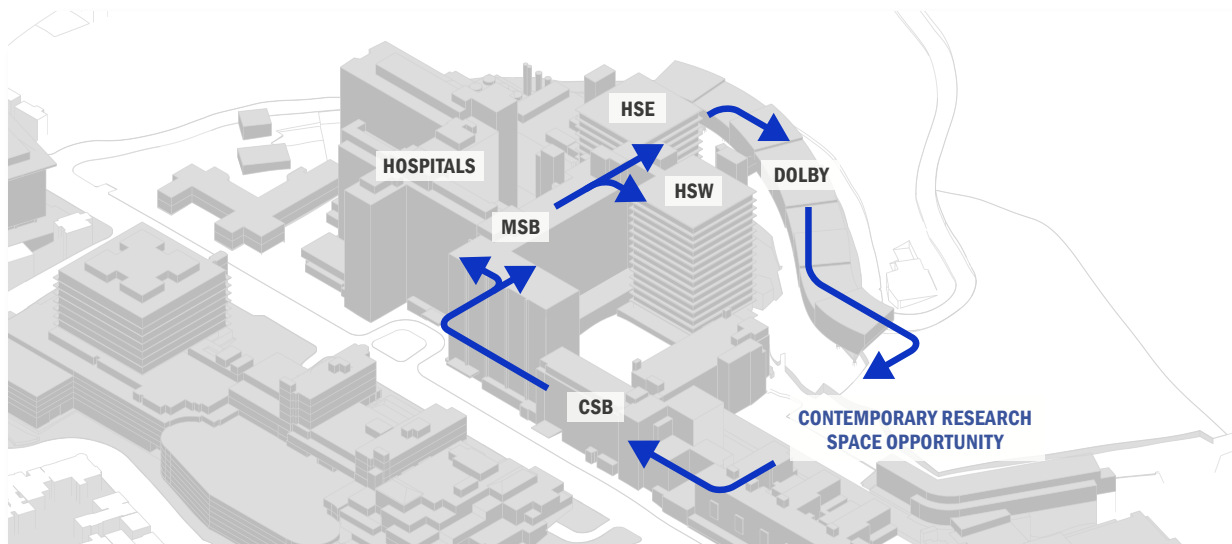
The RSWG vision for Parnassus Heights is an integrated campus comprising world-class health

science research, cutting edge patient care, and the highest quality educational programs.

The RSWG envisions a magnet science community at Parnassus Heights that is home to a blend of basic, clinical, and translational research activities, each with a critical mass of faculty.

The group recommends immediate expansion and transformation of the Parnassus Heights research campus to address challenges and deficiencies in the current space infrastructure and to allow future expansion. High-level recommendations are summarized on the following page.

Additional information on the physical design of research space can be found in Chapter 8, Best Practices.



4.3. The RSWG proposed two new program spaces on campus and stronger connection between all research buildings.



## WORKING GROUP FINDINGS 4.2

### RESEARCH SPACE WORKING GROUP RECOMMENDATIONS

- **Renovate existing research facilities** (approximately 1/3 of Parnassus Heights space) to contemporary standards. Good condition research space is currently utilized at higher than ideal density, while suboptimal space is underutilized.
  - **Expand basic research infrastructure** through construction of a new research building to accommodate growth of existing programs and development of new programs. New basic research space will allow renovation of older existing research buildings (Health Sciences East, Health Sciences West, and Medical Sciences) to modern research building standards.
  - **Provide flexibility** for research spaces that meet future needs, with new programs across the research spectrum and in emerging disciplines (i.e. artificial intelligence, microbiome).
  - **Expand the clinical research infrastructure** through construction of a Center for Innovative Medicine (CIM) to accommodate growing and successful programs in patient-centered research. The CIM will be a home for patient-facing clinical research at Parnassus Heights and an enabling resource for world-class clinical and translational research at UCSF.
  - The new basic and clinical research buildings could be one **large, modern, and inspiring** new research building that is a centerpiece for the rejuvenated Parnassus Heights.
  - Parnassus Heights research should continue to be **centrally located** near Saunders Court so that the research community can interact easily and have shared spaces for academic and social interactions.
  - In addition to the CIM, other **clinical research recommendations** include designated research areas in the new hospital and clinics and to provide an Overnight Stay Clinical Research Unit in the hospital.
  - Create space that fosters **programmatic collaboration** across the spectrum of basic, computational, translational, and clinical investigators, to advance the goal of cutting-edge human-centric science.
  - **Accelerate integrative human-centric science** with research infrastructure for programs, technologies, and core resources (i.e. CoLabs) that bridge basic and clinical research (i.e. big data, bioengineering).
- A unique opportunity to create transformative new space for research and discovery:**
- ▶ Realize the potential of outstanding research programs.
  - ▶ Pioneer clinical research.
  - ▶ Cultivate exciting new programs.
  - ▶ Advance a vision for impactful integrated research.
  - ▶ Attract and retain talented faculty and trainees.



## 4.2 WORKING GROUP FINDINGS

### **Education Space Working Group**

Led by the Campus Librarian, the Education Space Working Group (ESWG) comprised a range of educational leaders, faculty, and staff from across the academic enterprise. The ESWG engaged with stakeholders in all education mission areas, including students; conducted an inventory of current shared and departmental educational spaces; and explored the intersection of educational space with clinical and research space on the Parnassus Heights campus.

The ESWG raised several concerns. First, the spaces critical to UCSF's top-ranked educational programs are scattered across the campus; without a central location, they lack visibility and the opportunity for interprofessional interactions. Second, classrooms are insufficient in number, format, location, and quality. Third, classrooms are often used during the day by faculty, staff, and students for purposes other than educational activities. A classroom utilization analysis showed that more than half of scheduled time in classrooms is for non-class meetings. Fourth, education space has historically been narrowly defined as classrooms and learning labs whereas, given the all-consuming nature of graduate and health professions education, there is a critical

need for flexible spaces to accommodate student learning resources and wellbeing activities, peer engagement opportunities, and student-faculty advising and mentoring. This latter deficit will become critically apparent as we move to open workspace faculty environments.

For the foreseeable future, UCSF five professional degree programs will be primarily based at the Parnassus Heights campus site. Thus, it is imperative that the campus reflect the quality and national reputation of these educational programs. Furthermore, the campus must be designed to anticipate and support the evolution of innovations in educational practices. The campus must accommodate the whole education population continuum, including health professions students, residents, graduate students, faculty development, and continuing education. The ESWG also envisions an innovative central education core to support active learning and interprofessional pedagogies, with a robust reimagine of the spaces in which education occurs. This will require modernization of current space and expansion of total educational space, broadly construed.

Recognizing the amount of time that students spend on campus, the ESWG also focused on fostering a welcoming and stimulating environment



**Samuel** *he/him/his*  
**Professor and Surgeon**  
Primary campus: Parnassus  
Time on Parnassus: 16 hours

*PAIN POINTS: There is no surgical skills lab in hospital, he does not have much interaction beyond hospital.*

*NEEDS: Designated academic areas in hospital, space to facilitate interactions outside the hospital.*



**Brianna** *she/her/hers*  
**2nd Year Pharmacy Student**  
Primary campus: Parnassus  
Time on Parnassus: 10 hours

*PAIN POINTS: She has difficulty finding space to meet, wants more comfortable areas on campus.*

*NEEDS: Modular space to get work done, living room space for informal learning, more access to student wellness services.*

4.4. This "Day in the life of" exercise as abstracted from the ESWG report explores the needs of various populations and user groups.

## WORKING GROUP FINDINGS 4.2

for them. The future of Parnassus Heights should feature new spaces that support wellbeing, including housing and recreational amenities, while providing ample opportunity for intersections among the student, clinical, and research communities. The group advocates for a future

campus design that provides many options for informal, convenient small group meetings.

Additional information on the Best Practices for the design of education space can be found in Chapter 8.

### EDUCATION SPACE WORKING GROUP RECOMMENDATIONS

- **Optimize educational space for learners**  
Create a visible hub of educational spaces for the health professions programs; expand the number and variety of classrooms; modernize existing space; and incorporate innovative and flexible spaces into the design of clinical and research buildings.
- **Expand simulation learning spaces:** Dramatically expand clinical simulation spaces to support the development of a variety of professional clinical skill sets and interprofessional learning activities, inclusive of the needs of employed UCSF Health professionals.
- **Integrate educational space into research and clinical buildings:** Ensure that designated space for learning and teaching exists in all clinical and research buildings.
- **Foster student-faculty interactions and interprofessional education through intentional design principles:** Create spaces that facilitate interdisciplinary engagement between faculty and learners in all schools and programs.
- **Embrace a holistic view of educational space:** Utilize the wealth of empirical data that documents the critical nature of space beyond classrooms to support student wellbeing, professional development, and social engagement to optimize learning and ensure student success.



**Muthamma** she/her/hers  
**Associate Professor**  
Primary campus: Mission Bay  
Time on Parnassus: 7.5 hours

*PAIN POINTS: She gets lost in buildings when visiting Parnassus, consistently has issues with Zoom, always in search of space to meet.*

*NEEDS: More flexible spaces to informally meet, modern classrooms with video-conferencing.*



**Aubrey** they/them/theirs  
**First Year Biomed Student**  
Primary campus: Parnassus  
Time on Parnassus: 12 hours

*PAIN POINTS: They spend the majority of time in lab, missing out on student experience; feel siloed.*

*NEEDS: Sense of community, more formal interdisciplinary learning and collaboration, informal settings to interact with faculty and peers.*



## 4.2 WORKING GROUP FINDINGS

### **Digital Hub Working Group**

Located in the heart of the Bay Area technology ecosystem, UCSF is uniquely positioned to play a leadership role in driving and shaping digital health innovations as patient advocates and experts in research, patient care, and education.

UCSF has some of the world's most preeminent faculty and organizations working on digital health. But work in these groups—which spans clinical informatics to digital clinical research, to app development, to implementation science, to collaborations with Bay Area companies—is often siloed. It is harder for both internal and external stakeholders to gain a big picture of the work happening across the UCSF digital health enterprise, to create synergies and simplify engagements for those seeking to work with them.

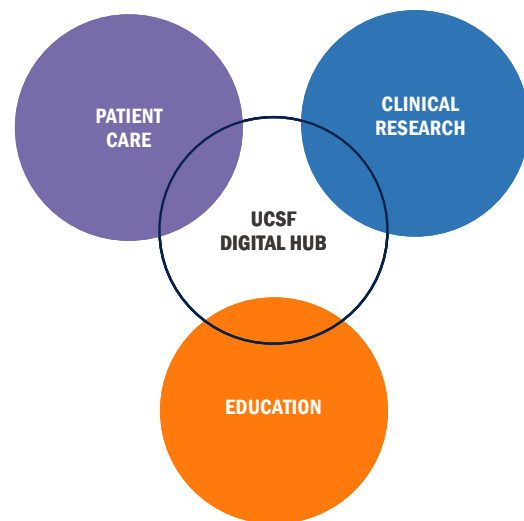
In response, the Digital Hub Working Group (DHWG) proposed formation of a new “Digital Hub” to better connect and accelerate digital health innovations in clinical and translational research and care transformation.

The DHWG has already spurred substantial new efforts: developing tools and resources that help researchers navigate and locate resources more efficiently; creating a global database of digital health projects across campus; and elevating communications and market presence in digital health with the goal of attracting top digital talent and new external partners.

A first-class home for the Digital Hub at Parnassus Heights would allow digital teams to convene, create, and scale breakthrough innovations. Co-working space will enable researchers, clinicians, faculty, students, and external partners to incubate

and accelerate new ideas; prototype with the latest technologies; test deployment of new products and services for frontline care in simulated environments; and share and build new skills through trainings and symposiums.

The vision for the Digital Hub is to fortify UCSF's position as the premier academic medical center in the world for digital health innovations.



**4.5.** The Digital Hub will focus on digital innovation at the convergence of translational and clinical research, patient care, and education.

## WORKING GROUP FINDINGS 4.2

### DIGITAL HUB WORKING GROUP RECOMMENDATIONS

- A first-class facility to function as home base for digital health innovators.
- Co-working space for internal teams, entrepreneurs-in-residence, and incubator companies.
- Clinical simulation and testing environments for care delivery concepts (e.g., Hospital Ward of the Future, Clinic of the Future, Hospital at Home).
- Prototyping spaces equipped for exploratory 3D printing, robotics, sensors, virtual reality, etc.
- Executive meeting and event facilities.
- Educational programming and training.

#### UCSF Digital Hub Four Core Areas:

- ▶ Entrepreneurship & Innovation
- ▶ Simulation & Testing
- ▶ Collaboration & Resources
- ▶ Education & Training



## 4.2 WORKING GROUP FINDINGS

### **Central Research Labs/CoLabs Working Group**

The Central Research Labs Working Group (CRLWG) developed a scope and programmatic concept for a central research lab facility, referred to as “CoLabs.” It will house critical personnel matched with cutting edge methods and technologies to enable innovative life science research and promote collaboration in research across a wide range of disciplines.

CoLabs is a common space that brings together core functions, staffed by related researchers from various departments to look at diseases in a complementary and collaborative way. The centrality of the CoLabs location is key to bridging

between geographically dispersed labs across the campus.

CoLabs brings together a wide array of disciplines, including scientists, health professionals, and trainees, as well as industry partners, to create and bring new breakthroughs to patients.

The CRLWG also proposes an entirely new model for providing a range of core methodologies to all faculty, facilitating the analysis of patient samples, developing new technologies, and creating new learning opportunities for both trainees and faculty.

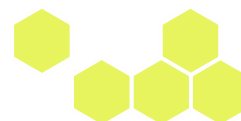
#### **COLABS RECOMMENDATIONS**

- Make the CoLabs a **transformational resource** for the Parnassus Heights campus.
- Develop a **state-of-the-art centralized facility** to bring together experts and cutting edge equipment.
- Support a new culture of **collaboration** and innovation.
- Embed investigators and projects within the CoLabs to **accelerate research**.
- Provide **standardized pipelines** for analysis of samples and develop a shared data library.



#### **COLABS AND THE INNOVATION SANDBOX**

- CoLabs is envisioned as a key component of a new ecosystem of human-centric science at Parnassus Heights.
- Research lenses to study the inter-relationships between seemingly different diseases.
- Fast learning and new personalized treatments: Breakthrough Cure Factory.
- Shortened bench-to-bedside trajectories.
- Embedded and UCSF-aligned commercial incubators to provide the fastest path to new cures.





## NEW PROGRAM APPROACHES 4.3

### 4.3 NEW PROGRAM APPROACHES

The introduction of new programs and strategic approaches will contribute to the future success of Parnassus Heights. The following section explores how the re-envisioned campus could offer improved environments with new approaches to discover, heal, learn, and live on campus.

Parnassus Heights will benefit from logical programmatic adjacencies and synergistic pairings, enhancing the experience for the UCSF population and its visitors and promoting campus legibility. The program approaches have emerged from workshops, public outreach, surveys, and stakeholder interviews associated with the CPHP process. They helped form a vision for an integrated and translational campus that introduces new spaces for existing and future campus activities.

These space types range from work space “hoteling” to the introduction of housing on the West Side of campus, to a distributed model for retail, dining, and convenience services:

- Academic Areas in Clinical Environment
- Designated Areas for Patient-Centered Research
- Concourse
- Forum
- Living Room
- Faculty/Staff Workspace Hoteling
- Science on Display
- Incubator Space
- Wellness Facilities
- Patient Family Lodging
- Food, Beverage, Retail

“At Parnassus Heights,  
I can see a patient in  
a **clinic**, walk to a lab,  
and **take samples down  
the hall**. Then I use this  
information to more  
precisely **diagnose and  
treat the patient.**”

— UCSF Faculty

Information summarizing programmatic drivers, potential locations, preferred adjacencies, precedents, and attribute descriptions for each of these new space typologies follow.

## 4.3 NEW PROGRAM APPROACHES

### Academic Areas in Clinical Environment

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#### DESCRIPTION

- Space in major clinical units of new and renovated clinical buildings (UCSF Health).
  - Informal learning spaces, adequate for individual and collective study.
  - Flexible meeting spaces for clinical research staff, small group learning sessions, and private conversations.
  - Simulation and other clinical skills spaces.
- 

#### PROGRAMMATIC DRIVERS

##### 1 Convergence

Supports collaboration among students and trainees.

##### 2 Convenience

Provides secure areas to leave items and to conduct training.

##### 3 Community

Fosters an educational community within major clinical care units.

##### 4 Translation

Facilitates exchanges between junior and senior clinicians and trainees.

---

#### ADJACENCIES

- Convenient access to school centralized services.
- Embedded in clinical areas.

#### POTENTIAL DEPENDENCIES

- Coordination with new hospital planning.
- Coordination with renovations in existing clinical departments.



Central gathering location

### Designated Areas for Patient-Centered Research

---

#### DESCRIPTION

- Space embedded in clinical care areas.
  - Overnight stay clinical research units to enable clinical studies requiring extended periods of participant monitoring.
  - Can be relatively small areas focused on recruitment and simple clinical studies or larger area that facilitate more complex trials in cancer patients.
- 

#### PROGRAMMATIC DRIVERS

##### 1 Proximity

Allows easy access to research participants for clinical research staff.

##### 2 Regulations

Responds to need for spaces for research in clinical settings.

##### 3 Recruitment

Showcases UCSF research and enables recruitment.

##### 4 Collaboration

Promotes collaboration between pharmaceutical, technical, and research staff.

---

#### ADJACENCIES

- Embedded within clinical care spaces, including the clinics, hospital wards, emergency rooms, and diagnostic spaces.
- Extension of other clinical research space.

#### POTENTIAL DEPENDENCIES

- Coordination with space regulations for research spaces within clinical settings.
- Potential for space sharing with educators.
- Reliance on grants and funding, coordination with staffing schedules, and FTE estimates.



Dedicated spaces with patient portal



Proximity to clinical functions



## 4.3 NEW PROGRAM APPROACHES

### Concourse

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#### DESCRIPTION

- High visibility, secure, and climate-controlled travel route across campus.
- Populated with complementary programs such as shared technical resources for faculty and researchers, secure meeting locations, and specialty support centers.

---

#### PROGRAMMATIC DRIVERS

##### 1 Commons

Facilitates cross-disciplinary interaction across campus.

##### 2 Connection

Connects between research, academic, and clinical destinations.

##### 3 Legibility

Puts forward a well-defined primary route through campus.

##### 4 Convenience

Allows for centralized access to shared programs and facilities.

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#### ADJACENCIES

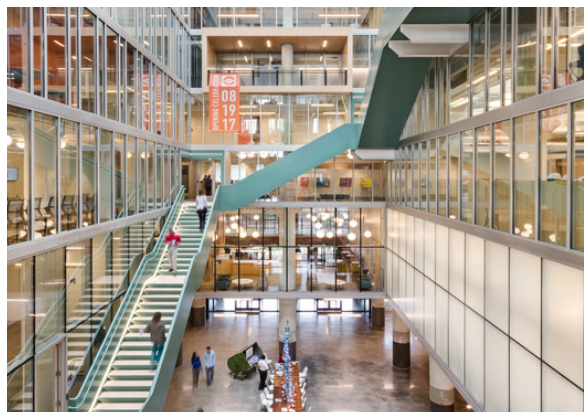
- Close to the forum, dining venues, and other social spaces.
- Access to and from vertical circulation cores.
- Location on floors with a restricted access strategy.

#### POTENTIAL DEPENDENCIES

- Coordination with a comprehensive design and programming exercise.
- Connection throughout renovated and new structures, between research facilities and clinical spaces.



Cross-campus connection



Convenient access

### Forum

---

#### DESCRIPTION

- Multi-purpose large assembly space.
  - Multi-level atrium with informal meeting spaces.
  - Open seating area with an emphasis on transparency and flexibility.
  - Memorable, welcoming features for the public.
  - Primary campus meeting place and location for events.
- 

#### PROGRAMMATIC DRIVERS

##### 1 Community

Provides a venue for campus lectures and public functions.

##### 2 Campus core

Co-locates experiences and signature events in a central location.

##### 3 Serendipity

Allows cross-campus encounters in a creative hub.

##### 4 Collaboration

Supports campus interaction and collaboration.

---



Multi-level activated atrium

#### ADJACENCIES

- Public access, central location.
- Near major arrival point.
- Access to and from major program areas on campus.

#### POTENTIAL DEPENDENCIES

- New construction in identified opportunity site.

## 4.3 NEW PROGRAM APPROACHES

### Living Room

---

#### DESCRIPTION

- Flexible spaces for meetings and collaborations.
  - Options for food and beverage (cafes or coffee carts).
  - Comfortable seating areas to unwind and socialize.
  - Calm, quiet environment that supports solo and group work.
- 

#### PROGRAMMATIC DRIVERS

##### 1 Convergence

Connects faculty and students in an informal setting.

##### 2 Liveliness

Fosters a lively environment between classes.

##### 3 Aesthetics

Provides beauty through natural light and outdoor access.

##### 4 Convenience

Features on-demand meeting space, social areas, and amenities.

---

#### ADJACENCIES

- Proximity to instructional activities.
- Adjacent to Saunders Court or other public realm landmarks.
- Central location.

#### POTENTIAL DEPENDENCIES

- Inclusion in new buildings or renovated space.
- Coordination with on-going improvements at Saunders Court.



Informal seating



Central place to unwind



### Faculty/Staff Workspace Hoteling

---

#### DESCRIPTION

- Secure space with access to desks, charging outlets, and conferencing systems.
  - Flexible seating and meeting spaces with distributed locations to reduce travel time to and from other campus activities.
  - Reservation and check-out systems.
  - Places to store items for longer periods when not in use.
  - Available during and after business hours.
- 

#### PROGRAMMATIC DRIVERS

##### 1 Flexibility

Accounts for accessibility and adaptability concerns.

##### 2 Security

Supports a secure environment with an access restriction strategy.

##### 3 Convenience

Responds to need for meeting places on campus.

##### 4 Convergence

Allows flexible staff movement and cross-campus collaboration.

---



Convivial, flexible work spaces

#### ADJACENCIES

- Close to teaching and research spaces.

#### POTENTIAL DEPENDENCIES

- Associated with potential campus concourse.

## 4.3 NEW PROGRAM APPROACHES

### Science on Display

---

#### DESCRIPTION

- Distributed exhibition spaces to educate the public and visitors about UCSF's cutting-edge breakthroughs.
  - Community/public access.
  - Information on UCSF legacy to inspire visitors, faculty, and students.
- 

#### PROGRAMMATIC DRIVERS

##### 1 Informative

Shares knowledge about cutting-edge activities at UCSF.

##### 2 Inspirational

Inspires students, staff, and visitors with UCSF's legacy.

##### 3 Trust

Helps UCSF develop its image beyond that of a medical center.

##### 4 Public

Welcome public to understand the institution's impact.

---

#### ADJACENCIES

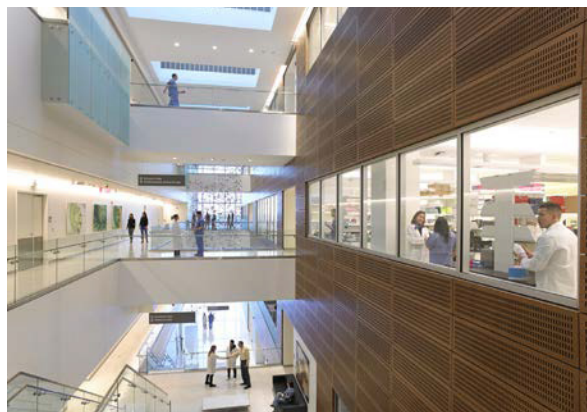
- At campus arrival points and major building entrances.
- Ground floor locations near the hospital, public spaces, or library.
- Locations with excellent views.

#### POTENTIAL DEPENDENCIES

- Inclusion in new buildings or renovated space.



Inspiring environment



Visible activities

### Incubator Space

#### DESCRIPTION

- Contemporary lab space, fitted yet flexible to adapt to chemistry, bioengineering, and biological research layout needs.
- Modern office designs, with meeting spaces for UCSF collaborators.
- Access to research areas while maintaining separation for privacy or space ownership considerations.
- Tools for networking and partnerships.

#### PROGRAMMATIC DRIVERS

##### 1 Convergence

Supports interaction across research and clinical groups.

##### 2 Partnerships

Allows for opportunities to work with industry research partners.

##### 3 Serendipity

Promotes interactions to foster discoveries.

##### 4 Innovation growth

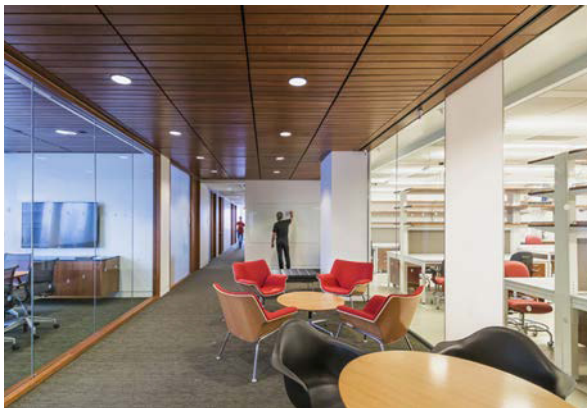
Supports continued excellence on campus.

#### ADJACENCIES

- Separation from campus functions with controlled access to limit security issues and concerns.
- Proximity to program spaces for socialization between partners, students, and researchers.

#### POTENTIAL DEPENDENCIES

- Inclusion in new buildings or renovated space.
- Coordination with new research and educational facilities.



Interaction



Conferencing



# 4.3 NEW PROGRAM APPROACHES

## Wellness Facilities

### DESCRIPTION

- Contemporary wellness center and healing environment.
- Recreational amenities (pool, equipment, fitness rooms).
- Access to natural light, views, and greenery.
- Spaces for mind and body restoration.
- Spaces for seminars and learning to support healthy choices and living.

### PROGRAMMATIC DRIVERS

#### 1 Healthy lifestyle

Improves clinical outcomes through exercise and recovery.

#### 2 Holistic Healing

Proposes comprehensive cures that consider the whole person.

#### 3 Restoration

Applies biophilic principles, with views and access to nature.

#### 4 Inclusivity

Provides community amenities: events, seminars, and education.

### ADJACENCIES

- Convenient access to physical therapy users and patient recovery.
- Locations with uplifting views and natural light.
- On-street location or convenient street access.

### POTENTIAL DEPENDENCIES

- Integration with human-centric research efforts in physical therapy, health, and wellness.
- Coordination with new construction opportunities.



Contemporary designs



Views to nature

# Patient Family Lodging

### DESCRIPTION

- Housing for longer term outpatient stays and inpatient families.
- Access to specialized staff to foster a sense of community and appropriate response to clinical needs.
- Private entrances or lobby.
- Standard rooms with some larger units dedicated to families and potential communal kitchens.
- Visual privacy and outdoor spaces.

### PROGRAMMATIC DRIVERS

#### 1 Affordability

Remains cost attainable for a wide range of users groups.

#### 2 Community

Creates communal, welcoming, and warm environments.

#### 3 Short Term

Supports short-term stays for visiting caregivers and families.

#### 4 Proximity

Allows loved ones and family to stay close-by and provide support.

### ADJACENCIES

- Street access.
- Proximity to dining and other amenities.
- Convenient location to/from hospital entry.
- Access to parking.

### POTENTIAL DEPENDENCIES

- Coordination with new hospital planning.
- Associated real estate and financial feasibility studies.



Communal kitchen



Welcoming lobby spaces

## 4.3 NEW PROGRAM APPROACHES

### Food, Beverage, Retail

---

#### DESCRIPTION

- Distributed dining options across campus.
  - Diverse, local, and healthy food venues.
  - Lifestyle dining, pubs, small coffee kiosks as feasible.
  - Convenience store network such as pharmacy, small grocery, dry cleaners, or other services useful for day-to-day living.
  - Ample natural light, comfortable seating, and welcoming features.
- 

#### PROGRAMMATIC DRIVERS

##### 1 Holistic health

Supports UCSF wellness mission through healthy and diverse food options.

##### 2 Convenience

Anticipates the needs of daily users and long-term visitors.

##### 3 Community

Strategically ties into the existing neighborhood business networks.

##### 4 Social

Fosters sense of social community around healthy lifestyles.

---

#### ADJACENCIES

- Distributed locations with easy access to/from main buildings on campus.
- On-street entry for most venues.
- Some food and beverage services embedded within campus buildings.

#### POTENTIAL DEPENDENCIES

- Coordination with new hospital and associated services programming.
- Inclusion in new buildings or renovated space.



Neighborhood style food venue



Convivial social space



## NEW PROGRAM APPROACHES 4.3

In addition to campus research spaces, such as hybrid, wet, and dry labs with associated support areas (see Best Practices in Chapter 8), the vision for Parnassus Heights accommodates a range of activities in the support of science and discovery. The vision for Parnassus Heights also gives new emphasis to sharing UCSF's scientific achievements with the public with "Science on Display." These spaces aim to bring together the key participants in UCSF's activities to foster convergence between mission areas and further highlight the University's achievements for the community.

Alongside the modernization of classrooms (see Best Practices in Chapter 8), new learning spaces support an increase in desired interactions between learners, faculty, and researchers as well as more space for applied learning experiences. New generous spaces foster casual gatherings to more formal collaboration and suggest the need for a centralized convening location that does not currently exist at Parnassus Heights, such as

the "Forum." Additional projects are also being considered for the Kalmanovitz Library, leveraging its resources as part of the core learning areas on campus.

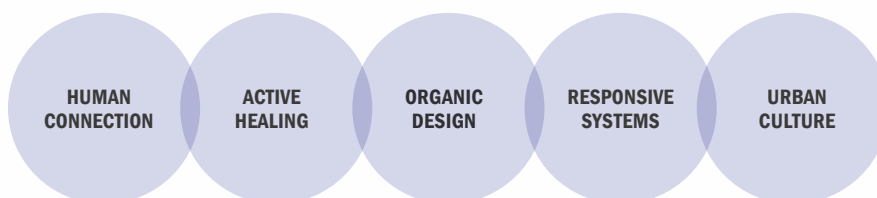
The clinical enterprise at Parnassus Heights includes the adult care hospitals, outpatient clinics, and clinical research activities. Today, an estimated 26% of the campus space is dedicated to clinical activities. UCSF Health plans to construct a new adult care hospital at Parnassus Heights by 2030, conceived as "The Hospital of the Future."<sup>1</sup> The campus site and hospital can leverage this opportunity to create a broad variety of spaces for physical, emotional, and social wellness. In the future, care will extend beyond the four walls of the hospital and the campus will emphasize hospitality and holistic wellness as integral to design.

Clinical spaces are designed to support the translational mission on campus, including areas that facilitate collaboration, and interactions between researchers, faculty, and patients.

---

1. Brand Bureau Concept Presentation, *Hospital of the Future at Parnassus Heights*, UCSF Helen Diller Medical Center, October 2018.

The Hospital of the Future is **The Healing Habitat**, a holistic experience and environment that fosters wellness for all.



4.6. "The Healing Habitat" concept is a holistic approach to healing.

## 4.3 NEW PROGRAM APPROACHES

### “HOSPITAL OF THE FUTURE” VISION (BRAND BUREAU)

- The Hospital of the Future is a new kind of hospital. It's a place that invites people in (patients, providers, and learners) and reflects the culture and diversity of its community. It is grounded in treating people as individuals and responding to the holistic needs of all of its users.
- The hospital should be more than a treatment center: it is a thought leader, health influencer, and a platform for all-round wellness.
- **Symbiotic spaces:** Future hospitals will need to create spaces that consider human interaction holistically.
- **Anticipatory design:** Design that not only predicts the needs and wants of users, but also adapts to them.
- **Connective technology:** Technology will become a conduit for seamless human connection and a gateway to the world.
- **Communal recovery:** Hospitals as connectors, enabling continued care and support among at-home patients.
- **Holistic care:** Hospitals focus on individualizing care experience based on each and every patient.
- **Healing environments:** Future hospitals will not only treat patients but also foster healing and overall wellbeing.
- **Lifestyle dining:** Food programs will fully integrate into the experience as a core component of healing.
- **Integrated retail:** Rather than occupying dedicated spaces, retail will be seamlessly incorporated.

#### Five Imperatives for the Hospital of the Future:

- ▶ Create spaces that heighten physical and emotional health.
- ▶ Be porous—an influential healing presence within its community.
- ▶ Be an industry thought leader and platform for information sharing.
- ▶ Establish a human relationship between the individuals and the institution.
- ▶ Offer an experience that seamlessly adapts to users' needs and lifestyles.



## NEW PROGRAM APPROACHES 4.3

UCSF's diverse, active population spends long hours on campus, and is a significant contributor to its local neighborhood. A re-envisioned Parnassus Heights can enhance work-life balance for employees and students. Additionally, it will provide a range of convenient amenities both for the campus daily population and its nearby neighbors. New opportunities to live on or near campus will give back time and energy to users, increase social opportunities, and limit vehicular trips.

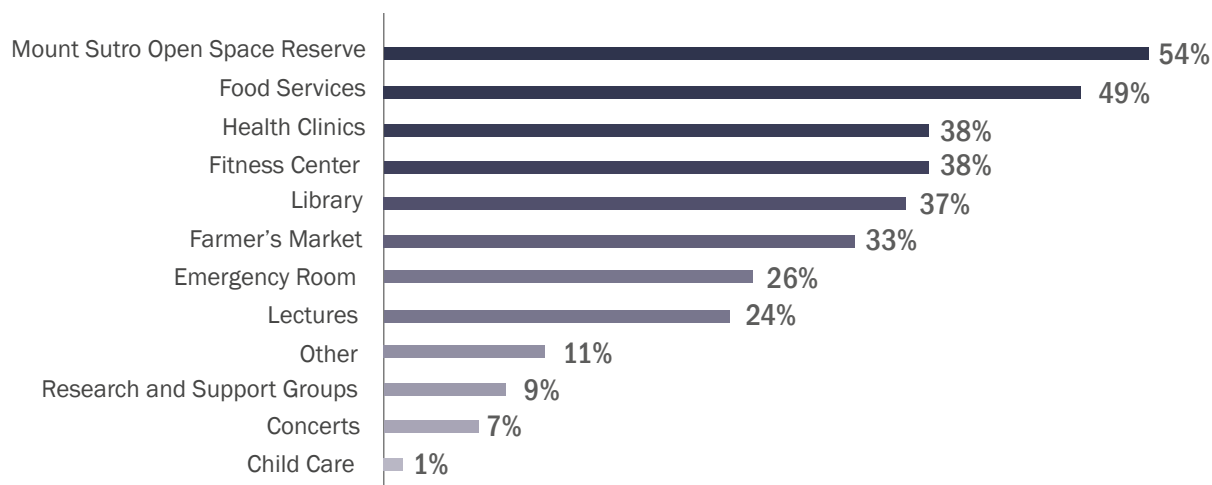
### **A New Approach to Housing**

To better manage extreme costs of living in San Francisco and offer a stable housing supply to its population, UCSF is exploring how to grow its overall housing portfolio. Affordable, accessible housing options are critical to the successful recruitment of faculty and students, as well as long-term employee retention.

Currently, housing across all UCSF sites totals 1,251 units of faculty and student/trainee housing. The estimated demand in 2025 for student/trainee housing is 2,030 units. Estimated demand for faculty housing is 345 units, predominantly for incoming junior faculty.

The Tidelands (Minnesota Street housing), opened in 2019, added 595 units for students and trainees. The 2130 Post Street property will add 70 faculty units in 2020. A phased plan for student housing at UC Hastings would add 341 units to UCSF's housing portfolio (see Figure 4.10).

A range of housing types and configurations were explored during the CPHP process resulting in some conceptual approaches for housing. These included student and trainee housing, faculty housing, long-term stay (i.e. patient and family lodging), and workforce housing.



4.7. Most frequently used programs and amenities at UCSF Parnassus Heights by the local community. Data from 2018 UCSF Parnassus Heights Campus Neighborhood Survey.

## 4.3 NEW PROGRAM APPROACHES

Faculty and workforce housing types were tested both with and without on-site, dedicated parking, while student/trainee housing types were assumed without dedicated parking.

Unit size and mix assumptions, as well as relative construction costs were based on UCSF existing housing developments and conceptual studies. UCSF housing is typically subsidized at below market rates and must be carefully tailored to each user group, with distinct attributes for location, unit size and type, rates, and lease terms.

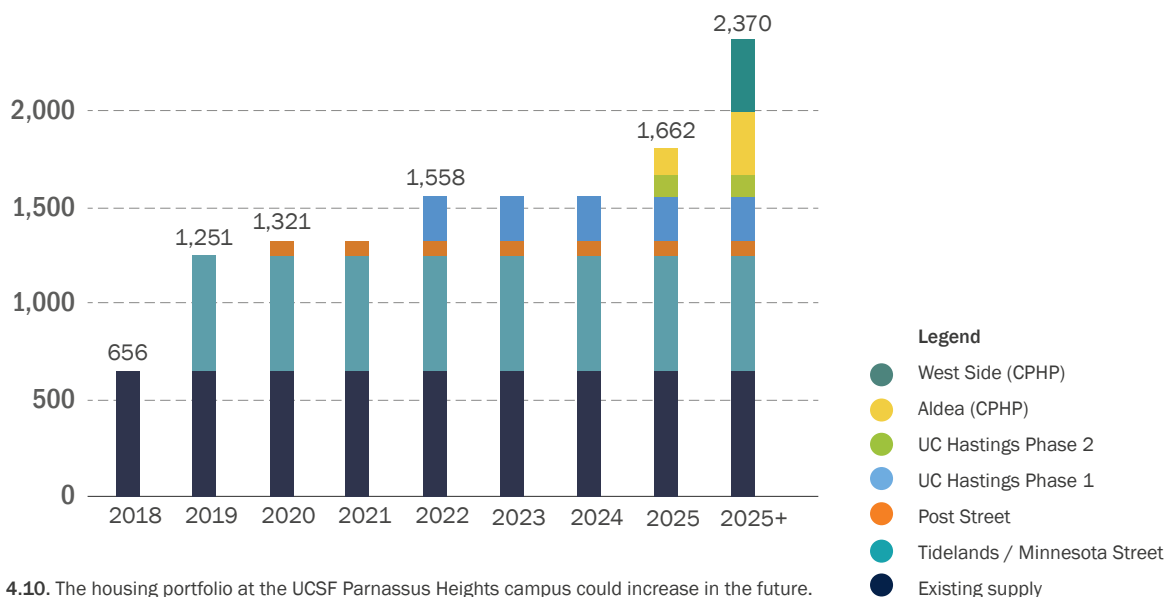
Table 4.9. estimates the potential to add housing to the Parnassus Heights sites shown in Figure 4.11. over the duration of the Plan. Future housing mix, tenure, quantity, design, and parking requirements will be determined on a project by project basis.

	West Side	Aldea
Average Unit Size	370-900 gsf	650-830 gsf
Number of Stories	Up to 10	Up to 8
Number of Units	426	504
Parking per Unit	0-1/unit	1/unit

4.8. Housing assumptions.

LOCATION	Units (2019)	Projected
Aldea	172	504
West Side	0	426
Avenue Housing	14-17	14-17
Total PH Campus Site	189	947
Total UCSF	1251	2370

4.9. Existing and projected housing stock.



4.10. The housing portfolio at the UCSF Parnassus Heights campus could increase in the future.



## NEW PROGRAM APPROACHES 4.3

### **Housing in the West Side**

The West Side is a potential location for a significant amount of housing, as well as supplementary social spaces and student support services. UCSF will explore student housing, as well as other related housing types including workforce housing.

### **Aldea Community**

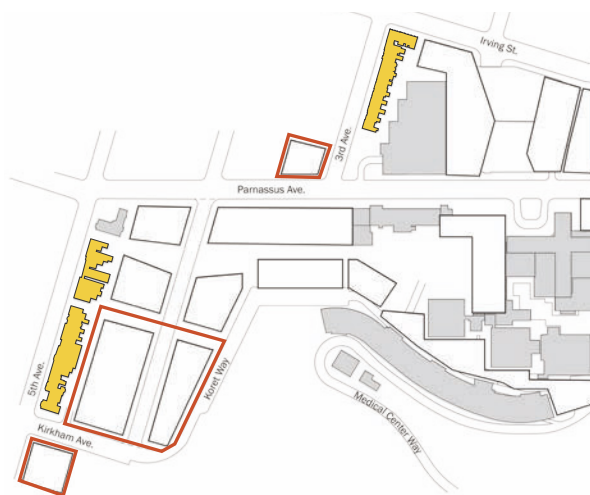
Located within the Mount Sutro Open Space Reserve, Aldea is a landing place for students and trainees with families. Made up of a mix of 1960's and 1990's buildings, Aldea provides apartment housing on a two-year lease term including one-bedroom, two-bedroom, and junior one-bedroom units.

UCSF will explore the incremental transition of Aldea's existing housing stock to upgrade older buildings, make better use of the site, and meet

long-term housing demand. Priority will be given to buildings with the most significant deferred maintenance requirements first. A more intensive housing program at Aldea is envisioned, continuing to prioritize families and adding up to 332 units in contemporary structures. While this population increase may require transportation improvements such as more frequent shuttles, the plan forecasts one parking space per unit due to the remote location and distance to public transit.

### **Child Care**

UCSF will continue to offer child care services for its population. The CPHP seeks to improve availability of on-campus child care services. Future locations should be selected to offer access to outdoor space and proximity to shuttle services. Preliminary studies have explored the provision of new and expanded services in future locations at Aldea (50 Johnstone), or in the West Side (Proctor site).



4.11. Existing housing and opportunities at Parnassus Heights.



#### **Legend**

- Existing housing
- Long term new opportunity
- 1960s apartments at Aldea



Irving St.

# **5 A FLEXIBLE PLAN**

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- 5.1 PLANNING FOR CHANGE**
- 5.2 OPPORTUNITY FRAMEWORK**
- 5.3 PLANNING FOR GROWTH**
- 5.4 PLANNING FOR SUSTAINABILITY**

# A FLEXIBLE PLAN

## 5.1 PLANNING FOR CHANGE

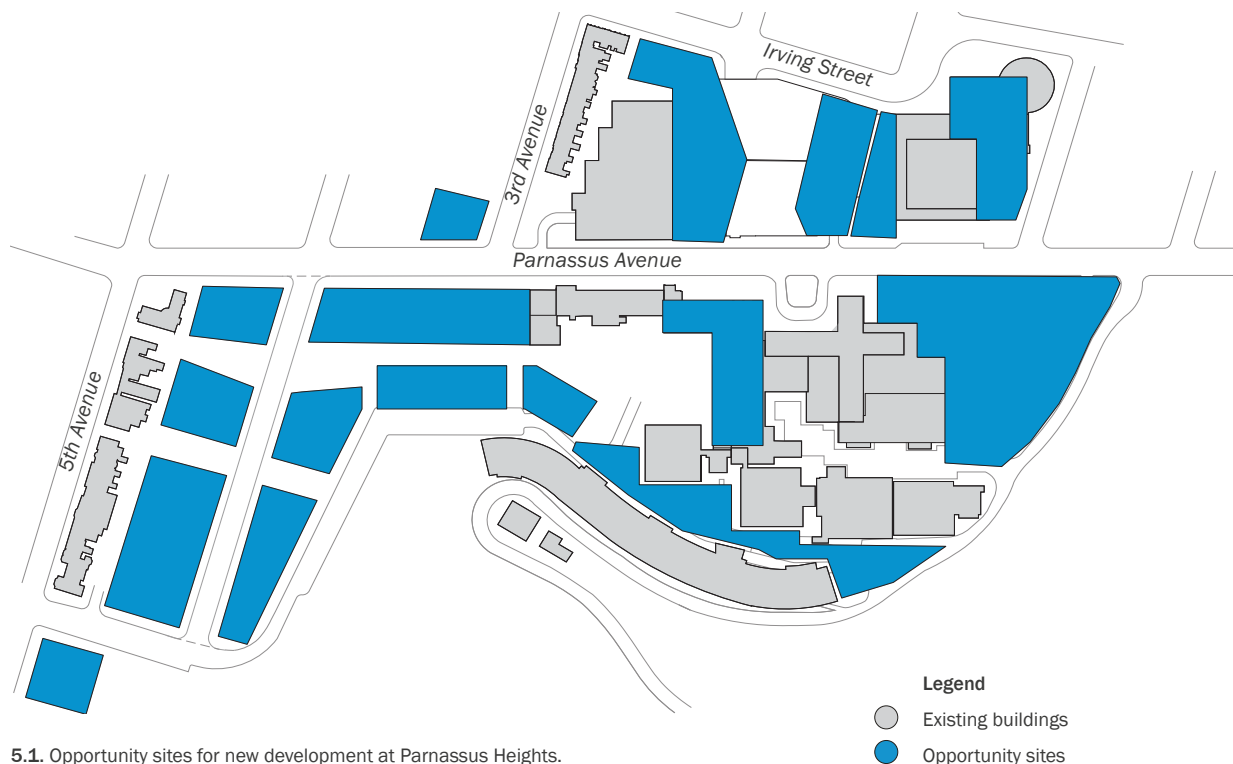
The following section establishes a long-term development framework for the revitalization of the Parnassus Heights physical environment.

Areas of potential change are illustrated in Figure 5.1, as “opportunity sites.” Opportunity sites reflect infrastructure deficiencies and long-term structural viability as shown in Figure 5.2. The Plan assumes the eventual demolition and replacement of up to 26% of existing program space to create opportunity sites.

Planning for change enables long-term decision-making and generates opportunities for strategic growth, new public realm improvements,

improved campus functionality, and the ability to decompress, decant, and renovate buildings efficiently. The estimated capacity of all combined opportunity sites (Figure 5.1) is responsive to program needs identified in Chapter 4. Opportunity sites accommodate space for:

- Growth for research and education facilities to maintain top-tier status.
- Growth assumptions for future patients and to accommodate the new hospital building for the Helen Diller Medical Center.
- New on-campus housing opportunities.
- Public realm improvements and amenities.



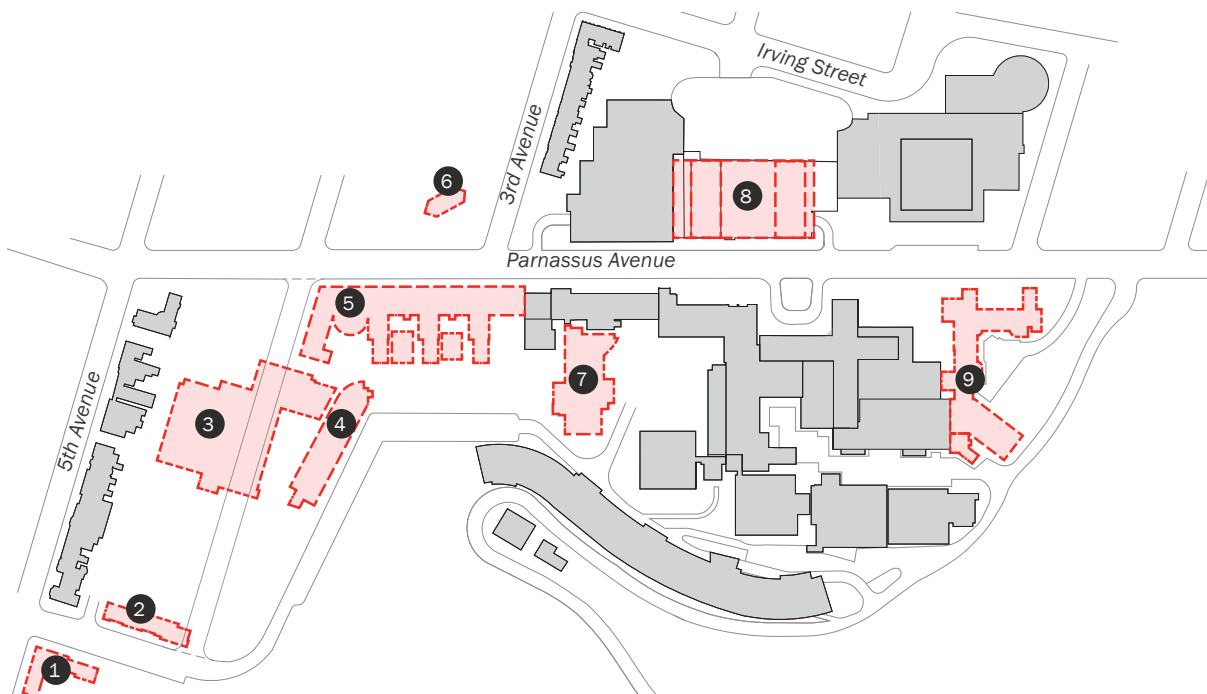


### 5.2 OPPORTUNITY FRAMEWORK


Pages 86-89 illustrate a future campus vision reflective of opportunity sites, organizing principles, and identified space needs. This framework helps establish preferred building placement, scale, height, and campus circulation and introduces desired urban design considerations for a campus promenade, neighborhood integration, “Park to Peak” connections, and view corridors.

The framework also explores how to be responsive to new approaches to campus quality of life such as housing, child care, space for public-facing programs, as well as health, wellness, and patient family lodging.

1. Proctor
2. Kirkham Child Care
3. Dental Clinics
4. Koret Vision Research
5. UC Hall
6. Lucia Child Care Center
7. School of Nursing building
8. Millberry Union East and West Towers
9. LPPI



5.2 Over the plan period, identified buildings will require significant investments to address challenges.

**Legend**  
 Candidate for demolition

## 5.2 OPPORTUNITY FRAMEWORK

The campus vision encourages the consolidation of campus functions and clarifies uses while addressing space needs, creating opportunities for growth and convergence.



For illustrative purposes only: image does not represent architectural design.



## OPPORTUNITY FRAMEWORK 5.2



### 1. Service Corridor

Develop back-of-house utility and material distribution systems for efficient campus operations (alignment to be determined).

### 2. Renovations

Support sustainable growth.

### 3. “Campus Heart”

Create the campus heart at Saunders Court and connect to the West Side of campus.

### 4. New opportunities

Support convergence between missions with new buildings and linkages.

### 5. New public spaces

### 6. Restored 4th Avenue

### 7. Housing

Explore long-term housing opportunities on the West Side.

### 8. Streetscape

Improve Parnassus Avenue.

### 9. Community

Integrate programs with the surrounding neighborhood.

### 10. Gateway

Locate programs that activate Irving Street.

### 11. Clinical East End

Consolidate clinical services in the East End and support a holistic patient/visitor arrival experience.

### 12. New hospital

Future location for the new hospital building at the Helen Diller Medical Center.

### Legend

- Existing buildings
- Opportunity sites  
(Not representative of design)



## 5.2 OPPORTUNITY FRAMEWORK

The vision provides the opportunity for new amenities and “Park to Peak” connections via an activated, public ground plane. The expansion of public spaces shown below is estimated to be a three-fold increase over today’s condition.





## OPPORTUNITY FRAMEWORK 5.2



### 1. Service Corridor

### 2. Pedestrian connections

Connect the campus to Mount Sutro via a pedestrian connection at the service corridor.

### 3. "Campus Heart"

Create the campus heart at Saunders Court and connect to the West Side of campus.

### 4. Promenade

Enhance campus public space with a large central promenade bridging the Campus Heart to the West Side.

### 5. Trail

Coordinate with planned trailheads to Mount Sutro.

### 6. Forest views

Maintain visual connection to Mount Sutro.

### 7. Forest

Continue stewardship of the Mount Sutro Open Space Reserve.

### 8. Open space visual connection

### 9. Community

Provide a home for community amenities.

### 10. Neighborhood

Keep Avenue houses in place to serve as a buffer between the campus and adjacent neighborhood.

### 11. Lodging

Explore lodging for patient families.

### 12. Millberry Terrace

### 13. Park-to-Peak

Enhance connections to Golden Gate Park.

### 14. Across Parnassus Avenue

Explore a bridge and a tunnel.

### Legend

- Existing buildings
- Opportunity sites  
(Not representative of design)
- Public spaces

## 5.3 PLANNING FOR GROWTH

### 5.3 PLANNING FOR GROWTH

#### **A History of Growth at Parnassus Heights**

Parnassus Heights is the oldest and largest campus site belonging to UCSF. Since 1898, when the Affiliated Colleges, including medical, pharmacy, and dental schools, relocated to 13 acres of donated land on a site overlooking Golden Gate Park, the campus site has grown in size, population, and prominence. UCSF has evolved from its original campus at Parnassus Heights to its current multi-sited configuration, decentralizing its activities to various locations throughout San Francisco. However, Parnassus Heights still remains a significant site for research, clinical care, and education of the next generation of health sciences professionals.

In response to neighborhood concerns about continued expansion and development of the Parnassus Heights campus site, the Board of Regents of the University of California adopted a number of recommendations to limit growth in a resolution approved in 1976 (1976 Regents' Resolution). These included the designation of the Mount Sutro Open Space Reserve as permanent open space, establishment of campus boundaries, a commitment to maintain residential use of houses on the west side of the campus site, authorization to negotiate the sale of specific properties, an annual average daily population goal for the campus, and agreement to complete transportation studies. Perhaps most relevant to the Comprehensive Parnassus Height Plan, the Regents' Resolution also established a limit on the total gross square feet (gsf) of structured space within the campus boundary, commonly known as the space ceiling.

The 1976 Regents' Resolution specified that the total amount of structured space within the campus boundaries is not to exceed 3.55 million gsf, excluding space committed to residential use on Third, Fourth, Fifth, and Parnassus avenues and Kirkham and Irving streets. In the 1976 Long Range Development Plan (LRDP) and all subsequent LRDPs, UCSF has proposed to reduce its space ceiling overage by demolishing certain structures over time. While buildings have been demolished since the 1976 Regents' Resolution took effect, there have also been new buildings constructed at the campus site in order to meet the evolving programmatic needs of campus users.

The 1976 Regents' Resolution was updated in the 2014 Long Range Development Plan to exclude all residential space. This change, which specifically excluded the Aldea housing complex from the space ceiling calculation, was made with the support of the broader community with the intent of incentivizing UCSF to create more on-site campus housing without such development counting toward the space ceiling. The change also placed UCSF in a better position to improve its jobs-housing balance, lessen traffic impacts, and focus the monitoring of space on non-residential uses. Further, it enabled UCSF to better support the City's overall housing goals.

When the housing modification was adopted, the amount of space subject to the space ceiling in the 2014 LRDP totaled 3.71 million gsf, an overage of approximately 162,400 gsf or about 4.6 percent.

The 2014 LRDP also reaffirmed continuing commitments with respect to the Regents Resolution, including: (1) maintaining the designation of the Mount Sutro Open Space

Reserve as permanent open space; (2) continuing to respect the Parnassus Heights campus boundary established in 1976, and (3) continuing to adhere to an expansion restriction area within which UCSF will not acquire property or lease private residential property.

### **Changes Since the 1976 Regents Resolution was Instituted**

Since the space ceiling was adopted as part of the Regents Resolution in 1976, significant changes have occurred in the City and the region. Both San Francisco and the Bay Area have seen substantial population growth. Between 1976 and 2017, San Francisco's residential population grew by about 28%, while the Bay Area's population increased by about 56%. Concurrent with this, the number of inpatients and outpatients treated at the Parnassus Heights campus has increased at a higher rate than the area's population growth, a result of UCSF's expanding role as a critical health care provider in San Francisco, the Bay Area, and across northern and central California. In San Francisco alone, UCSF's share of overall hospital discharges grew from 22 percent in 2001 to 34 percent in 2017. Between 2017 and 2019, the patient census at Parnassus Heights continued to climb, and steady growth is projected through 2034. This reflects UCSF's strategic importance as a regional patient referral center and an important provider of specialty care. The growth in the patient population at the Parnassus Heights campus is also reflective of the advancements in clinical care and treatment pioneered by UCSF. Since the mid-1970s, these advancements have included: fetal surgery to improve the long-term outcome of children with specific illnesses, brain mapping to safely remove tumors, targeted therapy to treat

forms of multiple sclerosis, prenatal tests for the identification and treatment of inherited blood diseases, and the evolution of gender-based health care, among others. Importantly, the Parnassus Heights campus is also home to one of the oldest and most respected programs in transplantation in the world, pioneering new treatments for diseases of the kidney, liver, and pancreas.

### **Parnassus Heights Space Needs Today and in the Future**

UCSF has grown significantly over the last two decades, not just in space and population, but also in terms of programmatic breadth and complexity. UCSF's growth has historically been driven by federal research funding, including grants from the National Institutes of Health and other governmental and non-governmental sources, and by inpatient and outpatient clinical volumes. In addition, philanthropy has been a significant driver of UCSF's capital construction.

A thorough assessment of the future forecast of these historic drivers of UCSF growth was conducted as part of the 2014 LRDP planning process. Based on information available at the time, future research funding was anticipated to grow at a modest and slower pace than UCSF had experienced in the previous two decades. Ongoing changes in the local, regional, state and national health care landscape were also considered, as were the impacts these changes were projected to have on future inpatient and outpatient volumes and, therefore, the need for, and location of, new or expanded UCSF clinical facilities. Further, the State of California's and the University of California's seismic requirements—which call for the replacement of certain facilities, including

## 5.3 PLANNING FOR GROWTH

hospitals—were factored into the 2014 LRDP’s growth projections.

Over the last five years, however, UCSF’s research enterprise has grown at higher than expected rates, due to factors including significant advances in existing programs and the development of new, leading edge programs. In addition, the Research Space Working Group, which reported to the Parnassus Master Plan Steering Committee, recommended that the research program portfolio for Parnassus Heights be expanded to allow for a critical mass of investigators in basic, clinical, and translational science, whereas previously, the focus at Parnassus has been on clinical and translational research. This expansion furthers the integrated, collaborative model of research that fosters vibrant, transformative new research and discovery. Aging wet bench laboratory spaces at Parnassus Heights have not kept up with advances in the sciences that they support, and a lack of “swing space” makes renovation of existing research space challenging.

On the clinical side, patient volumes have increased beyond 2014 projections. Today, UCSF’s patient census is at a record high. Moffitt Hospital was built in 1955, and physicians and staff are working in facilities that are outdated, inflexible, undersized, and clinically obsolete. While the 2014 LRDP forecast that a new 308,000 gsf hospital would replace inpatient activity currently in Moffitt Hospital, updated and recent demand analysis directs that a larger hospital will be required to ensure that UCSF can continue to provide the scope and quality of specialized clinical care to the patients who will need it. The long-term success and viability of UCSF Health, which in 2018 generated more than 60 percent of UCSF’s

overall revenue, is critical to sustaining UCSF’s public mission of providing top-quality care to patients and supporting research and education. This convergence of mission areas is highly prized by faculty and students at Parnassus Heights, and each component relies on robust participation from the others. In addition, providing quality facilities is critical to retaining and recruiting top-tier clinicians, staff, researchers, and students.

In an effort to carefully consider and weigh these issues, UCSF has been actively engaged in a planning effort to re-envision and revitalize the Parnassus Heights campus site to create a place that fosters collaboration among education, research, and patient care activities in ways that continue to promote excellence and advance human health. The planning process resulted in the development of the Comprehensive Parnassus Heights Plan (CPHP), which provides a long-term development framework for the revitalization of the Parnassus Heights physical environment, with the goal of also strengthening the economic and cultural vitality and livability of the entire neighborhood.

The CPHP process included the convening of four UCSF faculty/staff working groups to ensure that the plan could support the programmatic needs of our faculty and staff in the coming decades. Two of the working groups (CoLabs and Research Space) provided detailed quantities of space based on comprehensive review and analysis, while the Digital Hub Working Group projected headcounts that were subsequently translated into physical space needs, based on UCSF and peer benchmarking. The Education Space Working Group provided qualitative recommendations that, through consultation with working group members



## PLANNING FOR GROWTH 5.3

and the consultant team, were used to quantify the necessary space need.

The working group reports are summarized in Section 4.2, and the full reports can be found in Appendix B.

The initial sequence of projects as described in this plan includes a new hospital at the Helen Diller Medical Center, a new Research and Academic Building, development of an arrival/lobby space from the Irving Street entrance up to Parnassus Avenue, and densification of Aldea Family Housing. The exact space needs of the new hospital are currently the subject of detailed planning. The recommendations of the four faculty/staff working groups include 472,000 gsf of new space for research. The Irving Street Arrival is currently assumed to comprise approximately 25,000 gsf of net new space. Additional housing at Aldea would not count toward the space ceiling. The recommendations of the Education Space Working Group would be met in existing space or in replacement space following demolition of existing space.

Growth of the research and clinical environment would also require academic offices, clinician offices, and campus administrative space, as well as an increase in space for logistics in the form of a service corridor embedded beneath the east-west promenade (estimated at 43,500 gsf) and additional structured parking (approximately 66,000 gsf).

The total amount of existing space at the Parnassus Heights campus site in 2019 is 3,920,500 gsf, which includes 241,900 gsf of housing.

The total amount of future space needed to realize the total vision of the CPHP is approximately 5,965,300 gsf, which includes 915,300 gsf of housing.

In order to meet these critical space needs, UCSF proposes to modify the Regents Resolution to increase the space ceiling by 1.5 million gsf, from 3.55 million gsf to 5.05 million gsf.

## 5.4 PLANNING FOR SUSTAINABILITY

### 5.4 PLANNING FOR SUSTAINABILITY

UCSF is committed to achieving carbon neutrality by 2025. Defined as “net zero climate impacts from greenhouse gas (GHG) emissions” from new and existing buildings, it will be achieved both by minimizing these emissions and using measures to mitigate the remaining emissions. The *Sustainable Practices Policy* adopted statewide by the University of California establishes goals in nine areas of sustainable practices (see call-out box below).

UCSF prepared a GHG reduction strategy in conjunction with the 2014 LRDP and in alignment with the *Sustainable Practices Policy*, updated in 2017. It will help fulfill the GHG reduction requirements of the State of California Assembly Bill 32 (AB), which requires that California as a whole reduce GHG emissions to 1990 levels by 2020.

The University of California has strong sustainability guidelines for campus developments. All new building projects, other than acute care facilities, are to be designed to outperform the California Building Code energy-efficiency standards by at least 20%. No major project approved after June 30, 2019 can use on-site fossil fuel combustion for heating. New buildings will achieve a USGBC LEED “Silver” certification at a minimum and strive to achieve certification at the “Gold” level.

The re-envisioning of Parnassus Heights provides an opportunity to establish the campus as one of the UC system’s most sustainable sites. The university should consider “District Energy” options, low impact stormwater practices, and green building techniques at the campus scale. The CPHP explored resilience strategies in partnership with 100 Resilient Cities, as highlighted in section 1.4.



5.3. “Resilience Scan Workshop” led by 100 Resilient Cities, February 2019.

## PLANNING FOR SUSTAINABILITY 5.4

### UC CARBON NEUTRALITY 2025 INITIATIVE

- **Wholesale electricity**  
Create a shared service center, which will manage the supply of wholesale electricity.
- **Energy efficiency and renewable energy**  
Continue the efforts on energy efficiency projects and expand them to small- to medium-scale renewable energy sources.
- **Natural gas and biogas procurement**  
Manage purchase of natural gas to mitigate risk and develop renewable natural gas (biogas).
- **Management of environmental attributes**  
Solicit funds to support allowances and carbon offsets in compliance with California's cap and trade program.

#### Sustainable Practices Policy areas:

- ▶ Green building
- ▶ Clean energy
- ▶ Transportation
- ▶ Climate protection
- ▶ Sustainable operations
- ▶ Waste reduction and recycling
- ▶ Environmentally preferable purchasing
- ▶ Sustainable food service
- ▶ Sustainable water systems







## **6 MOBILITY & CIRCULATION**

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- 6.1 PASSENGER LOADING**
- 6.2 PARKING STRUCTURES**
- 6.3 PARNASSUS AVENUE CROSSING**
- 6.4 CAMPUS CIRCULATION**
- 6.5 SERVICE CORRIDOR**

## MOBILITY & CIRCULATION

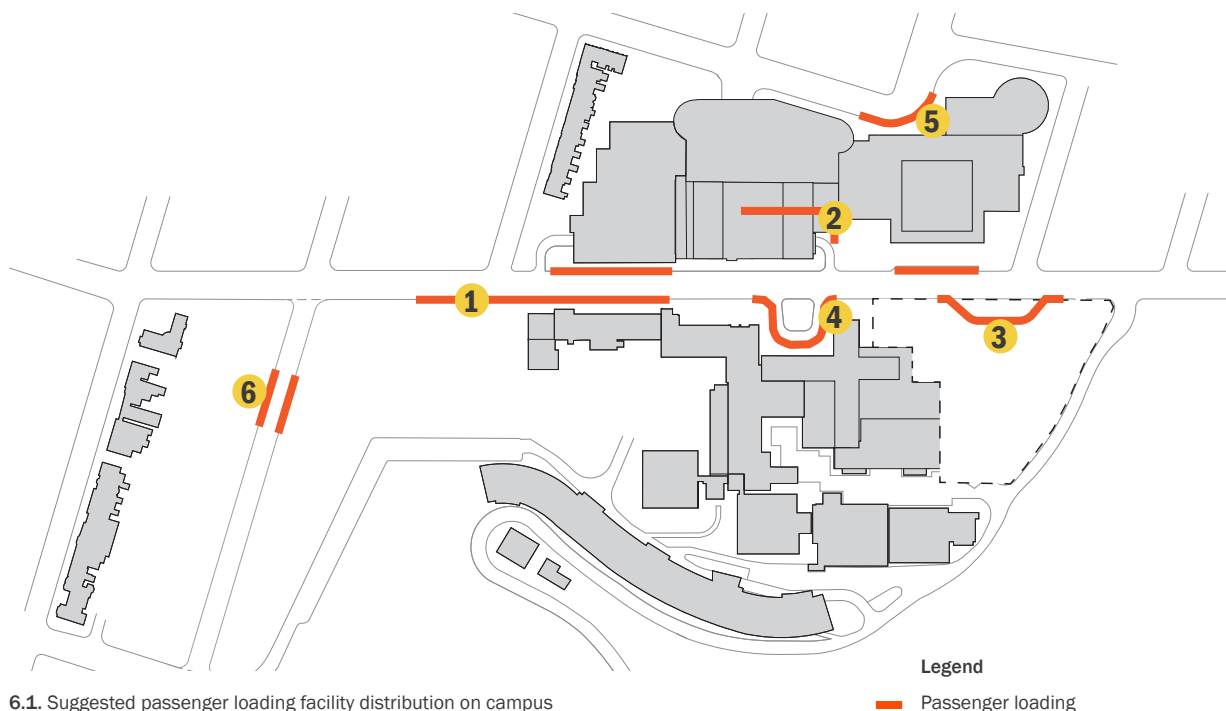
The vision for the Parnassus Heights campus acknowledges the shifting mobility landscape and proposes to further UCSF's goals to:

- Promote sustainable transportation behavior.
- Introduce campus circulation options to reduce impacts on the surrounding neighborhood.
- Improve the patient and visitor parking and arrival experience.
- Create safe on- and off-street passenger drop-off zones.
- Enhance Parnassus Avenue as a campus "main street."
- Optimize existing parking supply.
- Enhance overall campus functionality and efficiency.

### 6.1 PASSENGER LOADING

Projected growth in passenger pick-up and drop-off trips due to the use of ridehail services, such as Uber and Lyft, results in increased demand for on- and off-street curb space and the potential for more vehicle trips arriving and leaving campus. Similarly, the popularity of online purchases and delivery services results in more vehicle trips and increases demand for commercial loading. Strategies to adapt and mitigate resulting impacts to traffic flow and safety can be spatial (e.g., the design and location of new loading zones, improved crossings or traffic calming) and operational.

Figures 6.1 and 6.2 describe a preliminary concept for the expansion of new on- and off-street loading facilities at the Parnassus Heights campus as well



## PASSENGER LOADING 6.1

as the size of passenger loading facilities and the expected number of peak hour loading instances that may occur at the same time.

### **Parnassus Avenue**

Parnassus Avenue serves most of the campus' passenger loading demand. Moffitt Hospital's patient drop-off loop, a valet parking and drop-off area at Medical Building 1 (ACC), dedicated commercial loading spaces that can be used by Millberry Union vendors, the entrance and exit to the visitor parking garage, and several UCSF shuttle and Muni bus stops are also located on Parnassus Avenue. Since it is projected to remain the primary visitor passenger loading location for campus and outpatient services, the Parnassus Heights campus vision introduces new off-street loading facilities associated with the repurposing and renovation of Millberry Union garage. Any new on-street loading zones should be coordinated with implementation of the 2015 *Parnassus Avenue Streetscape Study*.

### **Irving Street**

Irving Street is estimated to account for approximately 55% of arrivals to campus. It is an access point for employee and visitor parking garages and the location of the N-Judah Muni light rail line.

In coordination with the express elevator and lobby arrival improvements discussed in Chapter 7, UCSF should explore designating on-street passenger loading spaces on Irving Street to reduce pressure from Parnassus Avenue. These spaces should be designed to minimize the potential for Muni and existing loading dock conflicts.

### **West Side**

As part of the long-term redevelopment of the West Side, UCSF should designate specific spaces for passenger loading activities to accommodate new development there, especially on the new 4th Avenue.

	Existing spaces	Proposed spaces	Weekday PM peak loading instance range
<b>1</b> Parnassus Avenue	13	13	5-7
<b>2</b> Proposed Millberry drop-off	0	5	1-3
<b>3</b> Potential Future Hospital drop-off	0	8	6-10
<b>4</b> Existing Moffitt Hospital drop-off	6	6	4-6
<b>5</b> Irving Street	0	4	3-5
<b>6</b> Proposed 4th Avenue (West Side)	0	4	2-4
<b>Total</b>	<b>19</b>	<b>40</b>	<b>21-35</b>

6.2. Suggested passenger loading distribution and location. Source: Fehr and Peers.



## 6.2 PARKING STRUCTURES

### Operational Recommendations

- Partner with the San Francisco Municipal Transit Agency (SFMTA) to inventory, assess, and prioritize curb space usage on public streets to safely and efficiently meet multimodal demands.
- Apply mechanisms such as pricing or time limits to balance demand for on-street loading spaces.
- Consider using attendant enforcement of key loading areas, similar to airport curbside operations.
- Use geofencing to restrict ridehail providers to specific locations.
- Introduce measures to ensure vehicles move to the far end of loading areas and/or the back of queues (e.g., signage and/or traffic control).

### 6.2 PARKING STRUCTURES

Two multi-story parking garages provide the majority of the parking supply for the Parnassus Heights campus site, with a total of approximately 2,000 spaces. The ACC garage is used for staff

parking and the Millberry garage is used mainly by patients and visitors.

Updating these garages to improve functionality and address the campus' changing mobility needs will help improve the arrival experience for those who drive to campus. These improvements should be prioritized as near-term, early wins while planning for eventual replacement of the Millberry East and West towers and potential replacement of the garages would occur over the longer term.

### Near Term Recommendations

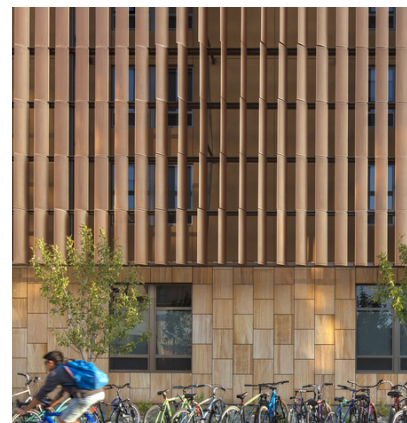
- Improve garage access and ease of use with better lighting and signage for pedestrians to access internal elevators.
- Coordinate strategies for improved aesthetics and functionality with the Irving Street arrival project (Section 7.2) and planning for the new hospital building.



Graphic identity



Clear wayfinding

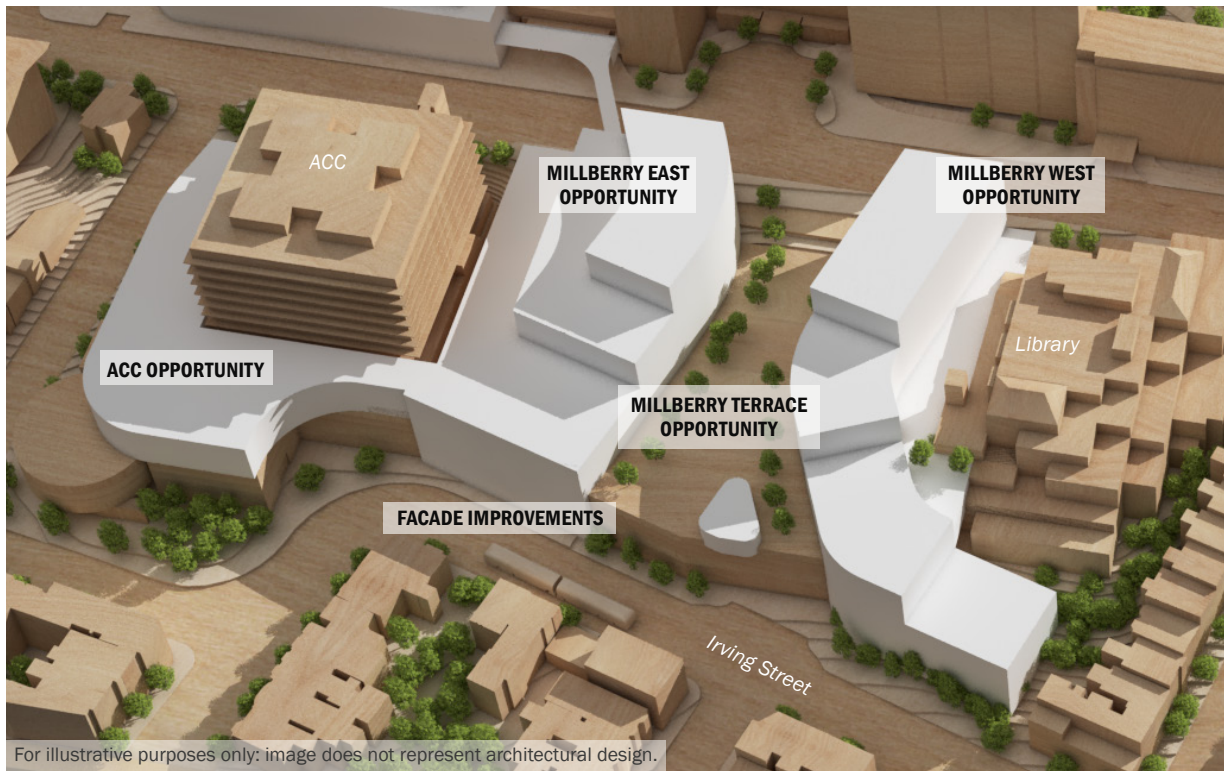


Re-skinned facades

## PARKING STRUCTURES 6.2

### **Long Term Opportunities**

- Introduce a new campus open space on the roof of the Millberry garage (Millberry Terrace) and include new program as feasible.
- Explore repurposing space in the Millberry Union garage near the Parnassus Avenue entrance as an off-street passenger loading facility. Figures 6.4 and 6.5 show preliminary concepts to optimize space and connect this project with the Irving Street lobby, clinical services, and hospital reception areas. These concepts should be developed in coordination with planning for the new hospital building as well as opportunities for the replacement of the Millberry East and West Towers and the creation of the new Millberry Terrace.
- Validate the potential to add a new structure on top of the ACC garage roof as additional campus space opportunity while maintaining garage function.
- In order to streamline redevelopment opportunities and accommodate changes to parking access during construction, explore the use of nearby off-site parking resources.
- Consider increasing valet parking operations beyond the existing service to increase capacity.
- Improve the function and safety of Parnassus Avenue with dedicated off-street loading areas that connect into clinical programs.



**6.3.** In the long term, the Millberry Garage roof could be repurposed as a “Millberry Terrace” and connect into the Irving Street arrival project. This should not preclude the development of Millberry East and West opportunity sites or the replacement of the Millberry Garage if required.

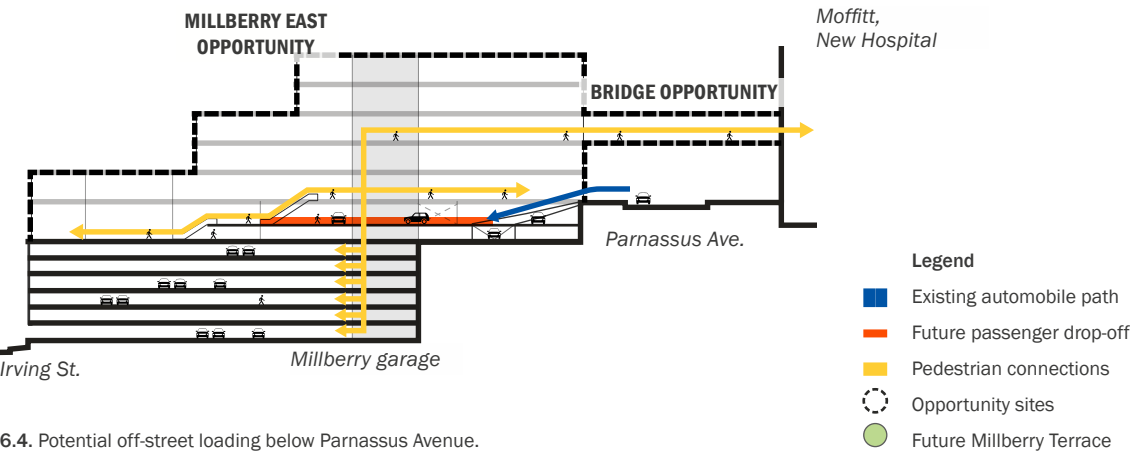
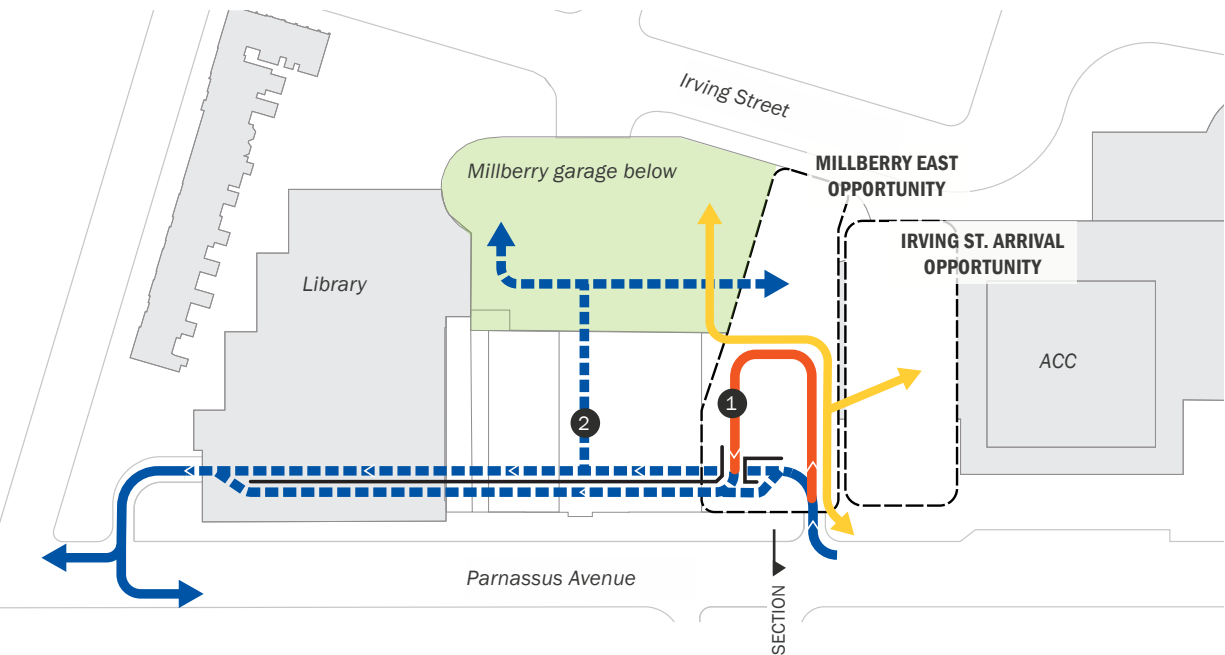
# 6.2 PARKING STRUCTURES

## Millberry East tower opportunity site

- 1

Design off-street passenger loading facility with valet service near Parnassus Avenue garage entrance, with connections to garage elevators, public programs, and
- 2

potential grade-separated crossing of Parnassus Avenue.  
Maintain visitor parking access via ramp to lower levels of the garage.



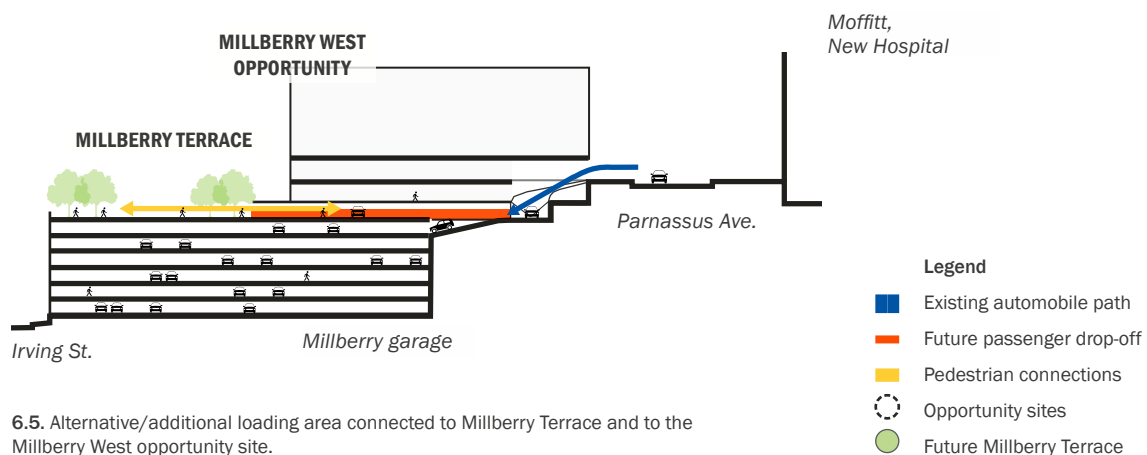
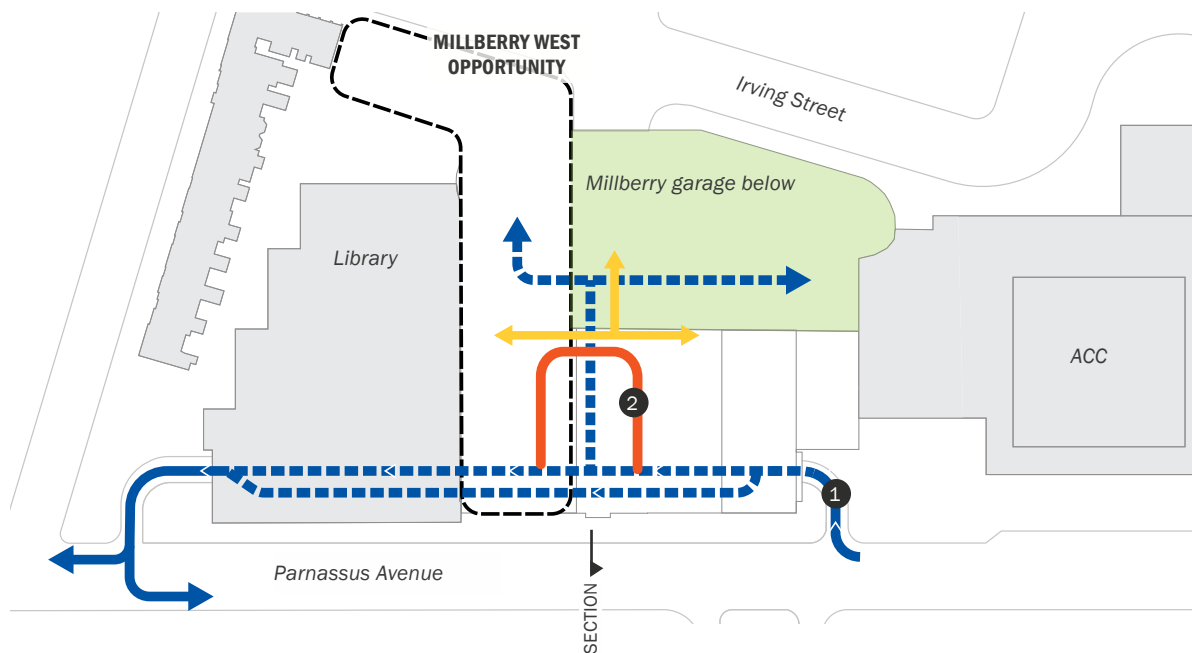
6.4. Potential off-street loading below Parnassus Avenue.



## PARKING STRUCTURES 6.2

### Millberry West tower opportunity site

- 1 Repurpose existing access to loading area with valet services. Maintain garage access to lower floors in this location.
- 2 Add additional drop-off that connects to Millberry Terrace and new program spaces in the Millberry West tower opportunity site.



6.5. Alternative/additional loading area connected to Millberry Terrace and to the Millberry West opportunity site.

## 6.3 PARNASSUS AVENUE CROSSING

### 6.3 PARNASSUS AVENUE CROSSING

Improving connections between the north and south sides of the campus across Parnassus Avenue is an important priority for UCSF. As part of the 2015 *Parnassus Streetscape Study*, UCSF plans to install two crosswalk plazas and pedestrian bulb-outs to improve the pedestrian crossing experience on Parnassus Avenue itself.

A grade-separated crossing will have the following benefits:

- Link acute care and ambulatory care facilities to avoid unnecessary ambulance transport between the two sides.
- Improve safety and convenience for both physicians and patients avoiding traffic lights and on-street conflicts as well as inclement weather.
- Combine elements of circulation, utility, and service.
- Improve opportunities for patients and the public to quickly access amenities on the north and south sides of Parnassus Avenue.
- Support research and clinical collaborations for the UCSF workforce.
- Improve wayfinding for visitor arrivals, in the Millberry Parking Garage and via the N-Judah light rail to the hospital entry.
- Support resilience and sustainability goals by allowing materials and deliveries to be transmitted across Parnassus Avenue efficiently and safely.
- Reduce on-street traffic conflicts between patients and vehicles.



Vertical connection



Enclosed walkway



Linked facilities

## PARNASSUS AVENUE CROSSING 6.3

Several conceptual locations for a bridge and tunnel crossing were explored during the CPHP process. Detailed designs and implementation strategies will be coordinated with planning for the new hospital, the replacement of the Millberry East tower, and the development of the Irving Street arrival.

UCSF should further develop the crossing concept to assess how to achieve the most benefit and finalize the proposed location, connection points, and primary user profile.

### Bridge

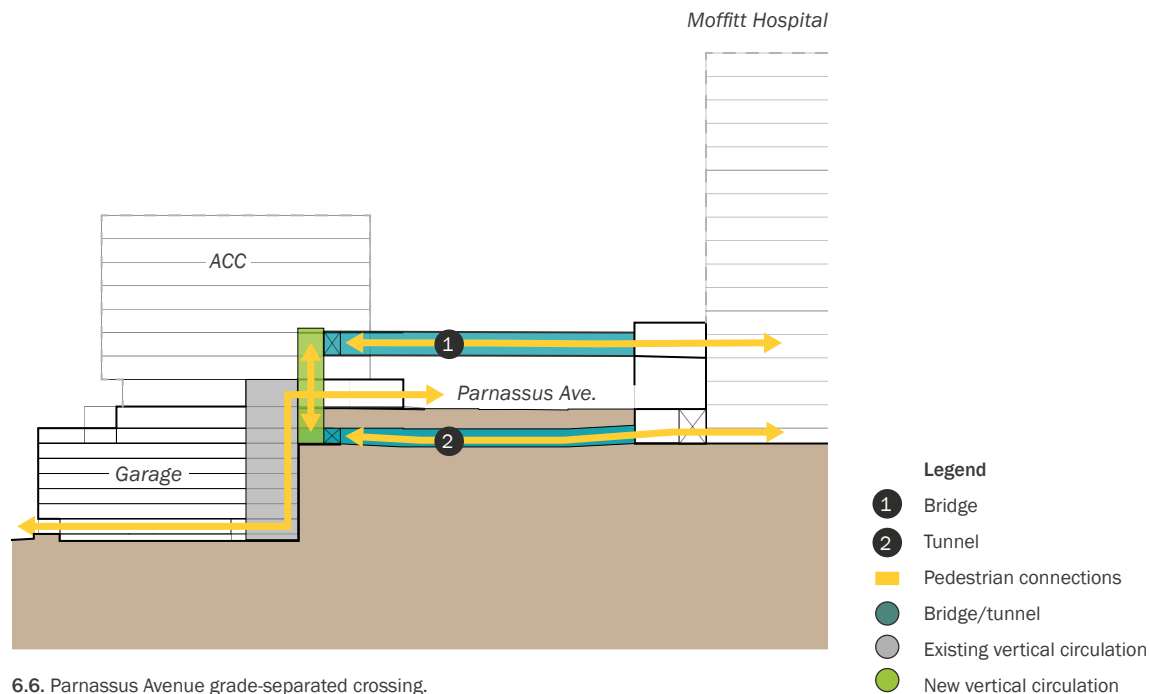
- As a new landmark for the campus, a bridge would create a conditioned, convenient connection between both sides of Parnassus Avenue.

- A public bridge could allow UCSF personnel, patients, and visitors to travel from the parking areas into the main hospital reception.
- A more secure internal bridge could also be explored. This bridge might only be used by UCSF staff for transporting supplies and patients with limited public access.

### Tunnel

Several tunnel options were explored for the CPHP process.

- A smaller bored tunnel could be used for improved utility connections (without personnel).
- A larger mined tunnel would allow for utilities and personnel connection between both sides of Parnassus Avenue.



## 6.4 CAMPUS CIRCULATION

### 6.4 CAMPUS CIRCULATION

New internal circulation routes at Parnassus Heights are proposed for improved functionality and to support the redevelopment of the West Side. The extended 4th Avenue would provide public access to West Side opportunity sites, including new housing. The extension of Medical Center Way to Koret Way would be used for a range of internal including the new service corridor.

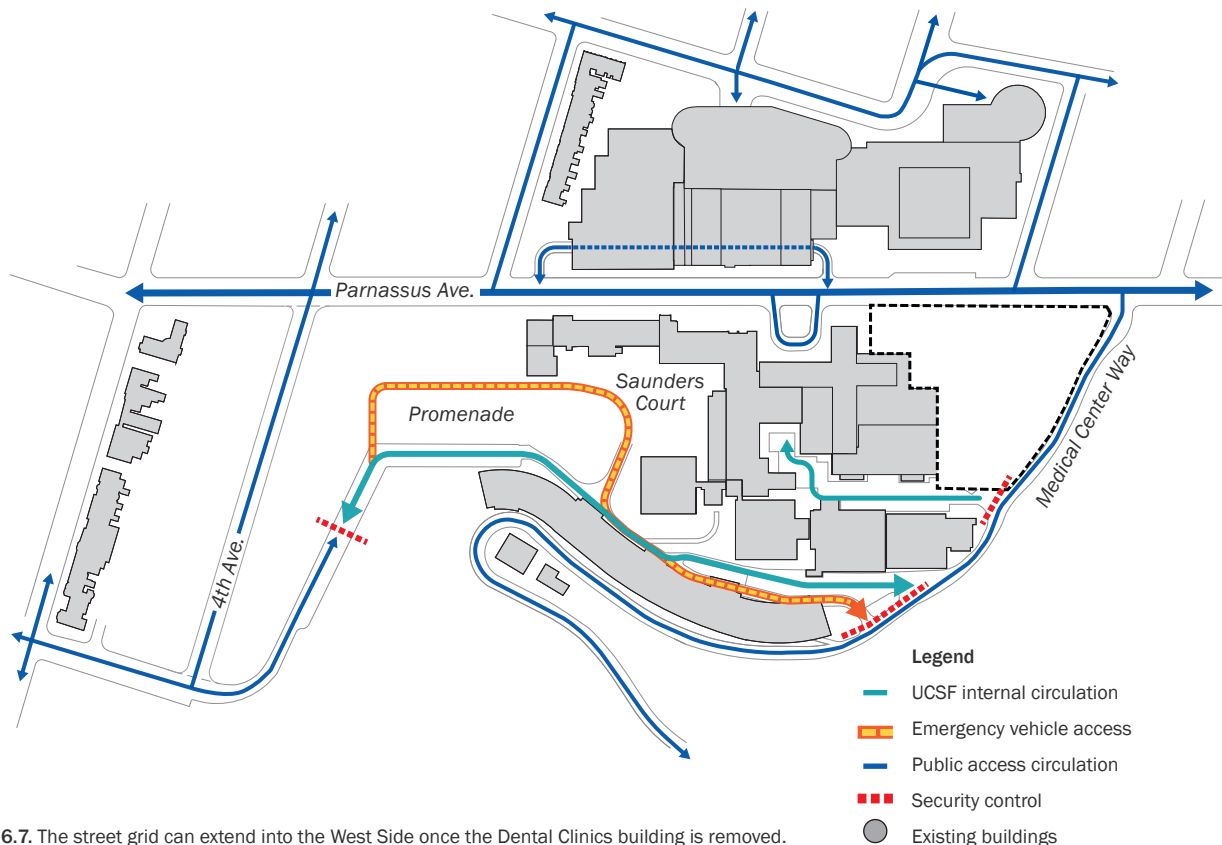
#### Medical Center Way Connection to Koret Way

With limited or no public access; this would be a controlled access route through campus. Users

could include service vehicles, UCSF shuttles, and upon the completion of 4th Avenue, UCSF deliveries. Emergency access into Saunders Court and the new east-west promenade would be supported.

#### 4th Avenue Extension

Designed as an extension of existing 4th Avenue, this new campus street would include on-street parking, sidewalks, and loading areas, and would be a campus street open to all vehicles. Future streetscape design should apply best practices in traffic calming and pedestrian facilities to minimize conflicts and to moderate vehicle speeds.



6.7. The street grid can extend into the West Side once the Dental Clinics building is removed.



## SERVICE CORRIDOR 6.5

### 6.5 SERVICE CORRIDOR

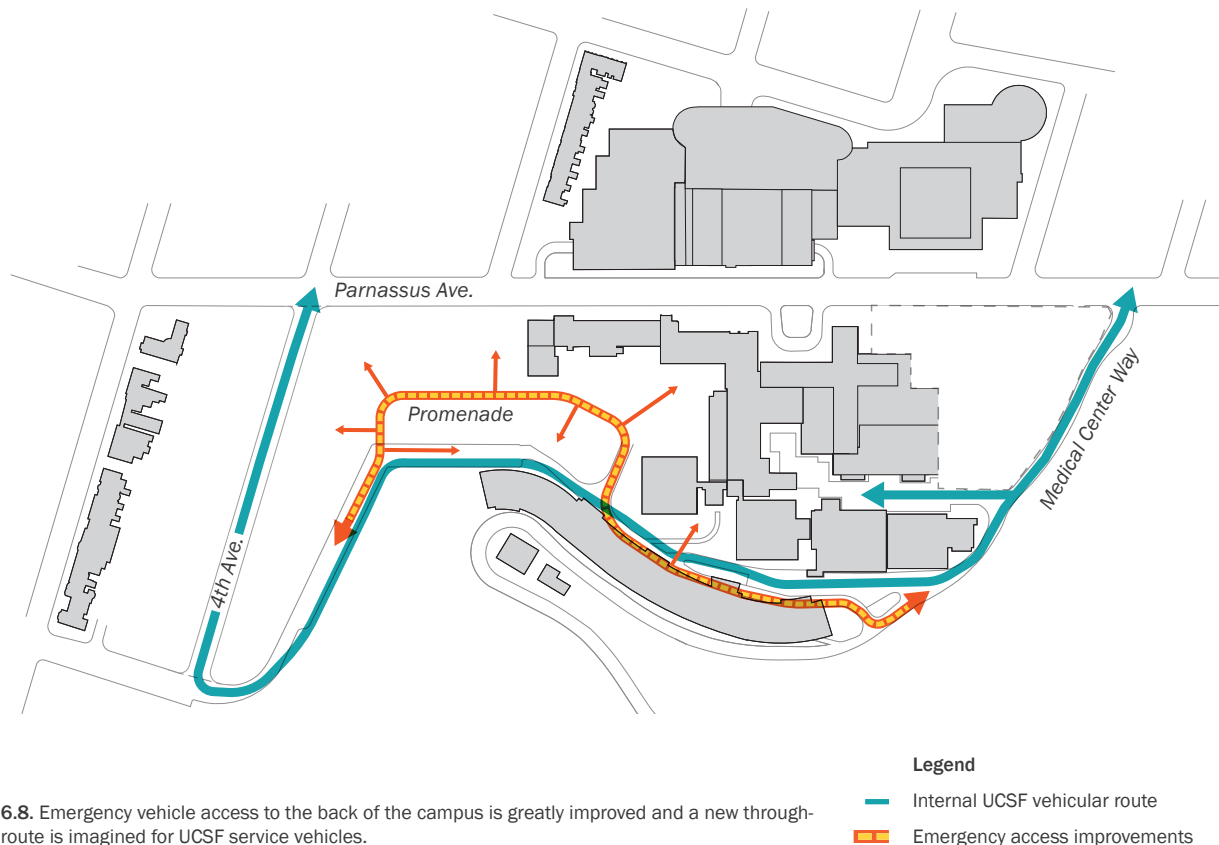
The service corridor will bundle utility, service, delivery, and emergency access improvements along the southern edge of the campus. It is conceived as a multi-functional, modular connection with a fire access lane, vehicular delivery routes, and possible pedestrian connections at grade. These access points will create a more robust framework for future campus expansion along Koret Way, into the West Side and Research and Academic Commons.

On-going coordination among the many maintenance and renovation projects around

the service corridor will permit UCSF to leverage these investments into a long-term, campus-wide improvement. The service corridor should be designed to be operational even if buildings that connect into it change or are replaced over time.

#### Goals

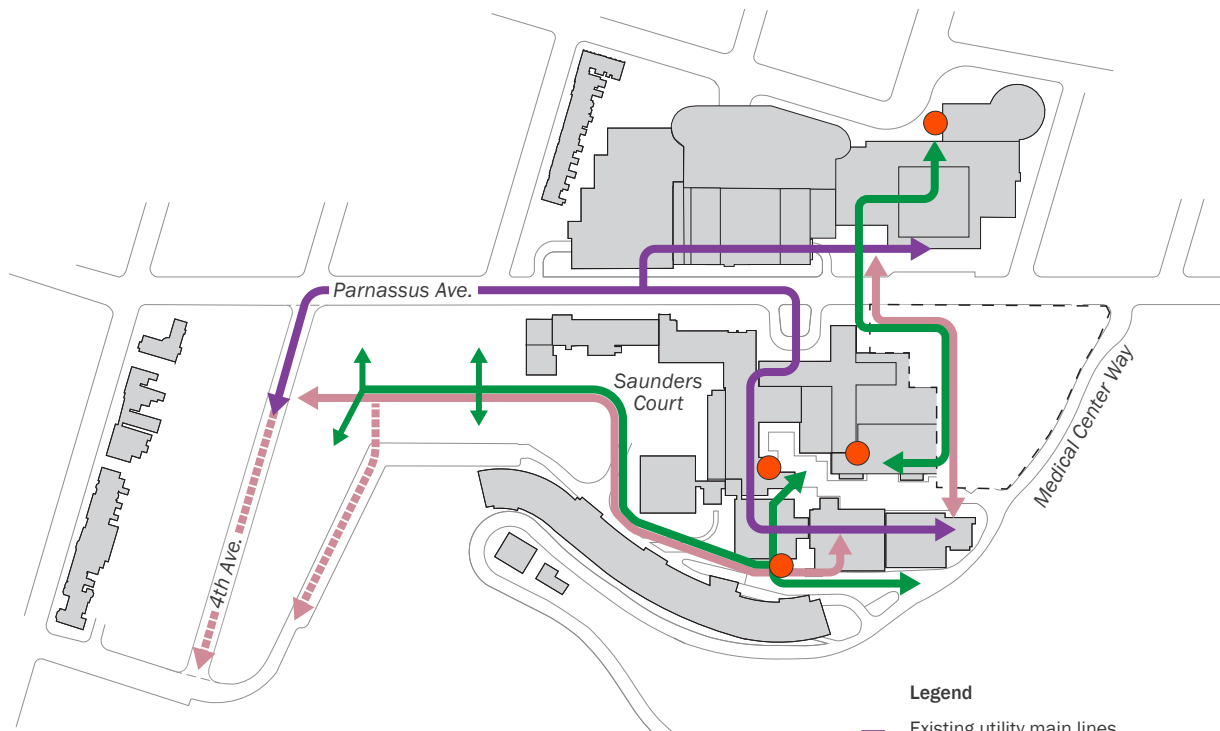
- Create a long-term design for the corridor to address connectivity, emergency vehicle access, maintenance access, delivery, logistics, and phasing for implementation.
- Manage risks of service interruptions. The service corridor provides for the creation of a utility loop to support overall stability of campus service as a whole.



## 6.5 SERVICE CORRIDOR

### **Service Corridor Project Integration**

- Coordinate with the new hospital planning team to link utility and delivery options.
  - Coordinate with existing loading docks to connect facilities to utilities and service areas.
  - Coordinate with campus fire, water, steam, and electrical upgrades and new construction and any new campus plant upgrades.
  - Coordinate with the Health Science towers code compliance improvements and renovations and upgrades as they occur. Consider integrating campus service functions into lower floors near docks.
- Consolidate Hooper Pad mechanical, electrical and plumbing system replacement projects, remove abandoned equipment, and strengthen pad, and build new retaining walls to accommodate corridor.
  - Coordinate with the replacement and expansion of environmental and hazardous waste facilities.



6.9. A new service corridor can connect existing loading docks for a future decentralized, flexible delivery strategy and connects existing utility lines for a redundant, resilient system.

## SERVICE CORRIDOR 6.5



For illustrative purposes only: image does not represent architectural design.

**6.10.** Today, mechanical equipment at Hooper Pad is vulnerable to weather and unsightly. This location is an opportunity for a landscaped future service corridor.







# **7 IMPLEMENTATION**

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## **7.1 OVERVIEW**

## **7.2 INITIAL SEQUENCE (2020-2030)**

## **7.3 PREPARING FOR THE FUTURE**

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# IMPLEMENTATION

## 7.1 IMPLEMENTATION OVERVIEW

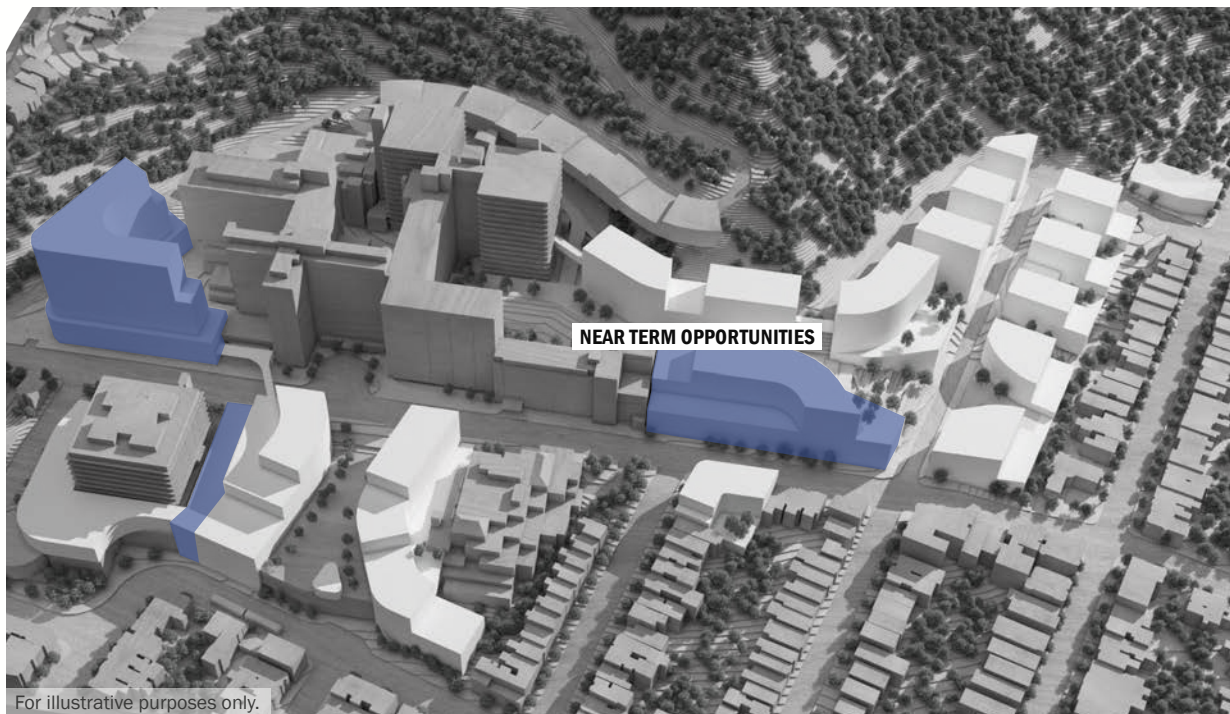
The plan is the culmination of work over the past year and a half to define a bold new vision for the reinvigoration of the Parnassus Heights campus and has been informed by the Community Ideas and other feedback provided by the Community Working Group described on page 24. The transformation of Parnassus Heights will take place over the next several decades.

The next step in advancing the CPHP is the development of an environmental impact report (EIR) to analyze the plan's potential environmental impacts. Following preparation of the EIR, an amendment to UCSF's Long Range Development Plan (LRDP) to modify the space ceiling to support

the recommendations of the CPHP, will be brought to the University of California Board of Regents for consideration.

To ensure that voices of stakeholders are heard, UCSF has convened an Advisory Committee for the Future of UCSF Parnassus Heights, comprising community leaders, neighbors, merchants, and representatives of city agencies and non-profits, to advise on potential neighborhood issues and to inform the LRDP Amendment.

This chapter summarizes the initial sequence for proposed near term implementation projects and describes longer term explorations.



7.1. Initial project sequence and proposed locations at Parnassus Heights.

## INITIAL SEQUENCE 7.2

### 7.2 INITIAL SEQUENCE (2020-2030)

The CPHP initial project sequence is identified on Figure 7.2. Initial sequence project criteria are:

- Have fewer “dependencies”
- Support research and academic community
- Generate enthusiasm and momentum
- Improve patient and visitor experience
- Provide the “empty chair” to enable renovation of existing space
- Improve access to the campus
- Lower escalation costs of construction
- Maintain long term flexibility, while moving towards the overall Vision
- Benefit a diverse set of stakeholders

Site descriptions, project recommendations, proximity, and dependencies for these projects are described on the following pages.



7.2. Initial project sequence and proposed locations at Parnassus Heights.

## 7.2 INITIAL SEQUENCE

### 1 **New Research and Academic Building**

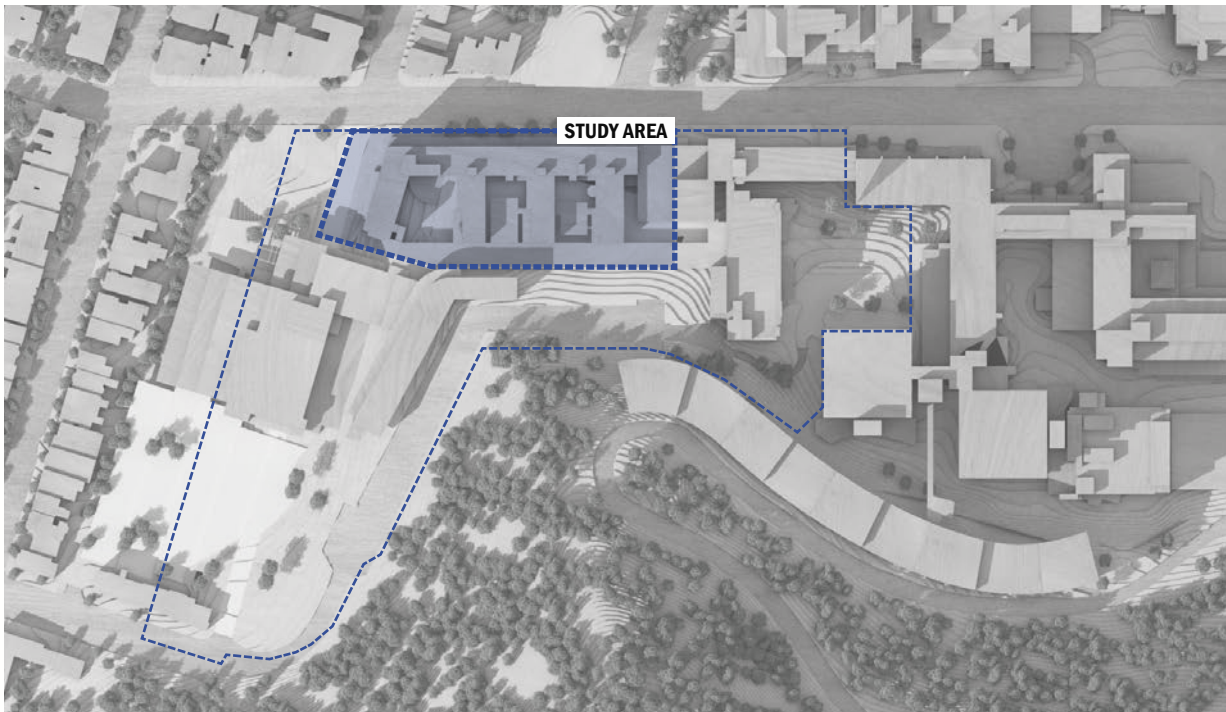
In contrast to the 2014 LRDP proposal to renovate UC Hall in a phased approach for housing, the CPHP proposes to demolish UC Hall and replace it with a new Research and Academic Building to provide new research space and an “empty chair” to help decompress, decant, and renovate critical existing structures and substandard spaces on campus.

In order to inform the redevelopment of the UC Hall site and its environs, a District Plan covering the area shown in Figure 7.3 will be prepared. In addition, a companion study will advance a conceptual program and massing for the new building and explore urban design treatments

and site adjacencies that include the proposed east-west promenade, the design of 4th Avenue, and service corridor connections as well as construction logistics and costing.

#### **Recommendations**

- Validate site constraints and opportunities for a new Research and Academic Building in support of long term objectives.
- Develop a phased approach for new campus elements including a plan for the extension of 4th Avenue and the campus promenade.
- Develop an integrated (UCSF Health/Campus) plan for construction logistics and apply techniques that will mitigate impacts on the campus and its neighbors.



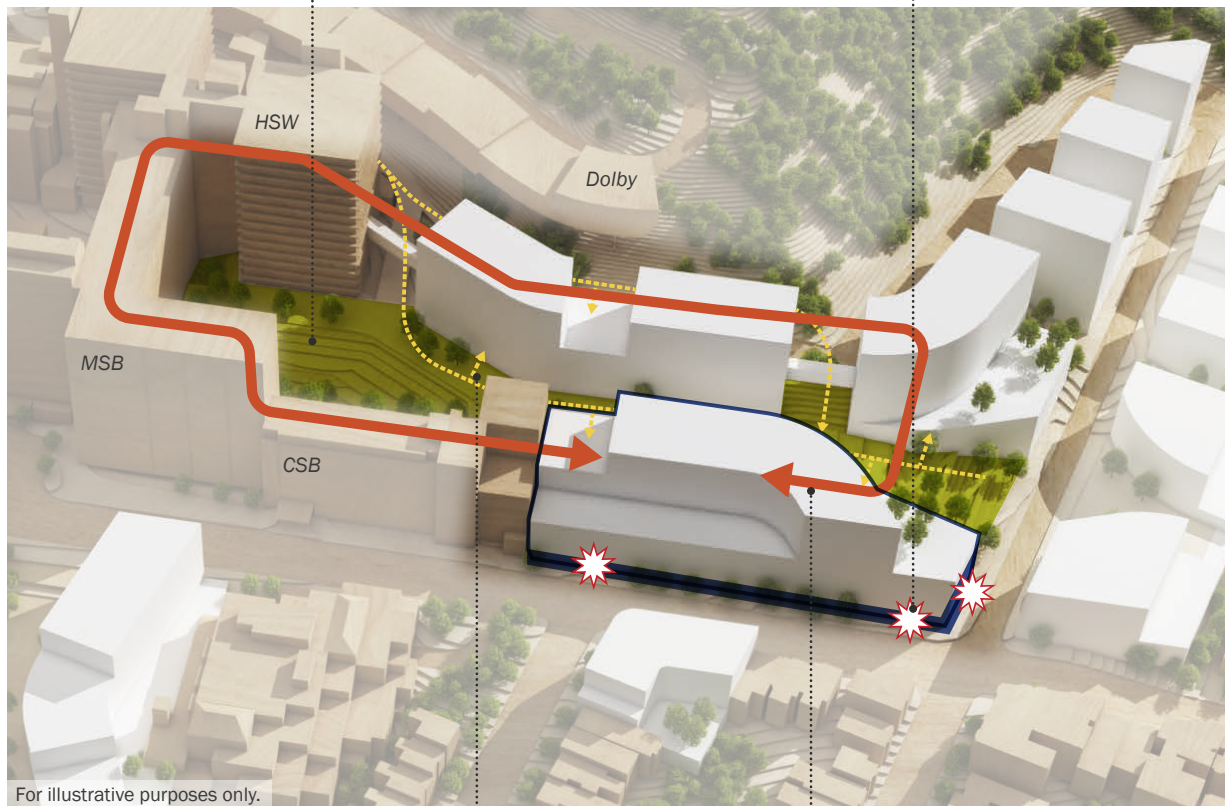
7.3. Study area for a new Research and Academic Building.



## INITIAL SEQUENCE 7.2

**Campus Promenade**  
Introduce a strong east-west pedestrian connection within the campus.

**Campus entries**  
Improve street presence with new entries at 3rd and 4th Avenues.



7.4. New Research and Academic Building site context.

**Long term opportunities**  
Extend service corridor connections and facilitate development.

**Connections**  
Propose secure, internal connections through existing and new buildings.

### Legend

- Primary building site boundary
- Campus promenade
- ➔ UCSF internal concourse
- Existing buildings
- Opportunity sites
- Potential utility connection
- ✦ Main entry points

## 7.2 INITIAL SEQUENCE

### ② **New hospital building at the Helen Diller Medical Center**

To meet state requirements, Moffitt Hospital must be decommissioned for inpatient care or seismically retrofitted by 2030. A new hospital building on the LPPI site is planned to address seismic, capacity, and patient care issues. UCSF Health has begun to plan for the new hospital building and design will begin in 2020. Demolition of the LPPI building and subsequent construction of the project is planned to begin in 2022. The first patient is expected at the hospital in 2029.

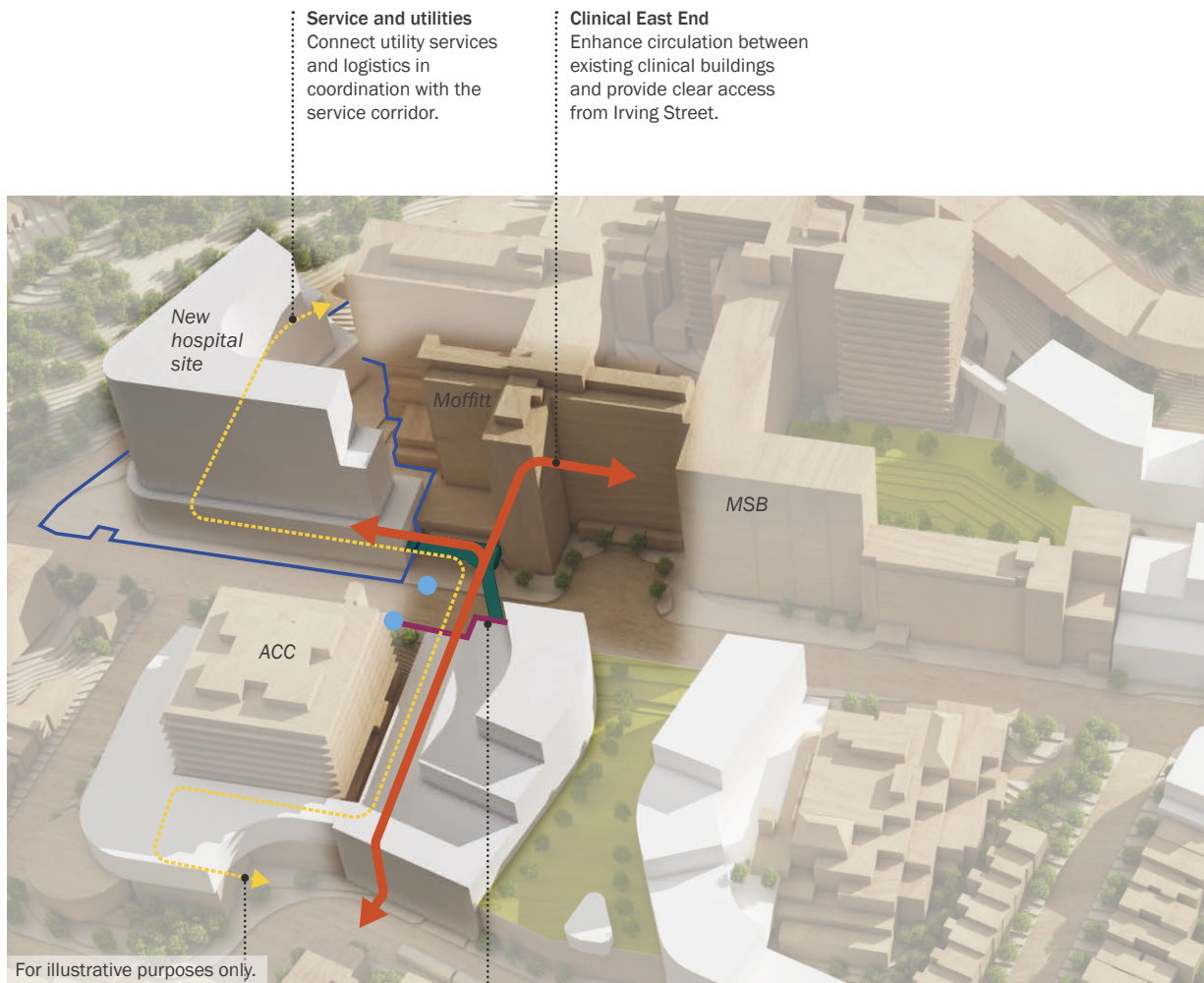
#### Recommendations

- Coordinate hospital planning with the CPHP vision for a Clinical East End District.
- Enhance outcomes for academic, research, and clinical programs with dedicated spaces for convergence.
- Coordinate with other campus development to extend the patient and visitor experience beyond the four walls of the hospital.
- Enhance clinical connections and patient safety by exploring a potential bridge and tunnel across Parnassus Avenue.
- Coordinate infrastructure upgrades and future circulation objectives for the service corridor to support UCSF's sustainability goals.



7.5. Study area for the new hospital building.

## INITIAL SEQUENCE 7.2



7.6. New hospital building site context.

**Loading**  
Connect to existing loading docks and back-of-house areas.

**"Unified Lobby"**  
Clarify campus experience with a consolidated welcome area with potential passenger drop-off.

### Legend

- Primary project boundary
- Bridge opportunity
- UCSF shuttle/Muni stop
- Off-street drop-off opportunity
- Public and patient circulation
- Potential utility/service connection



## 7.2 INITIAL SEQUENCE

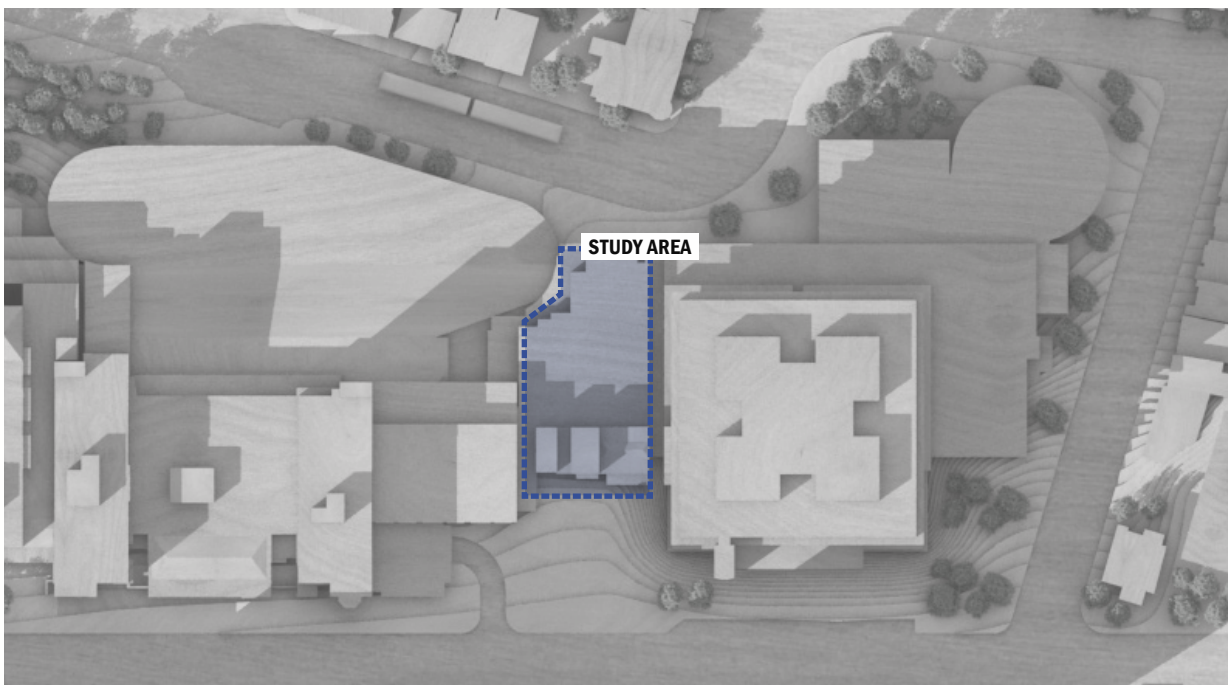
### 3 **Irving Street Arrival**

Reconfigure the Irving Street arrival experience to improve campus image, wayfinding, and user experience. As part of this project, explore the addition of express vertical transport to improve the journey between Irving Street and Parnassus Avenue by establishing an intuitive link that connects riders from the N-Judah directly up to Parnassus Avenue, and to in- and outpatient facilities and other campus destinations located there. The project should include a framework for an interior “unified lobby” built upon the top floors of the ACC Garage (see Figure 7.8).

This space should provide reception, clear access to waiting areas, wellness offerings, convenience retail, and other amenities.

#### Recommendations

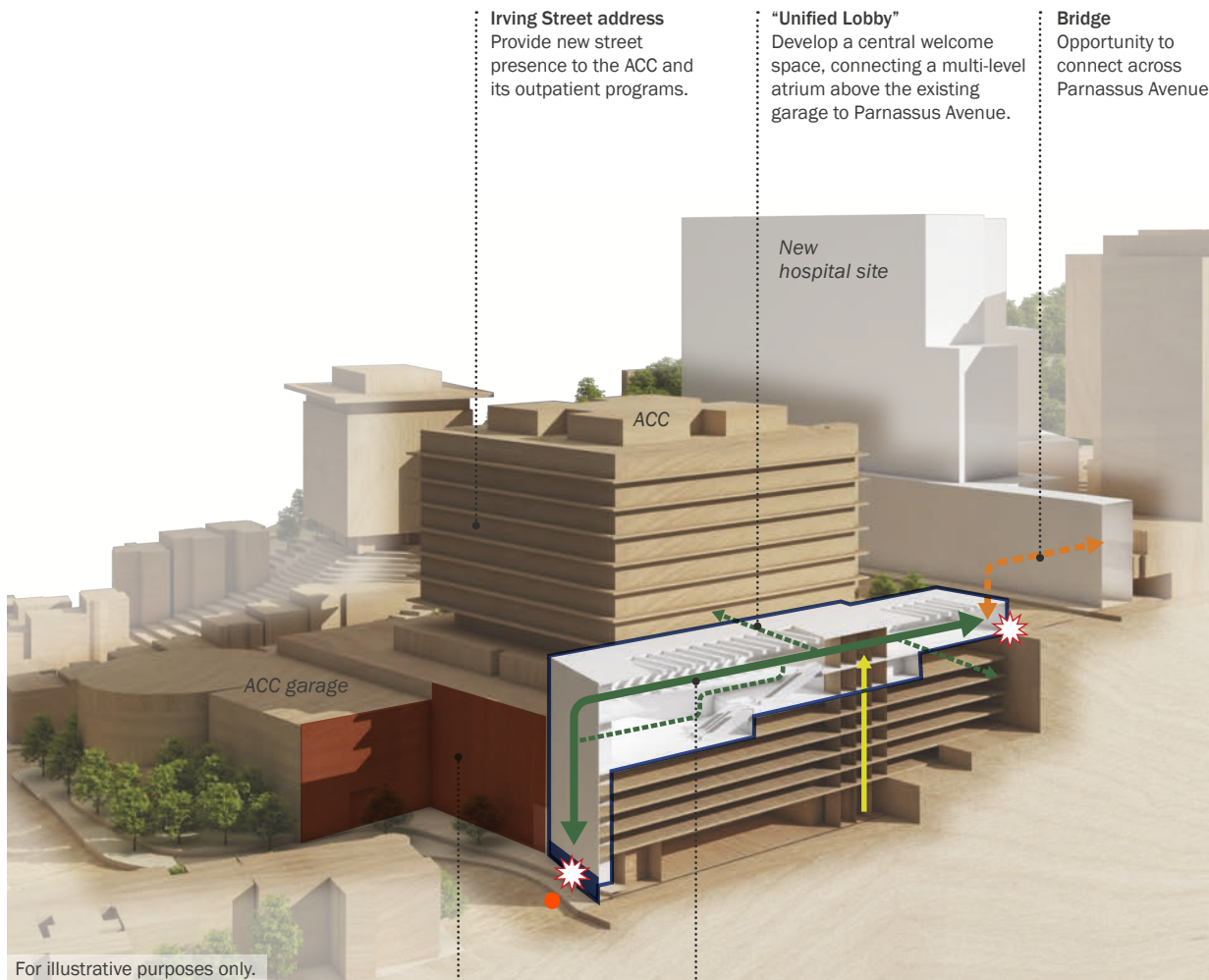
- Create a multi-story welcome experience.
- Build express vertical circulation (elevator/escalator) from Irving Street to Parnassus Avenue.
- Maintain flexibility for a future bridge and/or tunnel across Parnassus Avenue.
- Dedicate space to support shuttle, passenger pick-up and drop-off, and transit connections.
- Include arrival features that allow for orientation areas and check-in processing desks or kiosks to direct patients, staff, and visitors to their destinations on campus.
- Maintain future development flexibility at the Millberry Union opportunity site.
- Coordinate with new hospital planning for proper and secure pedestrian flow.



7.7. Study area for the Irving Street arrival project.



## INITIAL SEQUENCE 7.2



7.8. Irving Street arrival project context.

**Facade improvements**  
Enhance the existing garage facades with re-skinning strategies.

**Express circulation**  
Improve vertical connection with express elevator to/from Parnassus Avenue.

### Legend

- Primary project boundary
- ← New express circulation
- New secondary circulation
- Existing elevator core
- Potential bridge connection
- ✶ Main entry points
- Muni stop

## 7.2 INITIAL SEQUENCE

### 4 **Increase Aldea Housing**

In order to meet the need for additional housing at the Parnassus Heights campus as well as address significant deferred maintenance issues with existing housing at Aldea, redevelop older apartments at Aldea with taller buildings and a denser layout as feasible.

#### Recommendations

- Replace older housing stock with new larger buildings.
- Prioritize buildings with significant deferred maintenance needs.
- Develop a comprehensive urban design strategy that can be implemented over time.
- Analyze and manage traffic impacts.
- Prioritize family housing, and consider future child care at 50 Johnstone.

**1960s housing stock**  
Explore replacing existing building pads incrementally with higher density housing, starting with the oldest ones.



7.9. Aldea Housing within the Mount Sutro environment.

## PREPARING FOR THE FUTURE 7.3

### 7.3 PREPARING FOR THE FUTURE

As a constrained, developed site, all future projects at Parnassus Heights are subject to internal dependencies, validation, financial feasibility analysis, and discussions on campus priorities. UCSF will proactively plan for change and coordinate these dependencies among the long term opportunities identified in Figure 7.10.

An example of how dependencies may influence future phasing for West Side redevelopment is as follows:

1. Conduct School of Dentistry needs assessment and programming;
2. Construct replacement program space for the Dental Clinics;
3. Decant Dental Clinics;
4. Restore 4th Avenue on campus;
5. Design and construct first projects;
6. Prepare to decant remaining parcels;
7. Incrementally complete the West Side.



7.10. The Framework Plan: projects will be phased as additional information is developed.







# **8 CAMPUS DESIGN**

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## **8.1 CAMPUS DESIGN PRINCIPLES**

## **8.2 BEST PRACTICES**

**RESEARCH SPACE**

**EDUCATION SPACE**

**RESIDENTIAL SPACE**

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## CAMPUS DESIGN PRINCIPLES

This chapter is focused on providing a design framework for Parnassus Heights while recognizing the need to allow for future flexibility and creativity in design approaches.



## CAMPUS DESIGN PRINCIPLES 8.1

### 8.1 CAMPUS DESIGN PRINCIPLES

The Parnassus Heights campus physical form has evolved in form, style, use, and context since its founding and is a product of changing needs and incremental growth and alteration. This Campus Design chapter is focused on providing a more intentional design framework for Parnassus Heights while recognizing the need to allow for future flexibility and creativity in design approaches.

A *Physical Design Framework*<sup>1</sup> that applies to all of UCSF's campus sites was approved in 2010 and amended in 2016 and serves as the foundation for UCSF to plan and design future projects according to a clear and consistent set of high-level planning and design principles, guidelines and strategies. Included within the *Physical Design Framework* are Universal Planning and Design Principles:

- Respond to **context** while reinforcing identity;
- Welcome the **community**;
- Ensure **connectivity** to and within the campus;
- Improve campus **cohesiveness**;
- Create spaces to promote **collegiality**;
- Lead through **conservation** and sustainability.

These principles are the basis for the more focused and site-specific Parnassus Heights Campus Design Principles found in this chapter.

UCSF will engage in a process to develop Parnassus Heights Design Guidelines as part of the next phase of implementation, and these guidelines will provide guidance on design features such as setbacks, massing/building form, height, materiality, color, street furniture, signage, lighting, public art, and landscape features.

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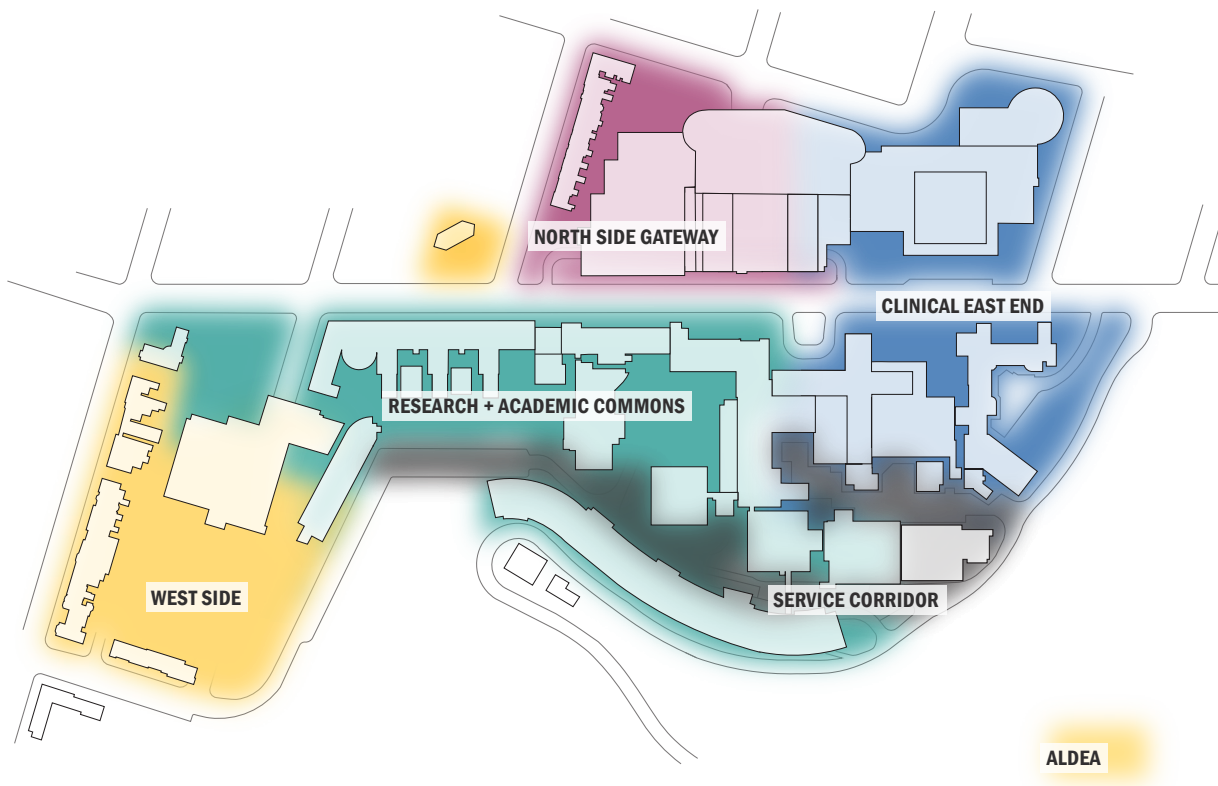
1. [https://campusplanning.ucsf.edu/sites/campusplanning.ucsf.edu/files/reports/UCSF\\_Physical\\_Design\\_Framework%20w%20Amendmt1.pdf](https://campusplanning.ucsf.edu/sites/campusplanning.ucsf.edu/files/reports/UCSF_Physical_Design_Framework%20w%20Amendmt1.pdf)

## 8.1 CAMPUS DESIGN PRINCIPLES

**L1** Foster intuitive wayfinding and support the creation of consolidated campus districts through the co-location of mutually supportive programs.

Create distinctive districts as defined in the Parnassus Heights Campus Vision:

- In the **Clinical East End**, consolidate uses focused on outpatient and inpatient treatment, and prioritize patient-oriented uses with direct access from a public street and visitor parking areas.
- In the **Research and Academic Commons**, create a location for the convergence between research programs and the academic and clinical missions, oriented around a central “campus heart.”
- In the **North Side Gateway**, create amenity spaces available to patients, visitors, employees, learners, and the public, and leverage future hospital ancillary functions. Create a prominent arrival sequence from Irving Street, maximizing visual connectivity to destinations.
- In the **West Side**, diversify and intensify land uses to support the UCSF mission with housing and child care.
- Create a **service corridor** to improve campus function, efficiency, and internal circulation.



8.1. Parnassus Heights campus districts.



## CAMPUS DESIGN PRINCIPLES 8.1



1. Large atrium spaces celebrate arrival and provide visual connectivity.

2. A prominent front door can be a memorable experience.

# 8.1 CAMPUS DESIGN PRINCIPLES

World-Class

Welcoming

Integrated

Compact

Legible

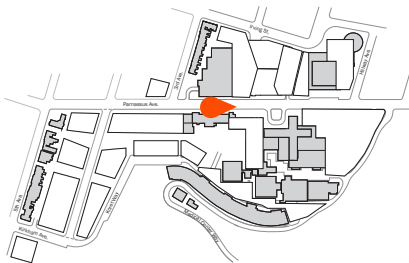
Prominent destination

Improved pedestrian connections



For illustrative purposes only: image does not represent architectural design.

8.2. The consolidation of campus districts helps bridge between mutually supportive programs and clarifies the campus experience for all users.



Clear sense of entry

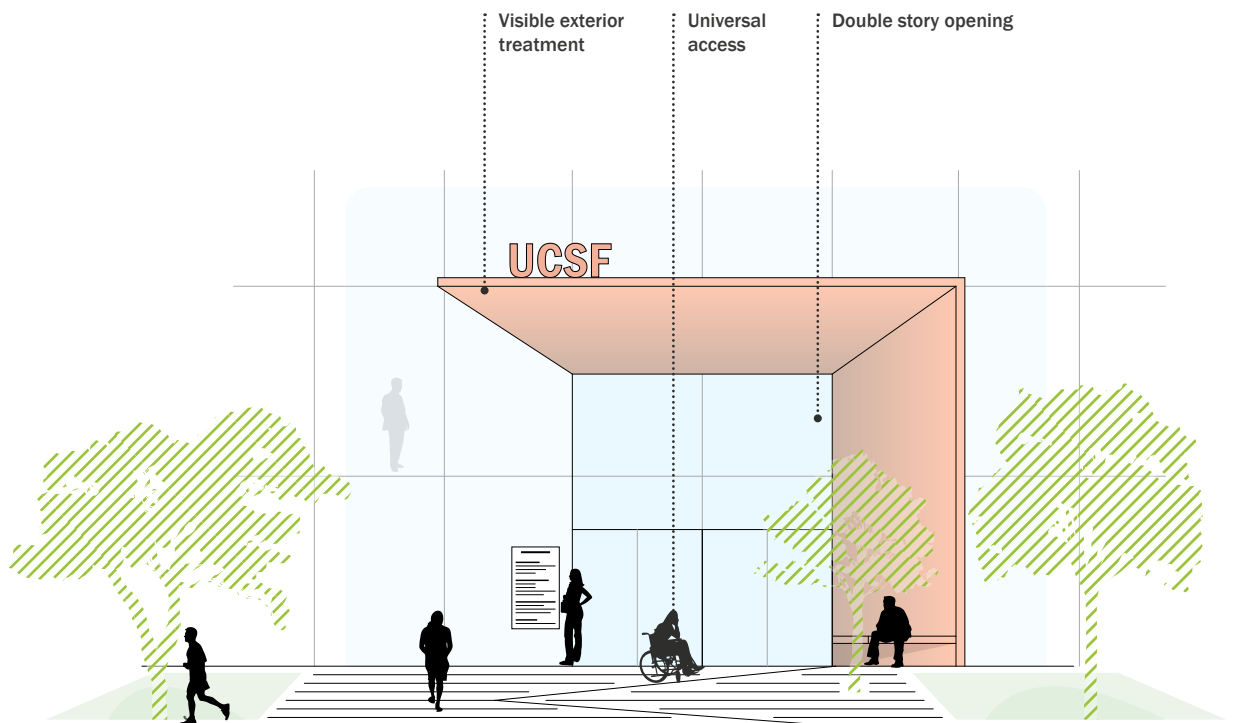


## CAMPUS DESIGN PRINCIPLES 8.1

### L2 Clarify the visitor arrival experience by differentiating primary “public” campus entrances from secondary entrances for everyday users, employees, and learners.

Buildings should include architectural features that differentiate between primary “public” campus entries and secondary building entrances. Primary building entrances should:

- Be clearly visible from a distance to form a positive first impression, as well as contribute to the life and activity of the street and sidewalk;
- Include treatments such as visible multi-story openings, exterior canopies, enhanced lighting, or distinct architectural treatments;
- Include generous areas for reception or waiting when necessary;
- Include dignified and welcoming universal access that does not segregate users based on physical abilities;
- Discourage primary building entrances that only incorporate major flights of stairs without ramps;
- For all entrances, apply bold colors or material accents on interior walls that can be visible to the outdoors;
- Accentuate interior activities, reinforce legibility of entries and exits and animate adjacent exterior spaces at night with bold color.



**8.3.** Distinctive canopies contribute to wayfinding. Universal access measures propose a similar arrival experience to all users.

## 8.1 CAMPUS DESIGN PRINCIPLES

World-Class

Welcoming

Integrated

Compact

Legible



1. Colors on circulation elements clarify paths for various groups.

2. Distinctive canopies make entrances enhance wayfinding.



## CAMPUS DESIGN PRINCIPLES 8.1

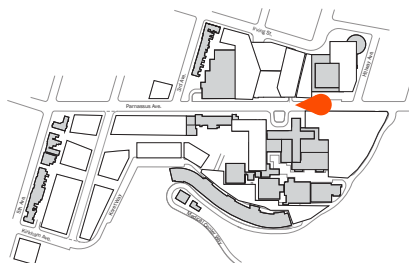
Clear sense of entry

Visible indoor activity



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**8.4.** The visitor arrival experience can be clarified through thoughtful design and articulation of main entrances and secondary entrances for everyday users.



Secondary entrance  
is more subdued

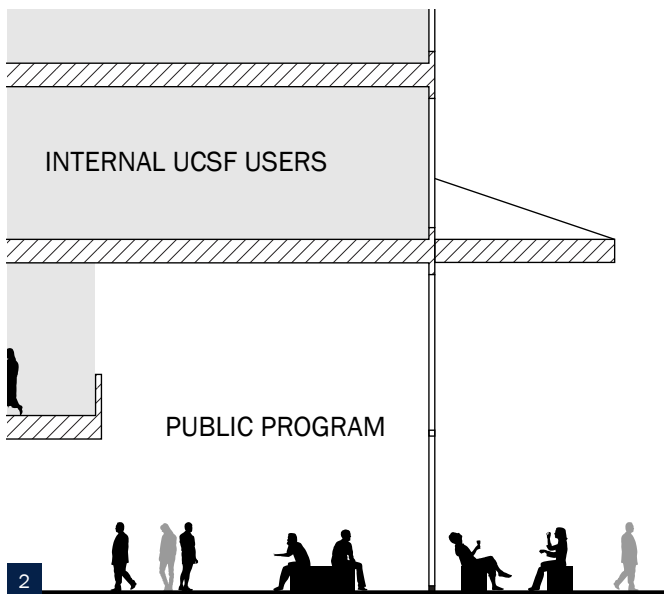
## 8.1 CAMPUS DESIGN PRINCIPLES

### L3 Provide ground floors with a welcoming public presence.

- Introduce facade designs that make the academic and research activities apparent to the public by prioritizing permeability at ground levels.
- Place active programs, such as lounges, retail and food venues, informal discussion areas, learning spaces, university assembly halls, seminar rooms, and exhibit spaces on ground floors.
- Introduce multi-level atria and entry spaces to impart a sense of generosity, maximize daylighting, allow for views to the exterior, and promote indoor-outdoor connections (both visual and physical). In atrium spaces use clerestory windows and skylights to supplement daylight.
- Highly reflective or tinted glass and blank exterior walls at the ground plane should be avoided.
- Deeply recessed ground floors or low height colonnades should be avoided.
- Avoid the creation of inaccessible narrow alcoves and spaces that lack a clear public purpose.



## CAMPUS DESIGN PRINCIPLES 8.1



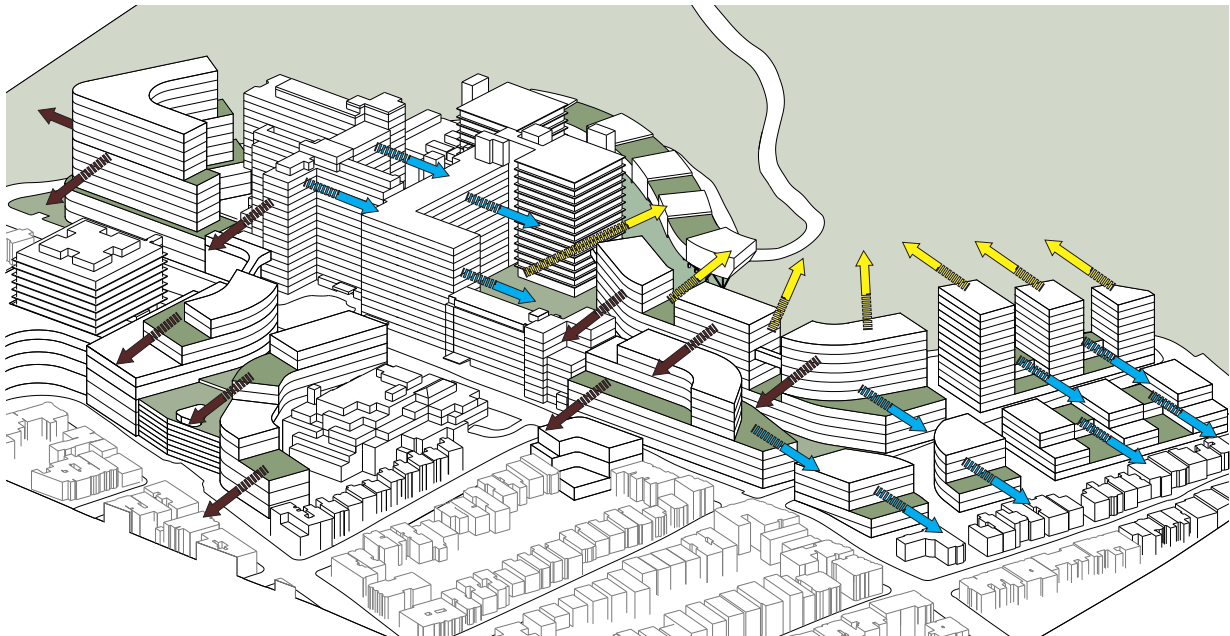
1. Welcoming lobby
2. Public facing programs at ground levels, upper stories restricted to UCSF-affiliated community.
3. Activated ground floor



## 8.1 CAMPUS DESIGN PRINCIPLES

### C1 Orient buildings to leverage the natural topography and create views in and out of the campus.

- Taller portions of buildings should abut the hillside, while lower scaled structures should be located closer to public streets and campus promenades.
- Buildings should provide for slot views of Mount Sutro from key public locations, such as Golden Gate Park and street intersections via breaks in building massing and differences in height.
- Interior floor plates should be designed to enable informal or formal gathering and shared spaces where there is access to significant views.
- Where feasible, new structures should include comfortable, usable roof gardens or terraces, which can act as a direct extension of the interiors and circulation spaces.
- Exterior terraces should be designed with attention to appropriate solar access and wind mitigation features.
- Mechanical equipment should be screened from view.

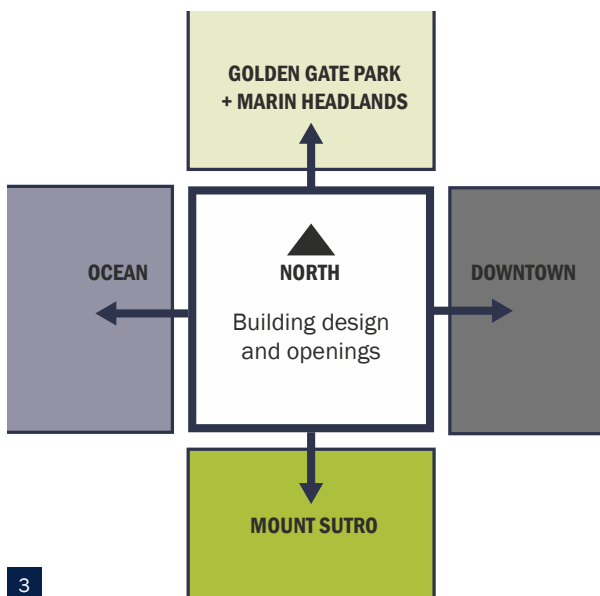
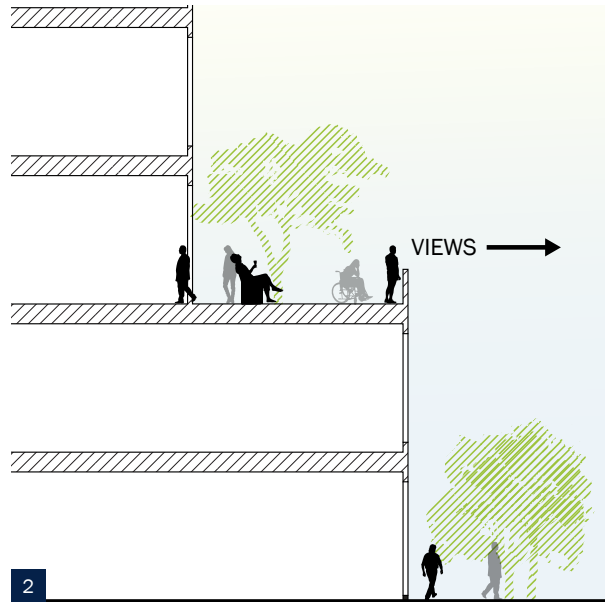


8.6. Buildings should optimize views to Mount Sutro, the ocean, and Golden Gate Park.

#### Legend

- Forest views
- Ocean views
- Park/city views

## CAMPUS DESIGN PRINCIPLES 8.1

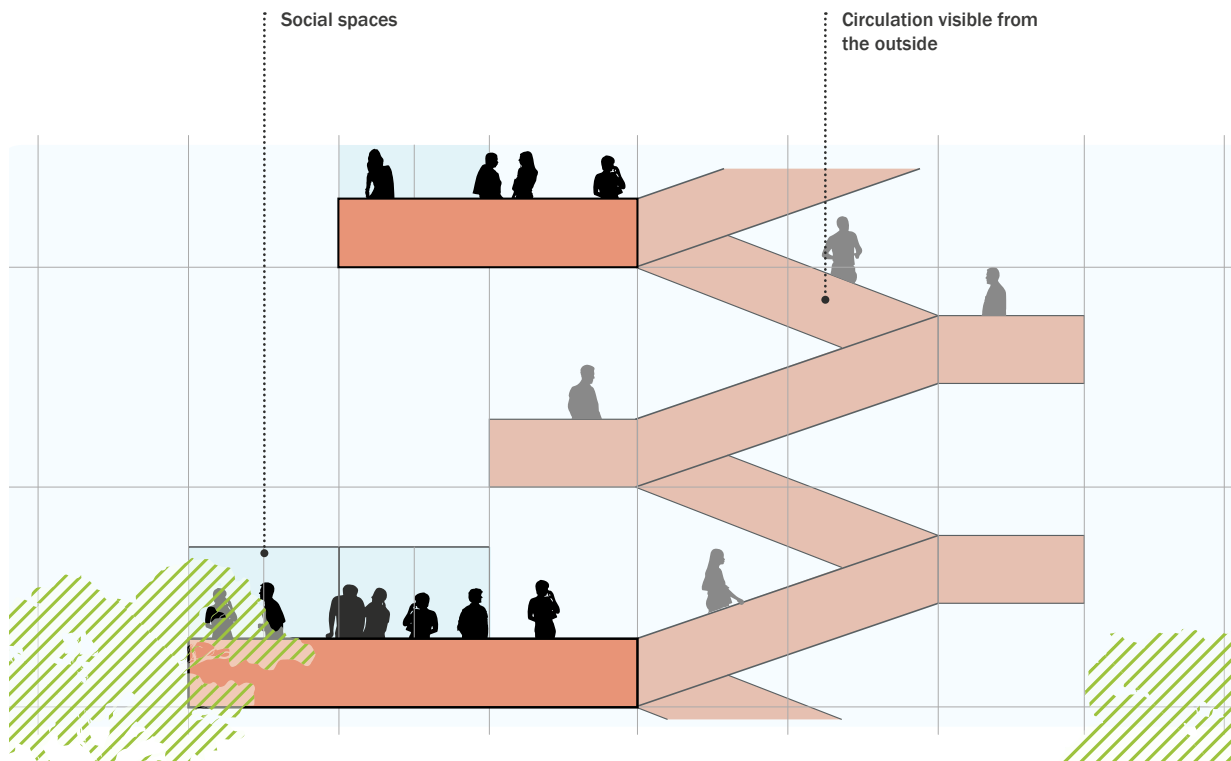


1. Roof terrace with views
2. Upper level views enhance user experience
3. Optimize for site surroundings
4. Ocean view from Koret Vision

## 8.1 CAMPUS DESIGN PRINCIPLES

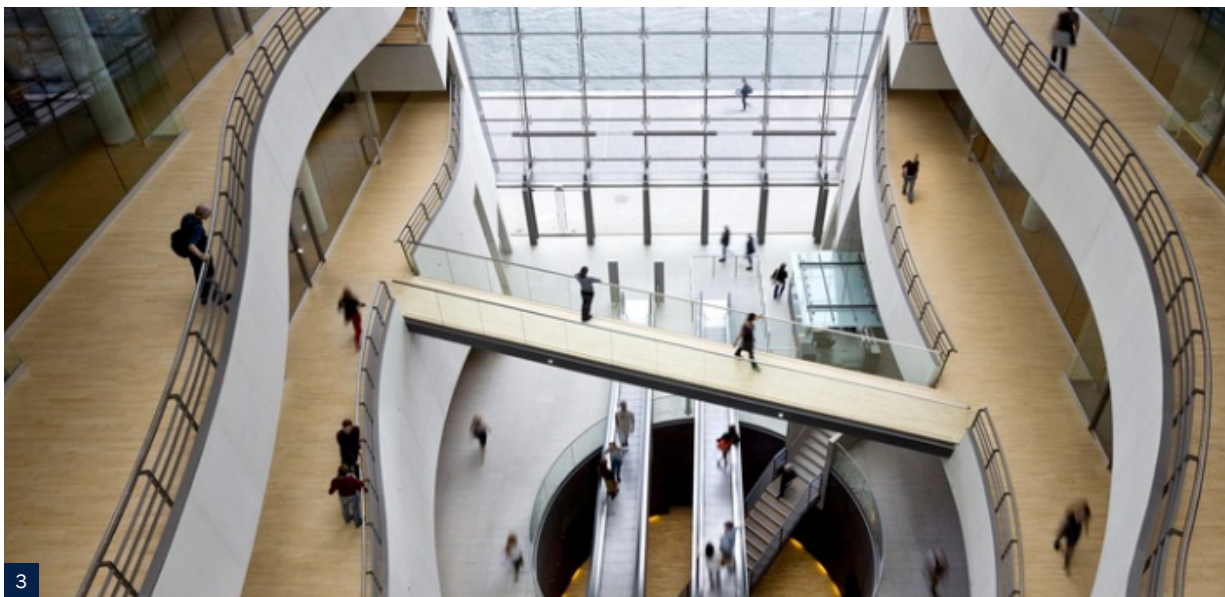
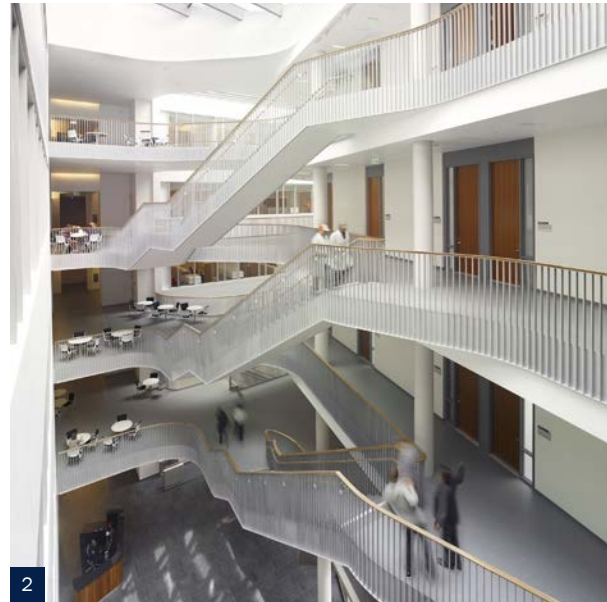
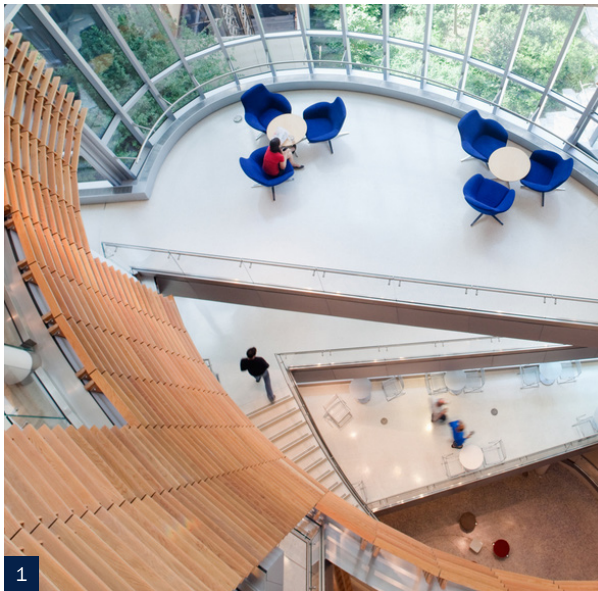
### C2 Design vertical circulation within buildings and in the public realm as a campus feature.

- All vertical circulation elements should be obvious, functional, and inviting.
- Interior and exterior vertical circulation (stairs, escalators, elevators) should be multifunctional, not only to move people through the campus, but allow opportunities for small gathering spaces and areas of stimulating engagement.
- Interior and exterior stairs should be conveniently located, assist in wayfinding, and encourage everyday use.
- Interior stairs should be designed to highlight interesting views, such as vistas of Golden Gate Park or Mount Sutro, or special indoor area overlooks, and support appealing walking routes between activities.
- Circulation in new and renovated buildings, when placed along the exterior facade, should allow for transparency between interior stairs and the exterior.



8.7. Whenever possible, circulation areas should be located towards the outside of buildings to maximize daylight and allow these functional spaces to double as comfortable social areas.

## CAMPUS DESIGN PRINCIPLES 8.1



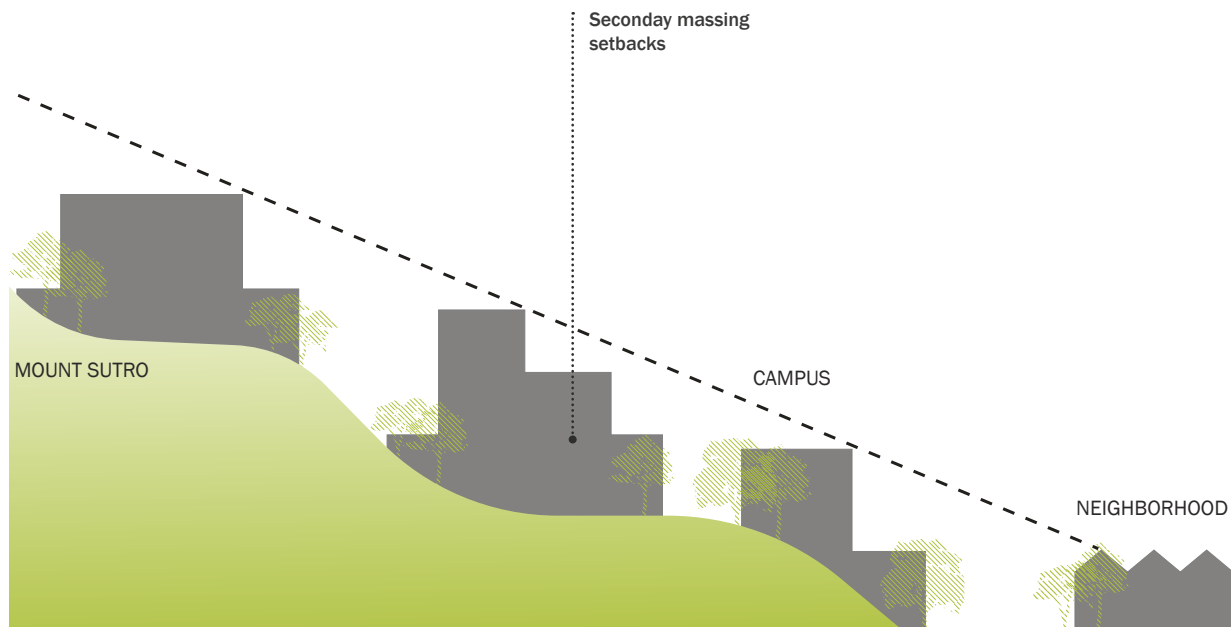
1. Atrium connection between existing buildings and new additions
2. Interior circulation
3. Vertical circulation with vistas



## 8.1 CAMPUS DESIGN PRINCIPLES

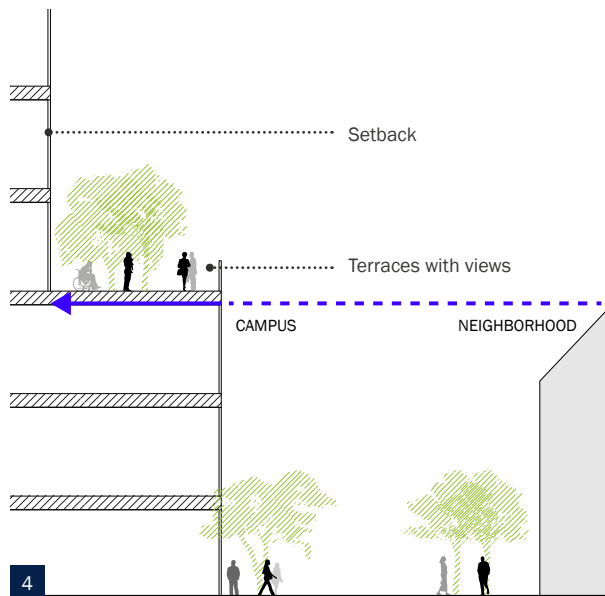
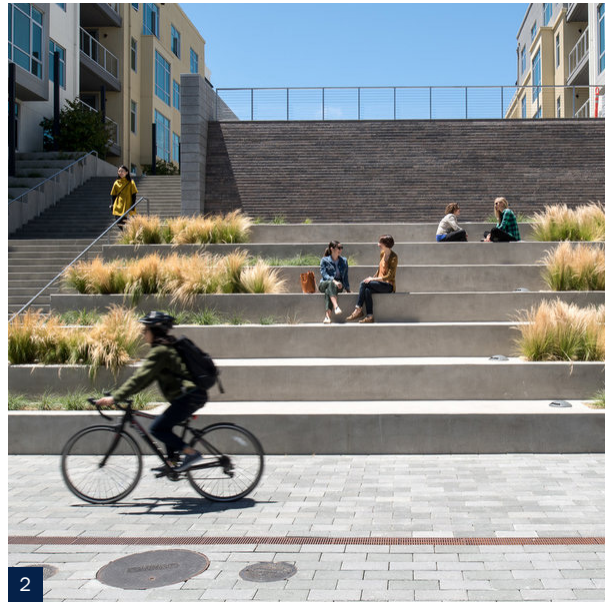
**C3** Create building massing to have respectful relationships with neighboring structures and natural features and create a positive environment for all users.

- Siting and massing of new buildings should coordinate with on-going public realm improvements.
- Building massing should transition from Irving Street to Mount Sutro and maintain a similar scale to surrounding structures. Larger campus buildings should include secondary massing refinements as feasible that reduce perceived scale.
- Effective arrangement and proportion of buildings should create neighborly relationships with existing structures at the campus boundaries.



8.8. Massing should transition from the neighborhood up the hill with massing refinements and setbacks to preserve human scale.

## CAMPUS DESIGN PRINCIPLES 8.1



1. Massing and topography
2. Neighborhoods with topography
3. Neighboring houses in Cole Valley
4. Setbacks open up views

# 8.1 CAMPUS DESIGN PRINCIPLES

World-Class

Welcoming

Integrated

Compact

Legible



8.9. Massing should take cues from neighboring houses, existing campus buildings, and natural elements to guide volumes at street level and secondary massing setbacks higher up.

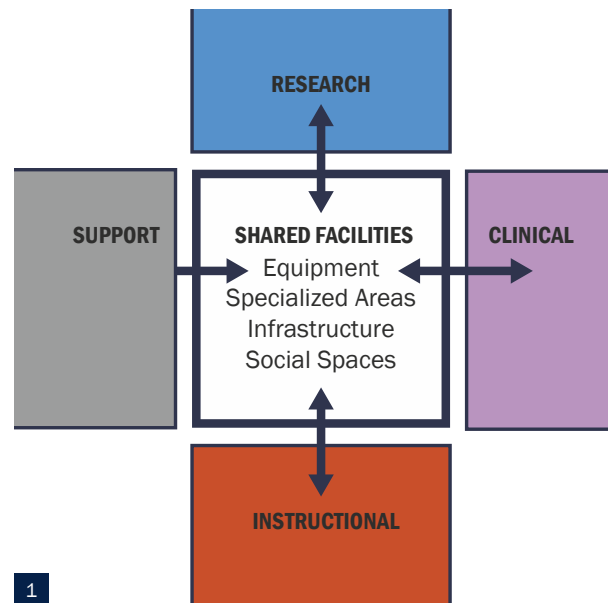
View corridor preserved



## CAMPUS DESIGN PRINCIPLES 8.1

### C4 Maximize the usable area within campus buildings.

- Shift away from less efficient, central corridor circulation to configurations that emphasize open and consolidated program areas.
- Expand shared facilities to limit the replication of expensive, space intensive specialized equipment.
- Facilitate operational adjacencies through accessible and flexible central shared spaces that can adapt to arising needs.
- Highlight opportunities for convergence within campus buildings by maximizing the co-location of formal and informal gathering areas.



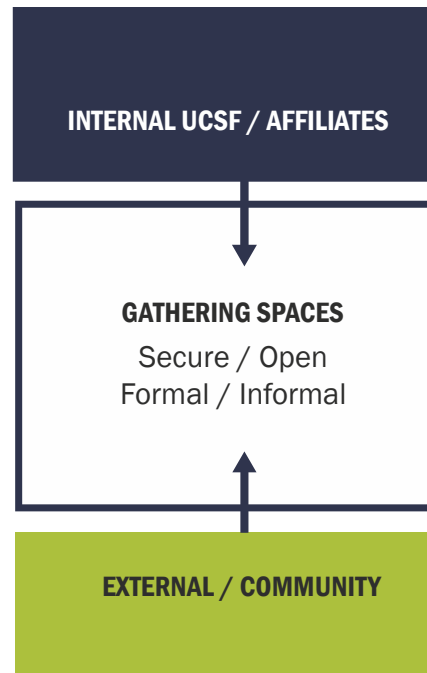
1. Shared facilities increases opportunities for convergence and efficiency

2. Strategic adjacencies limit the need to replicate equipment

## 8.1 CAMPUS DESIGN PRINCIPLES

### 11 Provide spaces that contribute to and encourage convergence among UCSF's missions of research, education, and patient care.

- Locate high-quality and convenient spaces to promote collaboration. Ensure these spaces have access to appropriate audio-visual and information technology to support convening activities for internal UCSF staff and faculty.
- Explore and apply contemporary, open design approaches to encourage teams from different fields to work together.
- Provide space for interactions with external (non-UCSF) entrepreneurs in formal and informal meeting areas, while maintaining appropriate levels of privacy and security.



8.10. Conceptual adjacencies.

## CAMPUS DESIGN PRINCIPLES 8.1



1. Accessible spaces can bridge user groups for collaboration

2. Lower floor have public, open areas; upper floors offer smaller, quiet gathering areas



## 8.1 CAMPUS DESIGN PRINCIPLES

**12** In addition to dedicated work spaces (including private offices), all buildings should provide ample space for informal gathering and meeting.

- Circulation areas should include generous gathering spaces, adjacent to more formal teaching and learning configurations.
- A diverse range of seating options should be provided within both informal and formal meeting areas.



8.11. Prototypical range of gathering spaces for formal/informal uses.

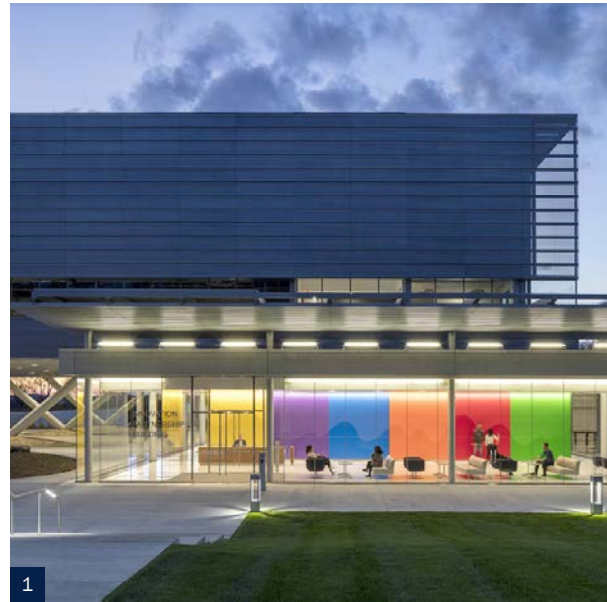
1. A variety of spaces ensures flexibility and collaboration

2. Food/beverage venues can be used for informal discussions

## CAMPUS DESIGN PRINCIPLES 8.1

### I3 Make innovation visible.

- Incorporate art, exhibitions, and interactive elements to showcase UCSF's unique contributions and ongoing discoveries.
- Highlight UCSF's missions and the current happenings throughout public facing spaces and in locations with high visibility: atria, lobbies, outdoor plazas, and concourses.
- New building facades should avoid unnecessarily opaque and closed structures where possible without compromising security and building performance.

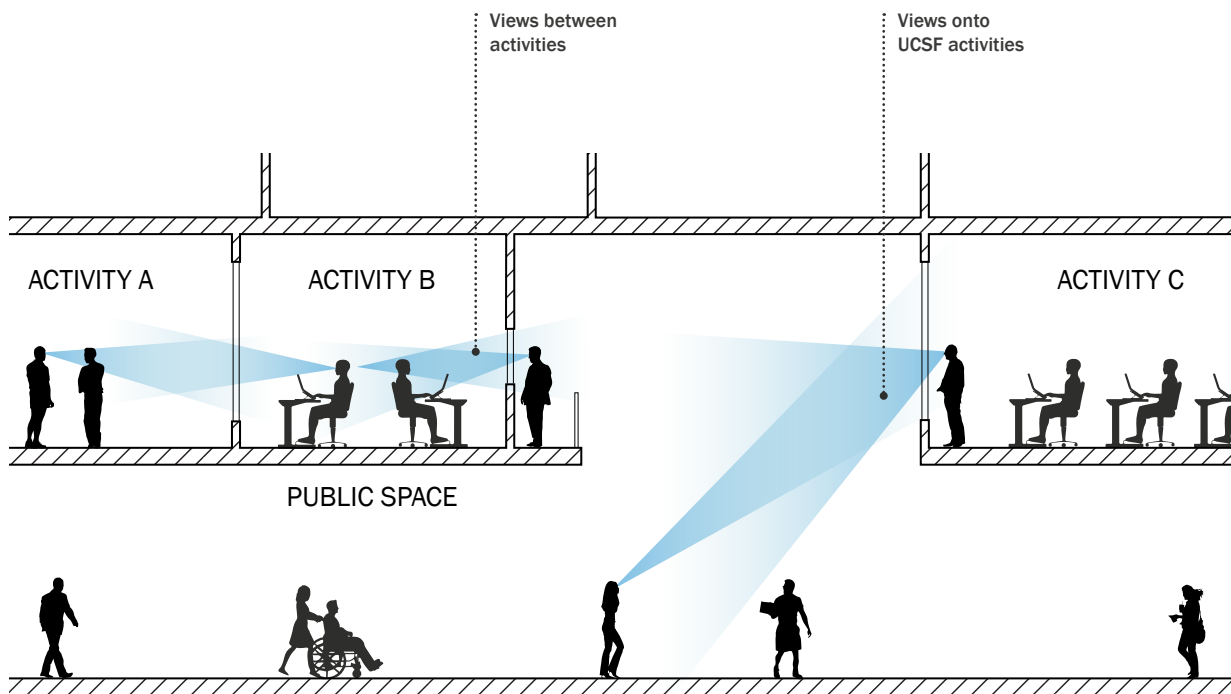


1. Color, materials, and lighting frame building perception
2. Transparency of activities

## 8.1 CAMPUS DESIGN PRINCIPLES

### 14 Design working and learning environments that enhance wellbeing and user experience.

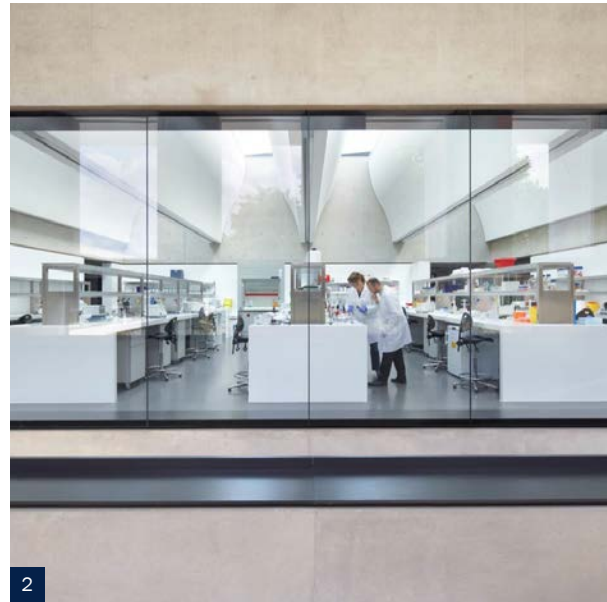
- Prioritize visual and physical access to daylight and nearby outdoor environments.
- Enable visual connections into and out of specialized spaces. Adjacent departments should achieve a minimum level of transparency to promote inter-disciplinary exchanges and campus-wide convergence.
- Introduce biophilic elements, such as plants, views, and natural materials to foster healthy work environments.
- Enhance the wellbeing of users by reinforcing their connection to the environment and to each other.



8.12. Transparency creates opportunities for convergence and inter-disciplinary collaboration amongst UCSF members and showcase internal activities for the broader community.



## CAMPUS DESIGN PRINCIPLES 8.1

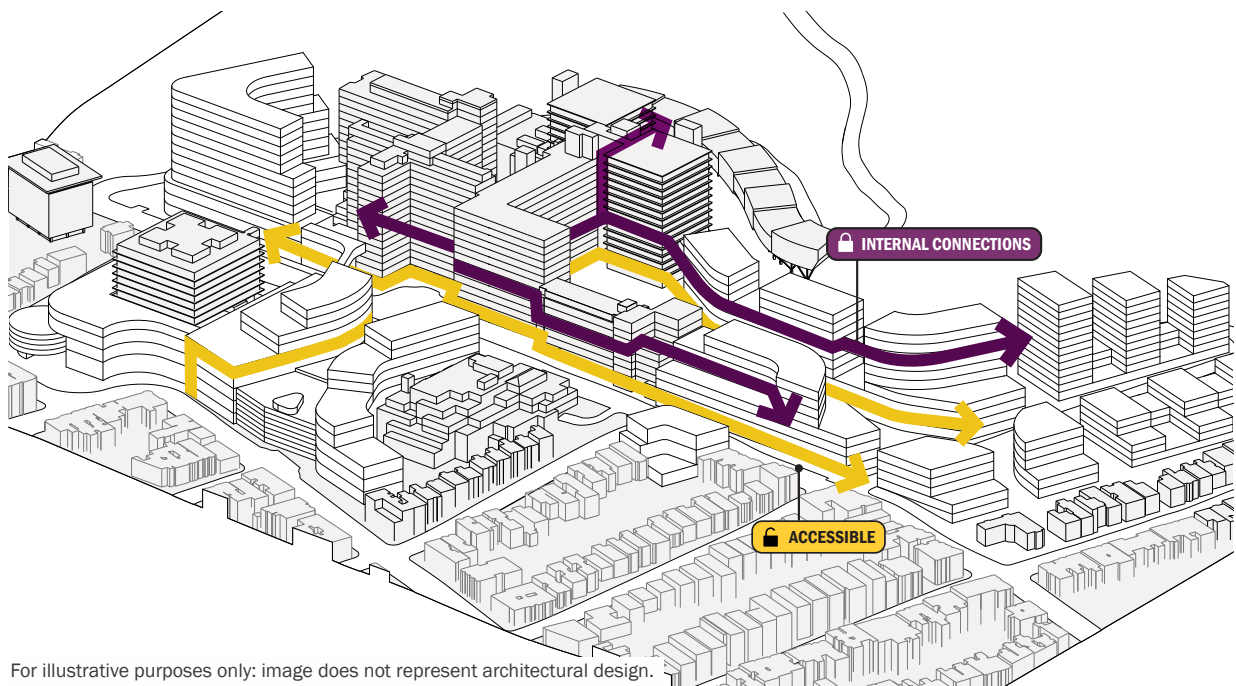


1. Large openings with views
2. Transparency in specialized areas highlights ongoing activities
3. Indoor green elements and light

## 8.1 CAMPUS DESIGN PRINCIPLES

### 15 Establish interconnected and continuous ‘concourses’ for campus-wide use.

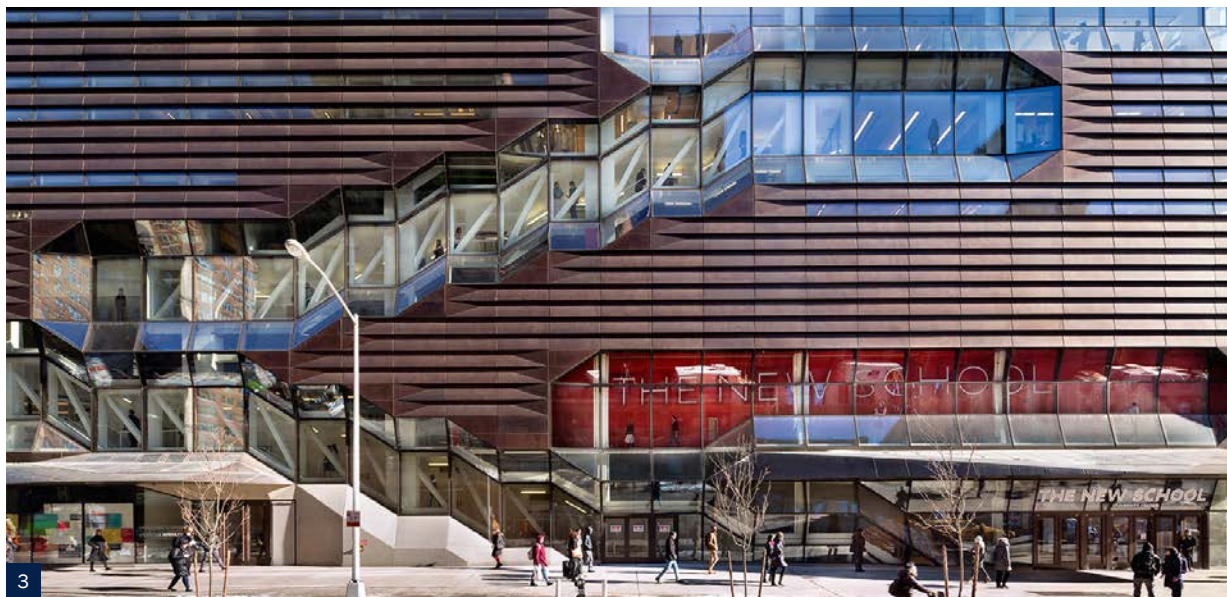
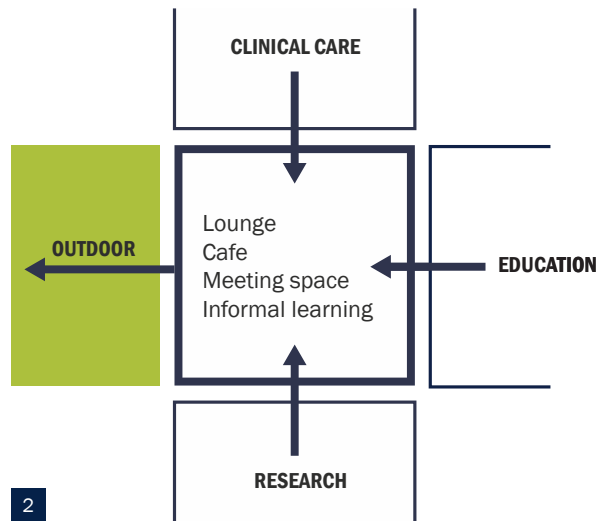
- All new and existing buildings should have an organized system of climate-controlled, upper story ‘concourses’ to help UCSF affiliates clearly navigate between buildings and campus districts.
- Design new building facades and architectural features to express the concourse, especially around Saunders Court.
- Concourse may include a portion of a building floor with a focus on circulation, meeting, and access to services.
- Concourses may include:
  - appropriate wayfinding;
  - secure check point to public lobbies within each building;
  - dedicated spaces to showcase scientific achievements, and campus news;
  - locations for secure campus hoteling;
  - formal and informal meeting areas;
  - conferencing facilities;
  - shared facilities, equipment, services;
  - high-quality personnel dedicated to providing technological tools.



**8.13.** Ground floors are active and include lounges, retail, cafes, assembly halls, and public programs. Internal connections on the upper stories support better collaboration and may be restricted to UCSF-affiliated community.



## CAMPUS DESIGN PRINCIPLES 8.1



1. Concourse with gathering areas and views to upper, secure stories
2. Strategic program adjacencies can bridge between departments
3. Facade with visible circulation



## 8.1 CAMPUS DESIGN PRINCIPLES

**W1** Bring nature from “Park to Peak,” connecting Golden Gate Park to Mount Sutro through the campus.

- Establish long and short-term strategies to enhance the campus landscape and help integrate with Mount Sutro and Golden Gate Park.
- Develop a long-range planting strategy, including initial planting, establishment, sequencing, and maintenance.
- Recognize role in local ecology as both habitat and recreational amenity.
- Create a landscape that is fully integrated with the immediate neighborhoods.
- Make the public realm areas of the campus an open amenity to nearby residents, as well as learners, faculty, patients, researchers, and visitors.

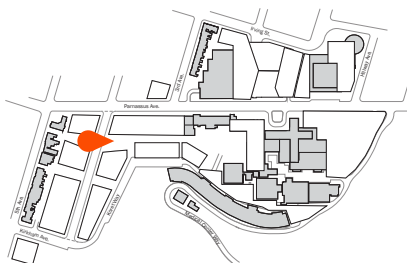


8.14. The landscape on campus bridges between Mount Sutro and Golden Gate Park.

## CAMPUS DESIGN PRINCIPLES 8.1



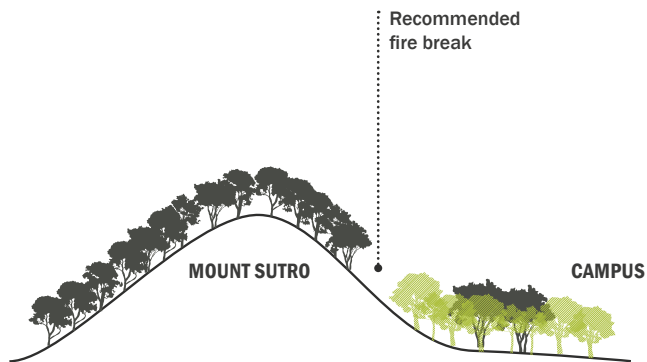
**8.15.** The edges of the campus can become porous, inviting spaces that bridge with the neighborhood.



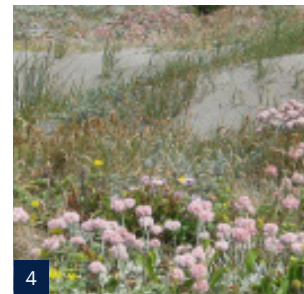
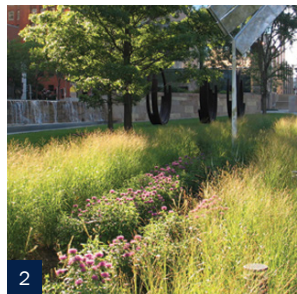
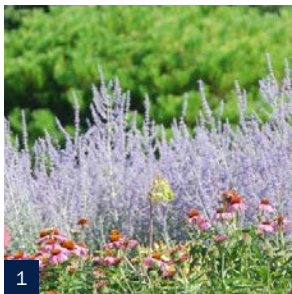
## 8.1 CAMPUS DESIGN PRINCIPLES

### W2 Design outdoor environments that are appropriate for San Francisco and the particular context of Parnassus Heights.

- Provide a distinctly coastal California landscape aesthetic and ecology.
- Integrate campus landscape with Mount Sutro reforestation efforts, including fire prevention strategies.
- Recognize the importance of cultural landscapes in the neighborhood and integrate in the public realm with adapted species.
- Design buildings and public spaces to address the local microclimate (wind, solar access, fog). Exterior spaces should function for year-round occupancy and include wind mitigation treatments, heating elements, and efficient lighting.
- Landscaping should incorporate native plants local to the surrounding environment or adapted plants whose characteristics allow them to coexist in the habitat without posing threats.



8.17. A fire break between the forest and campus can help mitigate risk.



**Plants inspired by native habitats, accommodating heavy usage**  
The campus site is located in an ecotone area between upland woodland and the former native sand dune shrubland.

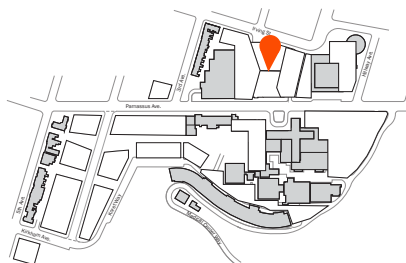
1. Adapted chaparral landscape
2. Grasses and shrubland
3. Chaparral landscape
4. Native dunes



## CAMPUS DESIGN PRINCIPLES 8.1



**8.18.** A planting palette made of primarily native and adapted species would respond to the local microclimate.

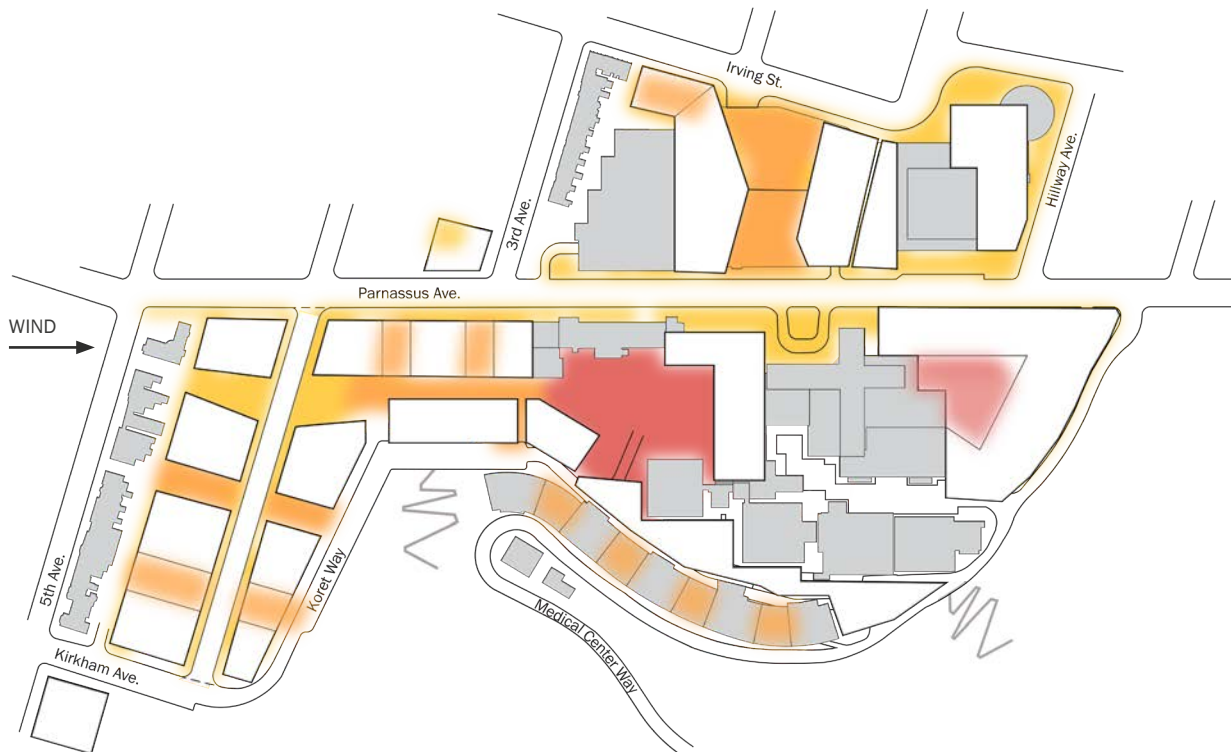


Native planting layers

## 8.1 CAMPUS DESIGN PRINCIPLES

**W3** Provide opportunities for unique open areas to connect, pause, sit, and interact.

- Identify and classify open space typologies in three categories, recognizing the attributes, opportunities, and constraints of each.
- **Linear landscapes:** sidewalks and alleys primarily adjacent to one building facade;
- **Terraces and Plaza landscapes:** campus corridors between buildings, rooftop terraces bounded by two buildings facing each other;
- **Courtyard landscapes:** central courtyards and other spaces surrounded by tall buildings on at least three sides.
- Complement and enhance access to natural areas and outdoor spaces.
- Create semi-enclosed indoor/outdoor spaces with the use of landscaping, porches, bay windows, extrusions and projections to support year-round thermal comfort and usability.

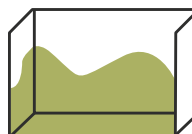
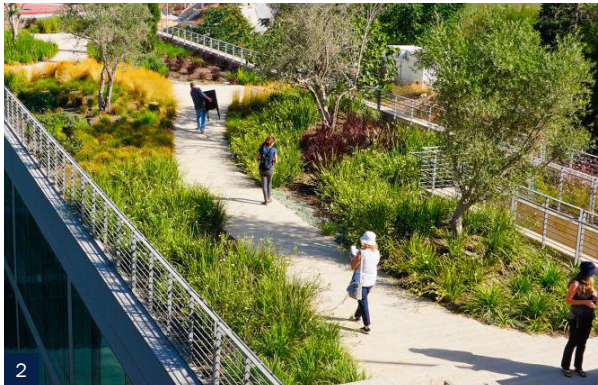
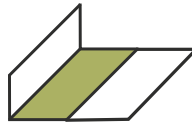


8.19. The public realm at Parnassus Heights can be classified into three typologies.

### Legend

- Linear landscapes
- Plazas and terraces
- Courtyards

## CAMPUS DESIGN PRINCIPLES 8.1



### Legend

#### 1. Linear landscapes

On structure  
At grade  
Streets and circulation

#### 2. Plazas and terraces

Terraces  
Ground levels bounded by buildings

#### 3. Courtyards

Enclosed spaces  
Courtyard envelope

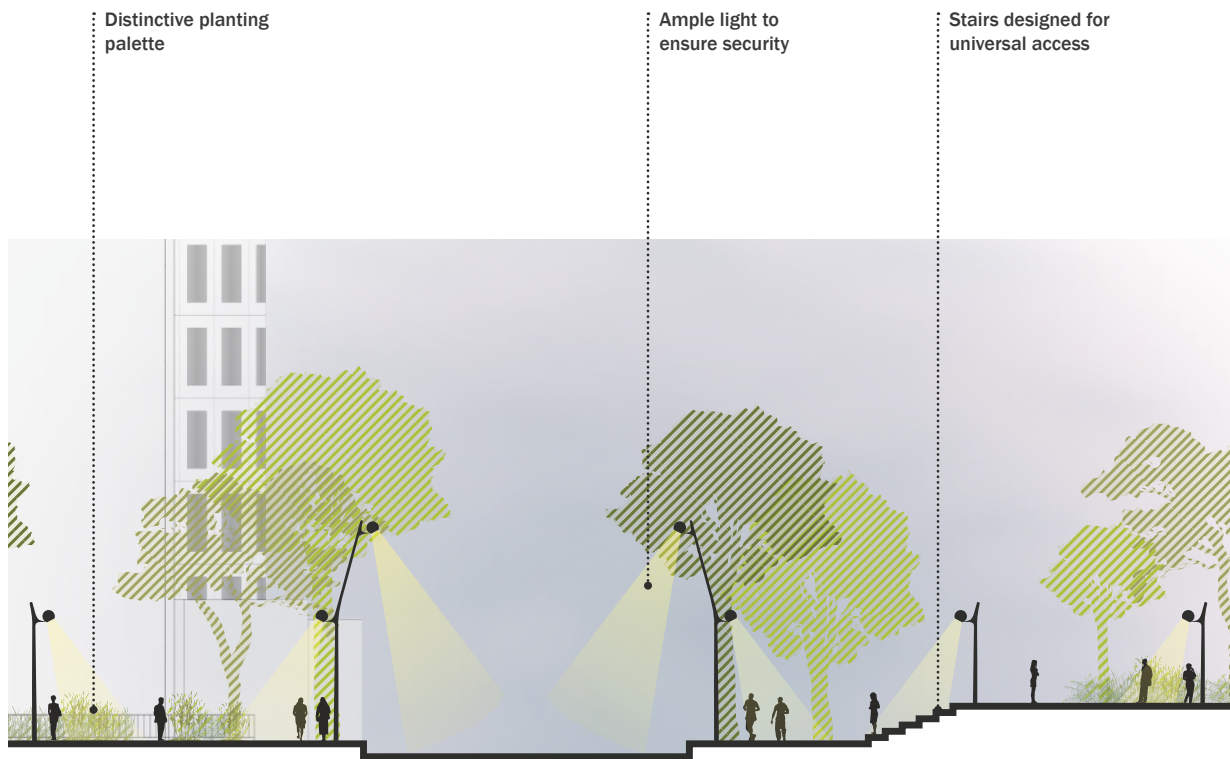
The three open space typologies aim to maximize the integration of planting, capture stormwater, and enhance the public realm.



## 8.1 CAMPUS DESIGN PRINCIPLES

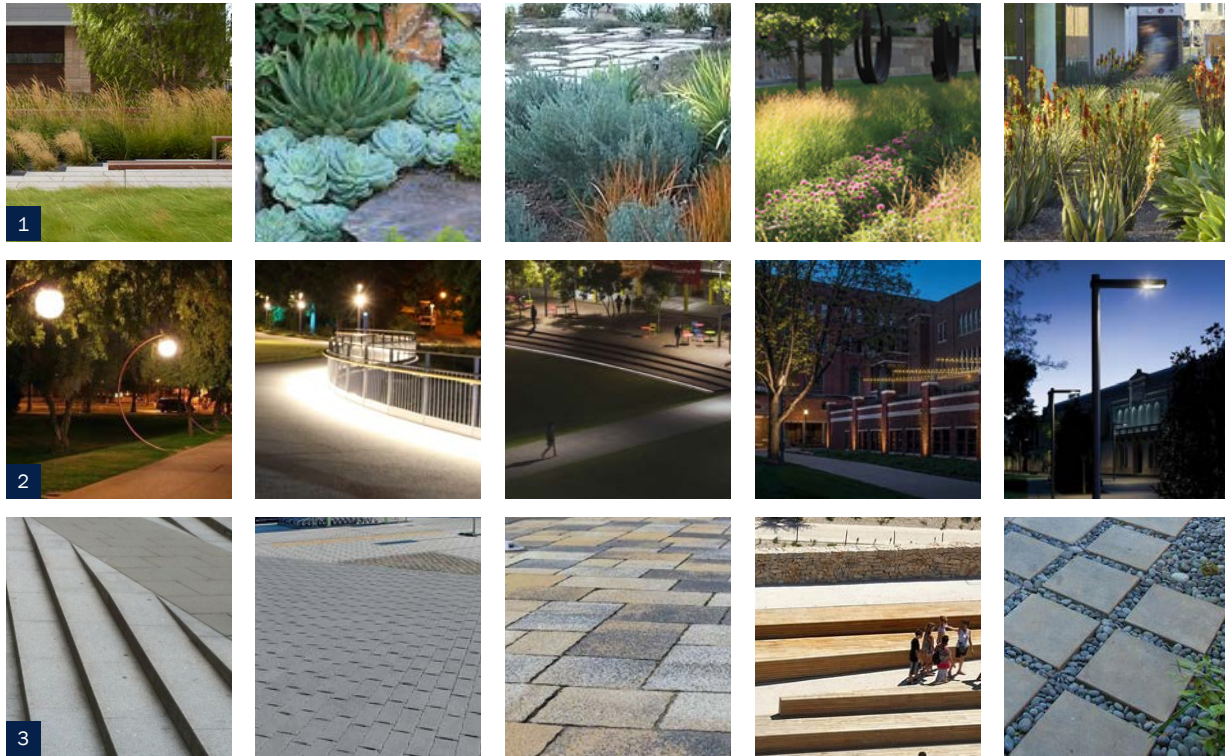
**W4** Public realm design should prioritize pedestrian connectivity, safety, orientation, and experience.

- Maintain universal access throughout campus, and go beyond minimum requirements in public/patient-facing areas in terms of mobility and visibility.
- Optimize outdoor circulation to also serve as gathering amenities for campus users.
- Develop planting palette to emphasize districts' distinctive character and enhance orientation.
- Develop campus-wide lighting strategies, including elements that help identify the districts.
- Deploy effective lighting design for safety and visibility 24/7. Adaptable light fixtures should be designed to modulate energy consumption and lighting levels, responsive to program needs and neighborhood concerns.



8.20. Conceptual street section.

## CAMPUS DESIGN PRINCIPLES 8.1



### Legend

- 1. Distinctive planting palette
- 2. Outdoor lighting strategy
- 3. Ground and material treatments

## 8.1 CAMPUS DESIGN PRINCIPLES

**W5** Create a Campus Heart for campus experience that supports socializing, listening, engaging, sharing, convening, connecting, and entertaining.

- Locate a central courtyard space to incorporate both ground plane and surrounding building walls.
- Include planting at ground level that minimizes additional shade creation.
- Create a green envelope in the space including building facades with landscape interventions such as green walls, water downspouts, or window planters.

- Design the space to function at different scales to maximize program and identity.
- Allow for individual and small group activity zones (pockets).
- Design flexible multi-use areas that can provide a cohesive large space for campus event gatherings (program layers).

World-Class

Welcoming

Integrated

Compact

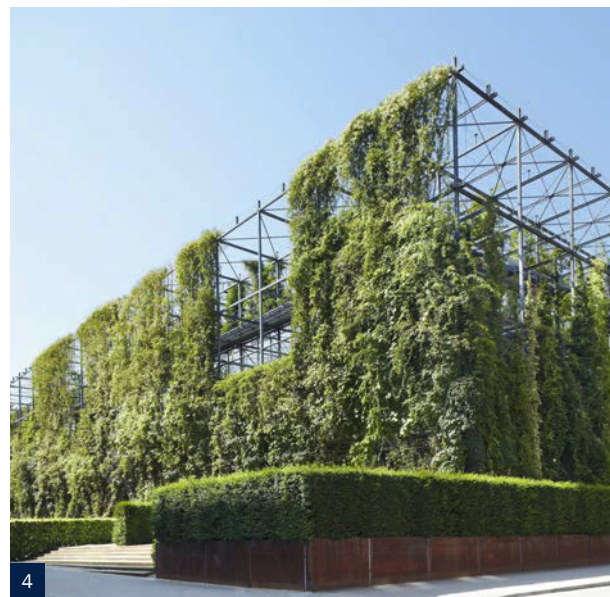
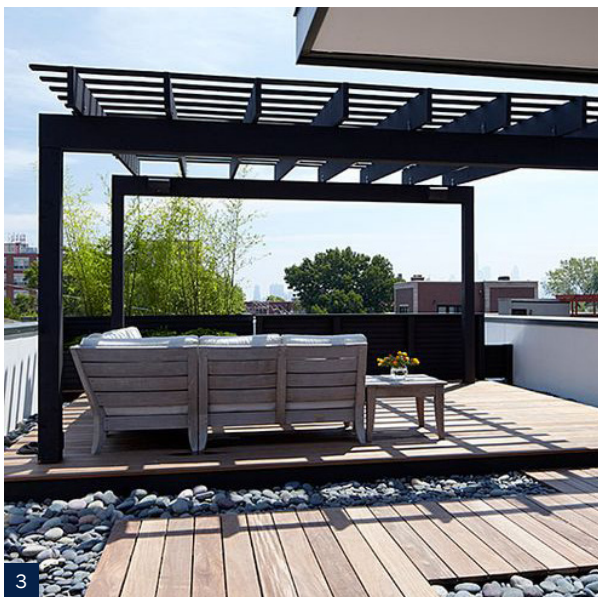
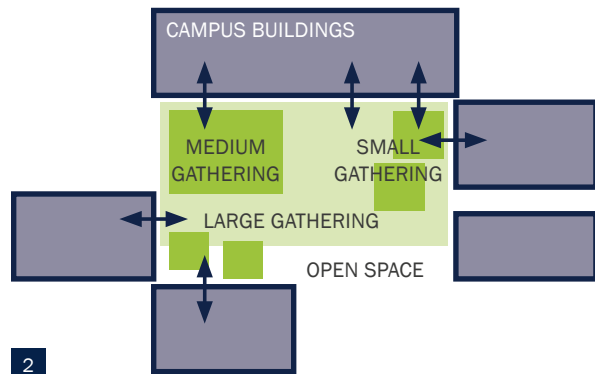
Legible



**8.21.** Various scales of gathering spaces provide learners, visitors, faculty, and researchers with comfortable options.



## CAMPUS DESIGN PRINCIPLES 8.1



1. Discrete planting palette on roofs
2. Open spaces should accommodate different sizes of gathering
3. Small trellises to minimize draft
4. Green facades do not add shade

## 8.1 CAMPUS DESIGN PRINCIPLES

World-Class

Welcoming

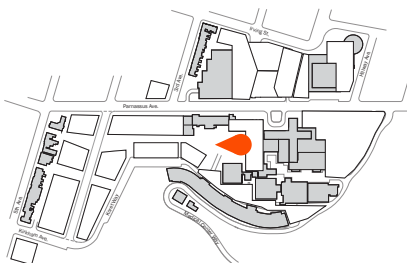
Integrated

Compact

Legible



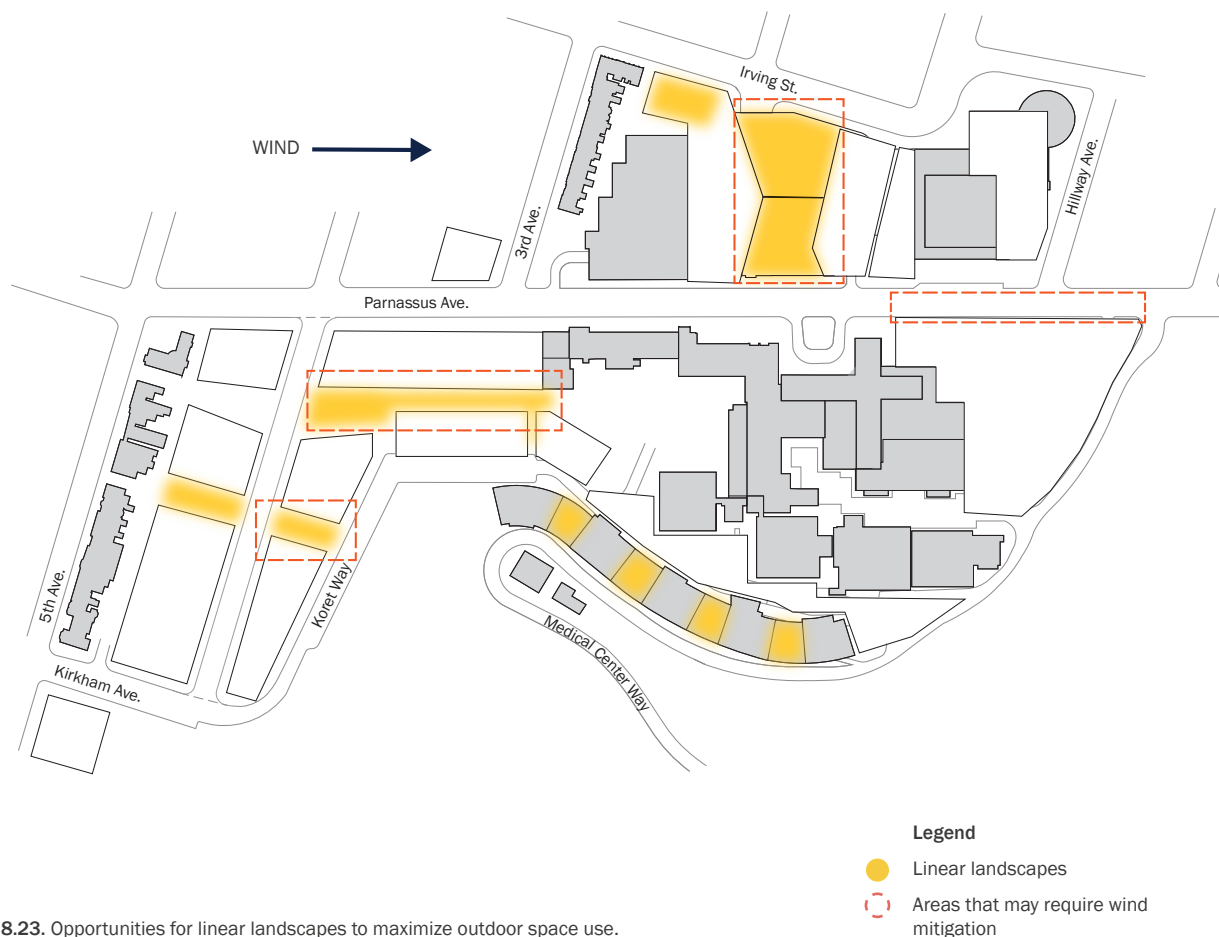
**8.22.** Taking advantage of the grade changes in Saunders Court, there is an opportunity to include multiple flexible use areas to program the space for different group sizes.



## CAMPUS DESIGN PRINCIPLES 8.1

### W6 Maximize the use of appropriate terraces and rooftop spaces as areas for social interactions, wellness, and research.

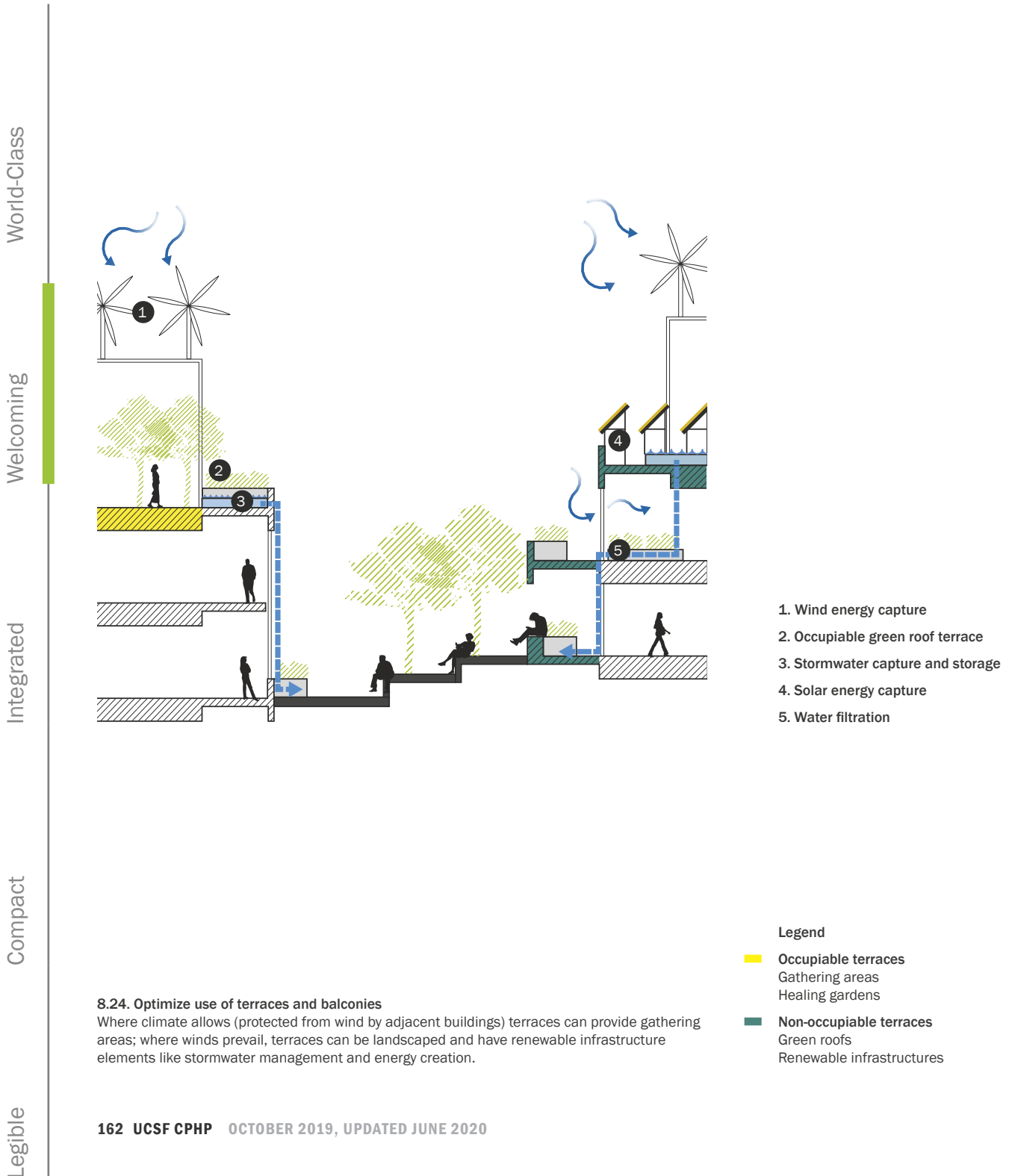
- In occupiable areas shielded from the wind, design terraces and outdoor spaces for pedestrian access, both in public and restricted zones.
- Favor wind-protected terraces with panoramic views, integrating demonstration garden elements such as medicinal, native, and culturally significant plants.
- Consider meditation, recreational, educational, and recuperative gardens as wellness contributors and places of respite.
- In non-occupiable areas, where dominant winds make human activity uncomfortable, create green roof gardens for heat island effect reduction and water detention.
- Incorporate green infrastructure systems, and consider solar and wind energy capture.



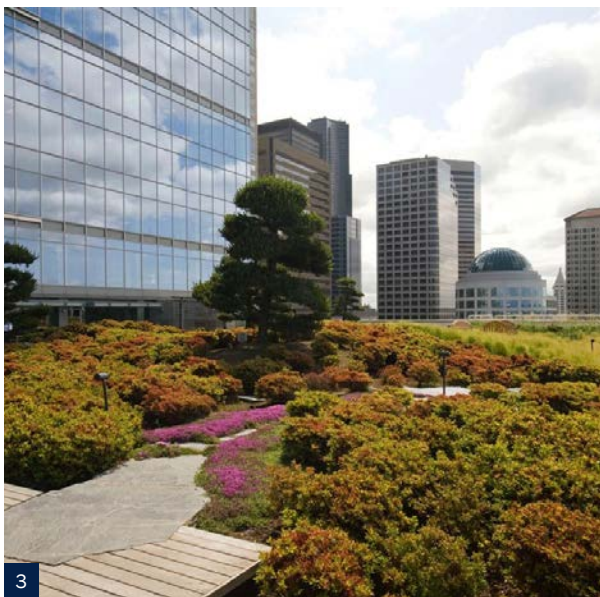
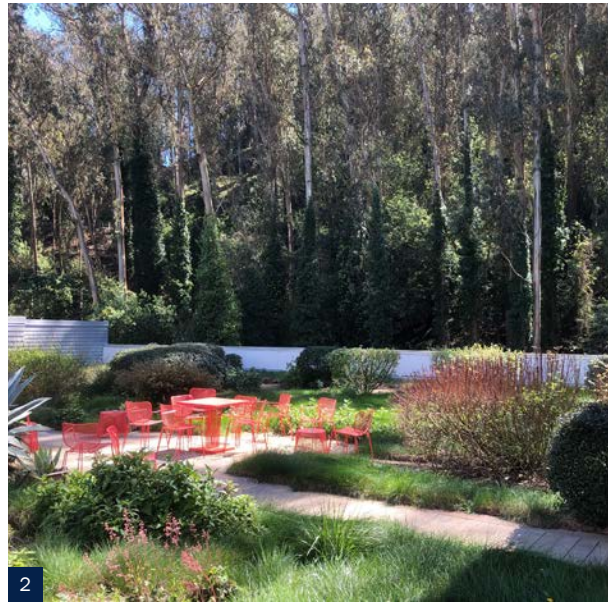
8.23. Opportunities for linear landscapes to maximize outdoor space use.



## 8.1 CAMPUS DESIGN PRINCIPLES



## CAMPUS DESIGN PRINCIPLES 8.1

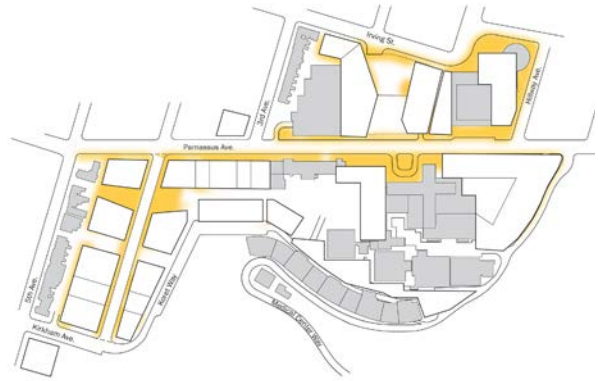


1. Wind mitigation screens
2. Roof terrace on the Dolby building
3. Urban gardens with distinctive planting palettes
4. Unoccupiable green roof

## 8.1 CAMPUS DESIGN PRINCIPLES

### W7. Introduce new streetscape gateway elements on Irving Street and Parnassus Avenue.

- Create campus gateways with clear graphics, landmark signs.
- Identify best locations for planting based on solar exposure to enhance pedestrian experience along sidewalks.
- Prioritize shade trees on sidewalk sections where buildings are already casting shadows to preserve sunny pockets.
- Plant deciduous trees and/or primarily ground cover on sunny areas.
- Define sidewalk materials that reinforce the character of each street, while aiding with site orientation.
- Implement campus lighting standards and utilize light fixtures (poles) on public streets as additional character-reinforcing elements.



**8.25.** The linear landscapes are opportunities for strengthening the campus character, incorporate green infrastructure strategies, and create an inviting walkable environment.



Gateway, landmark signs



Unique sidewalk treatments



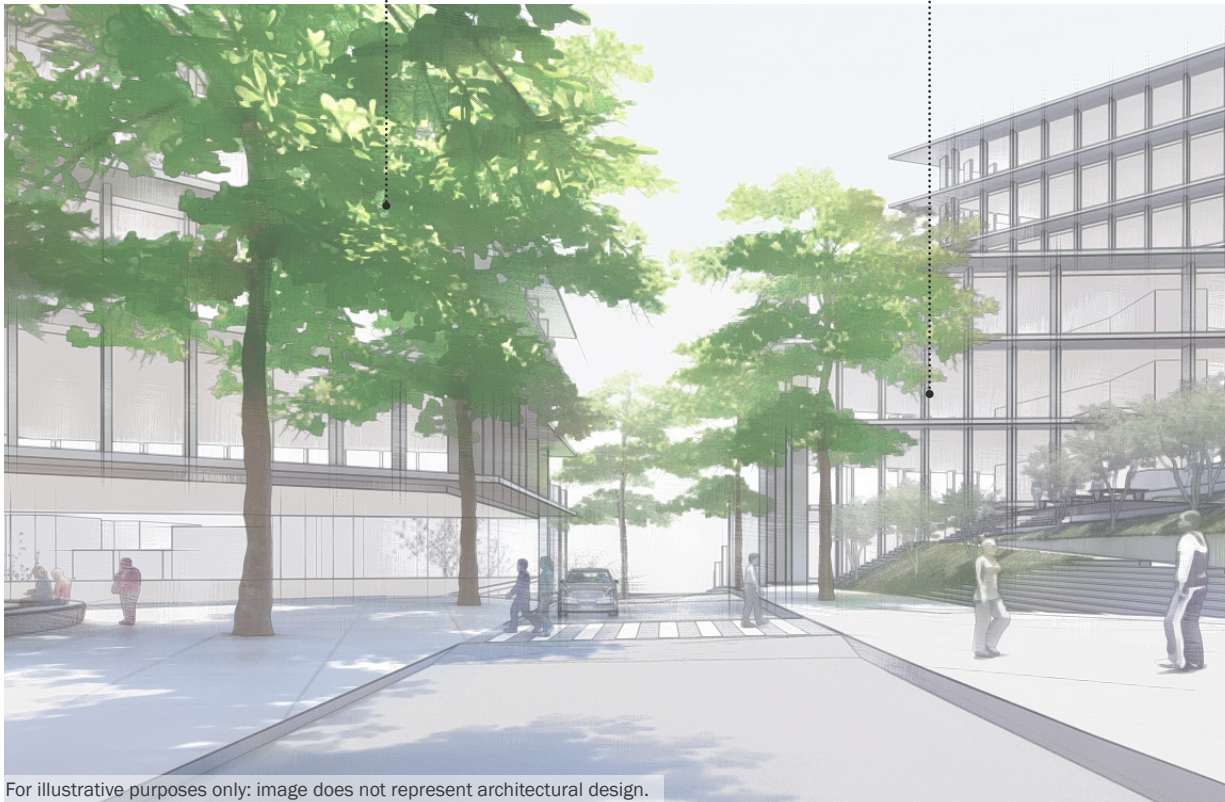
Distinctive signage and lighting standards



## CAMPUS DESIGN PRINCIPLES 8.1

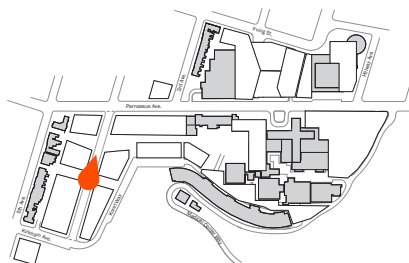
Larger, more trees  
on shaded sides of  
sidewalks

Fewer trees to  
maintain 'sunny  
pockets'



For illustrative purposes only: image does not represent architectural design.

**8.26.** Low planting will be favored on sunny areas to maintain welcomed sun exposure for pedestrians in otherwise windy corridors. Larger trees will be added on already shaded areas.



## 8.1 CAMPUS DESIGN PRINCIPLES

World-Class

In meeting the challenges associated with the long-term stewardship of Parnassus Heights campus resources, UCSF's performance standard will be "Design Excellence." The campus should express UCSF's commitment to leadership, its values, and serving its users. This requires a holistic approach that incorporates expertise in the areas of architecture, urban design, landscape architecture, interior design, engineering, construction, security, and sustainability.

UCSF should establish a **Design Excellence Legacy** at Parnassus Heights by:

1. **Developing a program** that results in dramatic improvements in the design of campus buildings and the positive perceptions they can portray of the institution.
2. **Engaging with distinguished experts** not only in architecture, and urban design, but also interior design, landscape architecture, construction, engineering, resiliency, art, and art conservation.
3. **Conducting on-going peer reviews** during the concept development phase of a project.

Welcoming

### WC1 Apply Design Excellence to achieve a contemporary expression of UCSF's mission.

Integrated

- Engage architects who are recognized design and thought leaders to create facilities that ultimately become respected landmarks.
- Build facilities to reflect the dignity, enterprise, vigor, and stability of UCSF, emphasizing designs that embody the finest contemporary architectural thought. Building designs should aspire to not only suit the occupants, physical program, and historical context, but also contribute to new scientific discoveries that bolster UCSF's ethos and mission.
- Reflect the architectural traditions of San Francisco.
- Avoid an official style.
- Where feasible, incorporate the work of living American artists in buildings and open spaces.
- Adhere to sound construction practices and utilize materials, methods, and equipment of proven dependability.
- Create campus and building designs that are universally accessible.

Compact

Legible

## CAMPUS DESIGN PRINCIPLES 8.1

### WC2 Renovate structures to meet or exceed contemporary building standards.

- All new buildings and spaces should respond to campus energy goals, embrace new building technologies and meet state-of-the-art standards for their specific building type or use.
- Renovations should consider the introduction of high performance facade treatments and building systems.
- Designs should be developed that support occupant comfort through increased micro-climatic control.
- Storm water treatment (low impact development), and design catchment and retention areas should exceed California requirements.

### WC3 Design for long term resilience and adaptation.

- Apply designs that are economical to build, operate, and maintain.
- Prioritize the use of green materials that meet third-party standards and certifications.
- Utilize adaptable and modular systems to respond to future program space needs to reduce costs of reconfiguration, and accommodate dynamic funding and team sizes.
- During renovation projects, design for deconstruction to introduce opportunities for salvage and re-use of existing material.
- Create redundant systems and system connections to fortify the campus against utility failure in case of natural disasters.
- Incorporate passive design strategies, as feasible, to reduce energy demand and full reliance on mechanical systems in order to maintain operability in case of disaster or systemic shocks.
- Incorporate design strategies to address climate change and localized weather event impacts including elements that can be adapted through time as environmental factors change.
- Preference low maintenance species and planting design and durable plant materials that withstand environmental stressors; incorporate long-lived species.
- Where possible integrate green infrastructure systems and integrate with Mount Sutro stormwater management strategies.
- Create landscapes to prevent wildfire spreading: design for natural fire breaks, plant species that are more fire resistant, and integrate with Mount Sutro fire prevention programs.



## 8.2 BEST PRACTICES

### 8.2 BEST PRACTICES

This section reflects best practices in the fields of research, educational, and residential environments applicable to Parnassus Heights. Best Practices should be applied to create the best possible environments for learning, healing, and discovery.

#### Research Space

The objectives for research space are:

- **Foster collaboration** among researchers, **blend** research activities between basic, clinical, and translational;
- Propose **high quality** investigator-assigned and shared resources for both bench and clinical sciences;
- Integrate research with the **clinical enterprise**;
- Secure a space allocation that accommodates **dynamic needs and opportunities**, programmatically and scientifically.

A number of trends in research space design inform the vision. Contemporary research labs are:

- **Core-centric:** High quality shared research resources and co-located equipment limit the replication of expensive, space intensive, specialized equipment. Portions of the equipment and activities traditionally done in a Principal Investigator's (PI's) research space could be shifted to shared facilities.
- **Co-located:** Research teams with critical mass can regroup complementary activities to promote collaboration in high quality shared space. Co-location allows the campus to reorient space allocations thematically.
- **Flexible:** Accommodate dynamic research needs and programs through contractible and expandable labs with modular design and reconfigurable casework, while designating spaces that can be customized to meet specific research needs.
- **Celebratory:** State-of-the-art lab spaces attract and inspire researchers and partners.
- **Collaborative:** Labs can connect physically and visually to nearby offices. Thoughtful adjacencies foster formal and informal interaction.

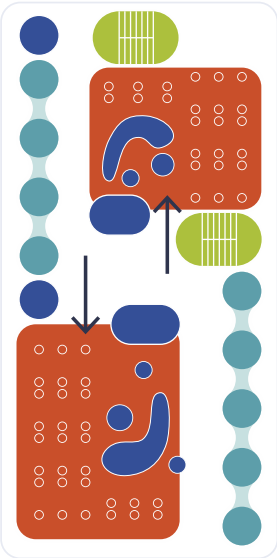


8.27. Collaboration areas can be integrated with traditional benches.

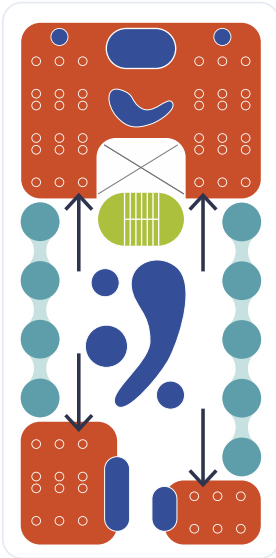
Research neighborhoods can be designed to encourage teams from different fields to work together while sharing cutting-edge equipment. The shared technology platforms can become a meeting ground for the scientists, inspiring them to try out new tools and expand the scope of their research.

Future research labs will break down boundaries as much as possible, fostering formal and informal collaboration, integrating support areas, staff offices, and circulation spaces with traditionally closed-off research stations.

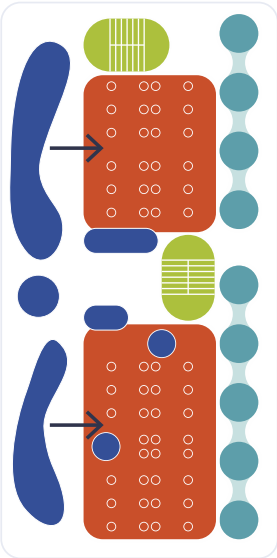
**Collaboration Integrated**  
Desks and collaboration areas have porous boundaries.



**Variety of Scales**  
Labs accommodate various team sizes and configurations.



**Offices Integrated**  
Faculty offices are close to research activities.

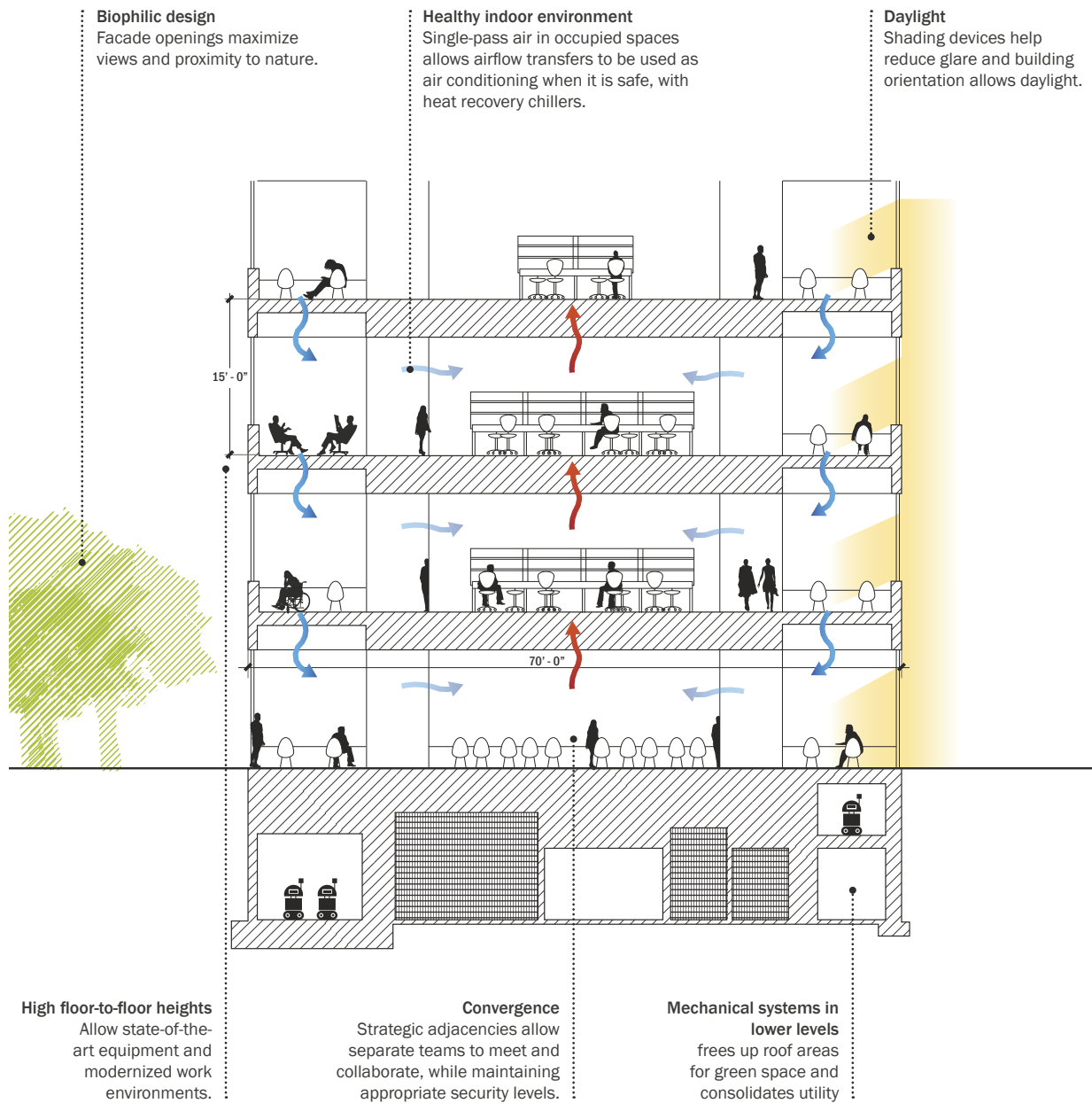


**Legend**

- Faculty
- Researcher staff
- Collaboration areas
- Vertical connections

8.28. Conceptual laboratory layouts displaying various adjacency strategies.

## 8.2 BEST PRACTICES



8.29. Conceptual laboratory building section.



## BEST PRACTICES 8.2

### Standard Benchmarks

- Floor plates: 25,000 GSF
- Floor-to-floor heights: min. 16'
- Floor depth: min. 70'
- Lab bay: ~11' x 33'

### Assumptions

(Jacobs Consultancy + peer institutions)

- Experimental: 6-8 FTE, 60-70% of time in lab.
- Hybrid: 4-6 FTE in hybrid wet lab and 2 in dry lab, 60-70% of time at computer.
- Computational: 6-8 FTE.
- Core-centric layouts will allow for a 20% reduction in wet lab space.

### Parnassus Heights Research

- Assumed breakdown:
  - 50% of Pls: Experimental (wet)
  - 25%: Hybrid wet/dry
  - 25%: Dry
- Research group sizes (FTE):
  - 25%: 1 to 4
  - 20%: 5 to 7
  - 30%: 8 to 10
  - 25%: 11+

Figure 8.4 describes potential neighborhood area sizes, based on best practices for a range of research types and group sizes. Figure 8.5 indicates desired adjacencies and potential research neighborhood layouts. Other planning approaches can also be considered.

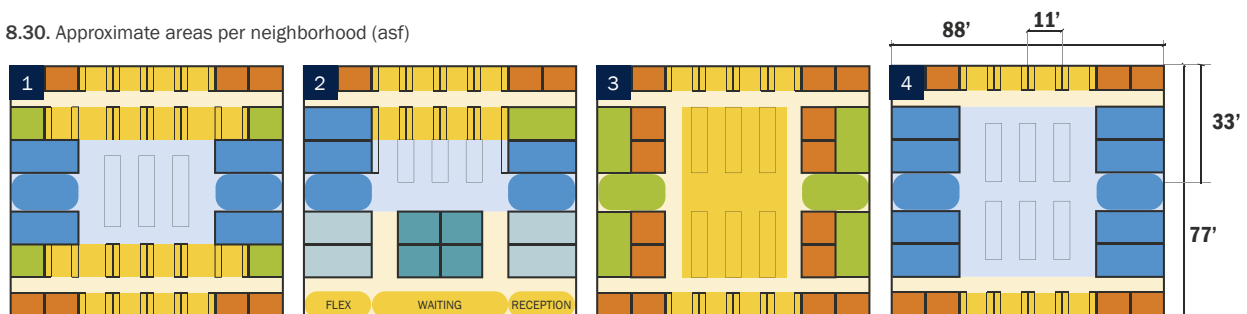
TEAM SIZE	PI Non core-centric	PI Core-centric	PI + 2 Core-centric	PI + 4 Core-centric	PI + 6 Core-centric	PI + 8 Core-centric	PI + 10 Core-centric	PI + 12 Core-centric
WET	200	170	510	850	1,190	1,530	1,870	2,210
HYBRID	150	135	405	675	945	1,215	1,485	1,755
DRY	100	300	500	700	900	1,100	1,300	1,300
PATIENT-FACING	225	675	1,125	1,575	2,025	2,475	2,475	2,925

1. Wet/Experimental (4 Pls)
2. Patient-facing/Clinical (8 Pls)
3. Dry/Computational (8 Pls)
4. Hybrid (6 Pls)

#### Legend

- Lab
- Lab support / equipment
- Clinical research
- Office
- Workstation
- Meeting room
- Exam room

8.30. Approximate areas per neighborhood (asf)



8.31. Conceptual lab module layouts.

## 8.2 BEST PRACTICES

### **Education Space**

The objectives for education space at Parnassus Heights are:

- **Foster collaboration** among students and faculty with appropriate gathering and meeting spaces;
- Propose **high quality** shared resources for educational uses;
- Integrate innovative learning with the **research and clinical enterprises**;
- Secure appropriate space allocation to accommodate **dynamic needs and opportunities**.

To support contemporary pedagogies, classrooms should be predominantly flat-floored and support multi-modal learning. Such classrooms feature mobile furniture, continuous whiteboard surfaces on many walls, and a wide array of station sizes. Lighting should be multi-directional and de-emphasize the concept of a primary learning wall.

Parnassus Heights has an opportunity to optimize spaces for collaboration and gathering, by promoting flexible classrooms and various types of meeting areas.

Adaptable layouts can support multiple forms of learning from traditional lecture format, to seminars, to small-group active learning activities. These design approaches can be applied to both meeting rooms and classrooms, allowing for interchangeability and expanded group sizes.

**Collaboration:** Contemporary teaching approaches emphasize dialogue, formal or informal storytelling, and the active display of ideas. Chapter 4 introduced some of these new typologies (Forum,

Concourse) and highlights the growing role of collaboration in higher education.

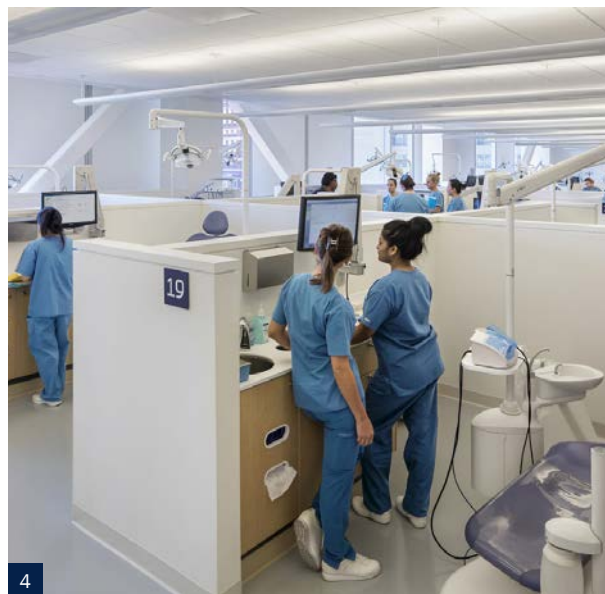
The promiximity between the clinical and education missions at Parnassus Heights is a unique opportunity for convergence. As a result, physical spaces should support the formal and informal gathering of various user groups to foster creativity, multi-disciplinary teams, and applied learning.

**Applied Learning:** Building upon recent investments in class labs and applied learning (such as the 13th floor of the Medical Sciences building, the Makers' Space in the Library, or the Anatomy Learning Center), future education spaces on campus should convey contemporary learning and discovery approaches through simulation spaces, Artificial Intelligence labs and clinical skills.

**Partnerships:** Parnassus Heights can be a fertile environment for industry and community partnerships. Such collaborations can be manifested in incubator spaces, less formal meeting areas, or programmatic approaches such as the Osher Mini Medical Center for the Public and lunch time lectures.

**Healthy Buildings:** Designing for performance means designing for the human body to improve attentiveness, task-focus, memory retention, and stamina. The concept of biophilia (“love of nature”) is illustrated through ample sunlight into classroom and social spaces, landscape views, natural materials and textures, and excellent air quality. Additionally, selected spaces on campus can emphasize wellness and provide respite via various forms of recharge, nourishment, and quiet contemplation.

## BEST PRACTICES 8.2



1. Adaptable furniture
2. Flexible simulation spaces
3. Technology in flexible classroom
4. Academic units in clinical spaces



## 8.2 BEST PRACTICES

**Appropriate Adjacencies:** The future Parnassus Heights campus should optimize adjacencies to allow research, education, and clinical care activities to have frequent and personal connections. For instance, simulations spaces and applied learning areas should be located as close as possible to, or embedded into, the new hospital.

The new hospital building and associated educational spaces should accommodate designated areas for faculty members to meet with clinicians, students, and trainees to open up new research opportunities.

**User-friendly Technology:** Learning processes and spaces have been transformed by technology, but they do not need to be driven by it. Energy efficiency, AV/IT seamless setups, and infrastructure systems in buildings should support classroom flexibility and unconstrained reconfiguration as much as possible. Technological investments should be focused on robust wireless

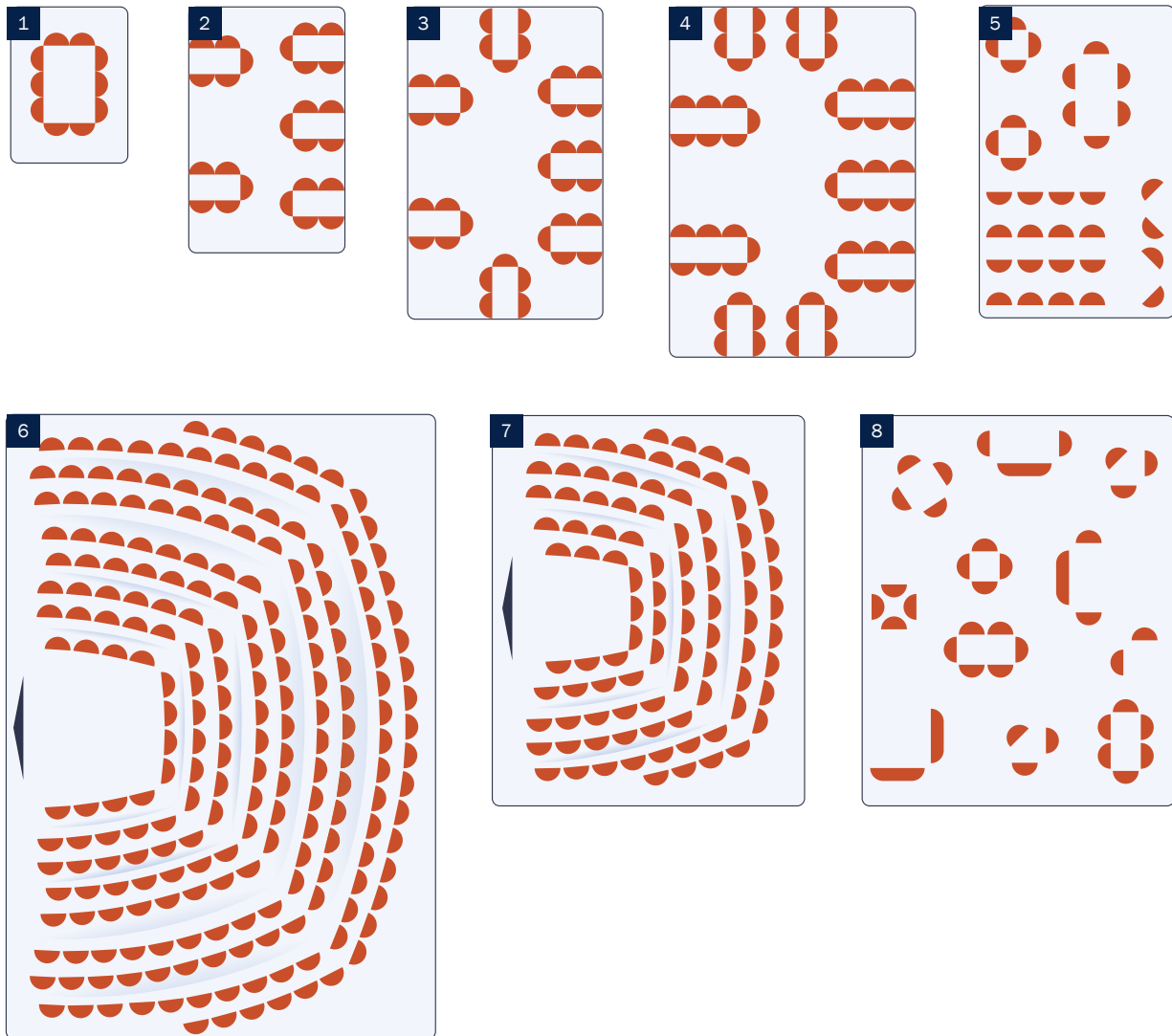
platforms and software platforms that work on the widest array of devices.

Access to video streaming can foster contemporary teaching approaches. For example, they allow students and trainees to monitor and learn from live surgeries, telemedicine consultations, and other doctor-patient interactions like recorded mock patient encounters.

	Seats	ASF/seat	Total (ASF)	Floor
Seminar	8-12	25	300	Flat
Small Active Learning	13-24	30	720	Flat
Medium Active Learning	25-36	30	1,080	Flat
Large Active Learning	37-55	30	1,650	Flat
Small Lecture Hall	56-99	22	2,178	Tiered
Large Lecture Hall	100-200	22	4,400	Tiered
Student Study + Lounge	1,700	1:7 seat/FTE	1,000	Flat

8.32. Space attributes per classroom type.

## BEST PRACTICES 8.2



1. Seminar
2. Small Active Learning
3. Medium Active Learning
4. Large Active Learning
5. Student study and lounge
6. Large Lecture Hall
7. Small Lecture Hall
8. Informal collaboration

8.33. Prototypical classroom space types.

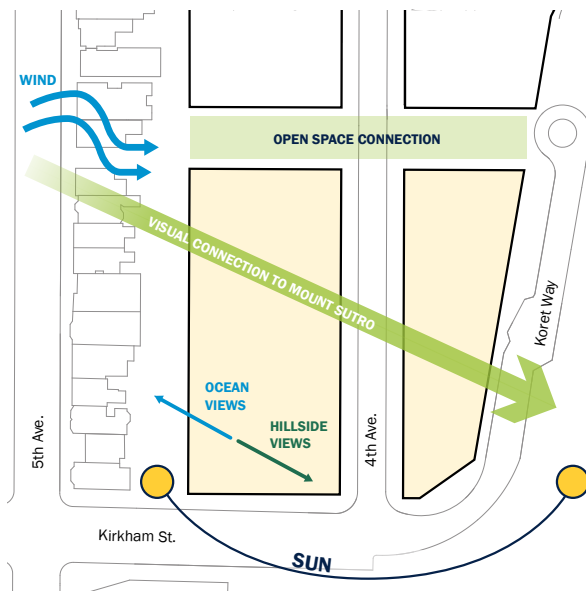
## 8.2 BEST PRACTICES

### **Residential Space**

The West Side district may include future residential development. As feasible UCSF should apply best practice approaches in residential design to integrate housing with the neighborhood.

The West Side Residential Building and Planning Principles are:

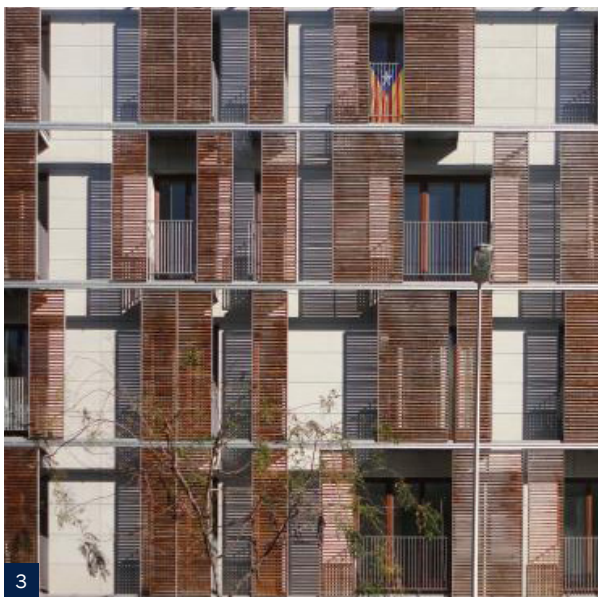
- Incorporate social spaces in residential buildings to create active ground floors and outdoor spaces.
- Provide accessible space for community facing amenities (i.e. markets, food retail, services).
- Consider the scale and solar access along 4th Avenue for comfortable residential street experience.
- Provide for adequate solar access and daylighting to housing units, interiors, and outdoor spaces.
- Create strategic vistas through the West Side to Mount Sutro from the surrounding community, informing building bulk, height, and scale.
- Maximize views to the hillside and the ocean from housing units.
- Orient buildings to shield from the prevailing winds, and create sheltered outdoor spaces.



8.34. Transitioning from the neighborhood to the hillside should inform massing, optimizing for views, light, and wind mitigation.



## BEST PRACTICES 8.2



1. Pedestrian passages
2. Maximized views
3. Sun and wind mitigation strategy
4. Green roofs

## 8.2 BEST PRACTICES

### **Aldea Housing Community**

Redevelopment at the Aldea housing community is an opportunity to reinforce its connection with Mount Sutro. Recent trends in sustainable design help inform design opportunities.

- Thoughtfully incorporate views to maximize connectivity to nature while preserving residents' privacy.
- Respect existing wooded setting and open space areas, refrain from impacting the extent of the Mount Sutro Open Space Reserve.
- Consider impact on Clarendon and Behr Avenues if changing the building siting or scale; preserve public view corridors and street scale as feasible.
- Foster a harmonious integration of housing through landscaping.
- Reinforce pedestrian connections between apartment structures.
- Establish discrete facade treatments and a design language that embraces the context.
- Prioritize the use of natural materials for building design, and promote efficiency through sustainable building systems.



## BEST PRACTICES 8.2



1. Aldea today
2. Visible pedestrian connections
3. Textured facades
4. Terraces and balconies







# APPENDICES

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## APPENDIX A

### ACKNOWLEDGMENTS

## APPENDIX B

### WORKING GROUP REPORTS

RESEARCH SPACE WORKING GROUP

EDUCATION SPACE WORKING GROUP

DIGITAL HUB WORKING GROUP

COLABS WORKING GROUP

## APPENDIX C

### COMMUNITY IDEAS

---

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## **B WORKING GROUP REPORTS**

### **B. WORKING GROUP REPORTS**

#### **RESEARCH SPACE WORKING GROUP REPORT**

For the full report with appendices, please see:

[https://space.ucsf.edu/sites/g/files/tkssra416/f/wysiwyg/CPHP\\_Research\\_Space\\_Working\\_Group\\_Report.pdf](https://space.ucsf.edu/sites/g/files/tkssra416/f/wysiwyg/CPHP_Research_Space_Working_Group_Report.pdf)



February 15, 2019

Dear Senior Vice Chancellor Jenny and Executive Vice Chancellor Lowenstein:

Thank you for the opportunity to serve on the Research Space Working Group (RSWG) for UCSF-Parnassus Heights (PH). We have greatly enjoyed working together to evaluate UCSF-PH research programs and the research space infrastructure that supports them. We provide the attached report in the form of a combined pdf that includes the slides we presented to CPHP in December and additional supporting information. The supporting information includes an executive summary, background information about the RSWG, research programs and buildings at PH, and detailed information about current and proposed research programs at PH, including a mechanism to solicit input and communicate with these programs as decisions about research space at PH proceed.

You will see that the main pressing recommendation in our RSWG report is the immediate construction of Parnassus Discovery Hall and the Center for Innovative Medicine. The RSWG believes that it is critical that the construction of these research buildings begin immediately so that they are completed before construction of the new Diller hospital starts in 2023. In this way, the transformation of the PH research space can occur within a timeline that quickly transforms the current research space infrastructure while allowing the UCSF-PH research enterprise to retain and recruit world class faculty and staff.

We are aware that new construction for research buildings at PH brings many challenges, but we believe that presenting you with a bold vision for transformative change is a key step on the journey toward meeting these challenges and delivering a rejuvenated UCSF-PH campus. We envision an integrated campus at UCSF-PH comprising world class biomedical research, cutting edge patient care, and the highest standard education programs in life sciences and health professions. We think this vision will appeal to our community neighbors and resonate with our university's friends and donors.

Please let us know how we can help further. We are energized by the process of bringing you this plan and we stand ready to help you implement it.

Sincerely,

Tamara Alliston, PhD

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Robert Blelloch, MD, PhD

Jason Cyster, PhD

Maria Dall'Era, MD

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Rushika Perera, PhD

Art Weiss, MD, PhD

# Research Space Working Group

## FINAL REPORT

**Dated: February 15, 2019**

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## I. Research Space Working Group (RSWG) - Executive Summary

### Overview

The RSWG is a working group of the Comprehensive Parnassus Heights Plan (CPHP) that was charged to develop guiding principles for research space at PH. The RSWG has broad representation from UCSF schools and departments and from basic and clinical research faculty and staff.

Through an assessment of UCSF-PH research programs and infrastructure, the RSWG finds that UCSF-PH is home to numerous world-class research programs that are outstanding across the spectrum from basic and quantitative biomedical research to translational and clinical research. In contrast, the current research space infrastructure is weak. The lack of investment in the UCSF-PH research space infrastructure threatens the competitiveness and viability of PH-based research.

Following a data-driven process using standard benchmarks for research space and growth, the RSWG provides an urgent call for the rejuvenation of the PH research infrastructure with the construction of new and renovated research buildings that will transform and prepare the PH campus and UCSF for its bold future.

### Recommendations

**Recommendation 1:** Immediately expand and transform the PH research campus to meet the urgent needs of current and future research programs. Plan for an increase in research space from current 550,000 ASF to 875,000 ASF. A two-phase approach to construction of research infrastructure is recommended:

#### **Phase 1 (Immediate, near term):**

- (i) Construct *Parnassus Discovery Hall*: a new 150,000 ASF building for research to accommodate growth of existing programs and development of new programs.
- (ii) Construct a *Center for Innovative Medicine*: a 75,000 ASF clinical research building to provide currently missing clinical research infrastructure.
- (iii) Renovate the main research buildings (HSIR East and West, Medical Sciences).

The RSWG believes that it is critical that the construction of Parnassus Discovery Hall and of the Center for Innovative Medicine begin immediately so that these buildings are completed before construction of the new Diller hospital starts. In this way, the transformation of the PH research space environment can occur within a timeline that quickly transforms the current research space infrastructure while allowing the UCSF-PH research enterprise to retain and recruit world-class faculty and staff.

#### **Phase 2 (Medium term):**

Build 100,000 ASF of additional research space to meet the ongoing needs of strong and emerging research programs.

**Recommendation 2:** Create space conditions that rejuvenate the existing strong PH research programs while fostering growth of new programs.

**Recommendation 3:** Create inspiring research space with adjacencies and design elements that spur connectivity, community, innovation, and celebration

**Recommendation 4:** Assign space using transparent and inclusive mechanisms.

## B WORKING GROUP REPORTS

### II. RSWG Report



University of California  
San Francisco

# Research Space Working Group (RSWG)

PMP Steering Committee Meeting

#### Co Chairs

Tamara Alliston  
John Fahy

#### Committee

Robert Blelloch  
Jason Cyster  
Andrei Goga  
Julene Johnson  
Thomas Lang  
Janel Long-Boyle  
Shaeri Mukherjee  
Rushika Perera  
Art Weiss  
Carol Dawson-Rose  
Christine Nguyen  
Maria Dall'Era  
Jeffrey Lotz

Lindsey Criswell

#### Support

Cara Fladd  
Sharon Priest  
Joy Glasier  
Maryam Farshad

## Research Space Working Group Charge

- **Research Space Working Group (RSWG):** A representative committee reporting to campus leadership as part of the Comprehensive Parnassus Heights Plan project.
- **RSWG Charge:** To develop guiding principles for research space at Parnassus Heights.

***How much research space does PH need?***

***What kind of research space does PH need?***

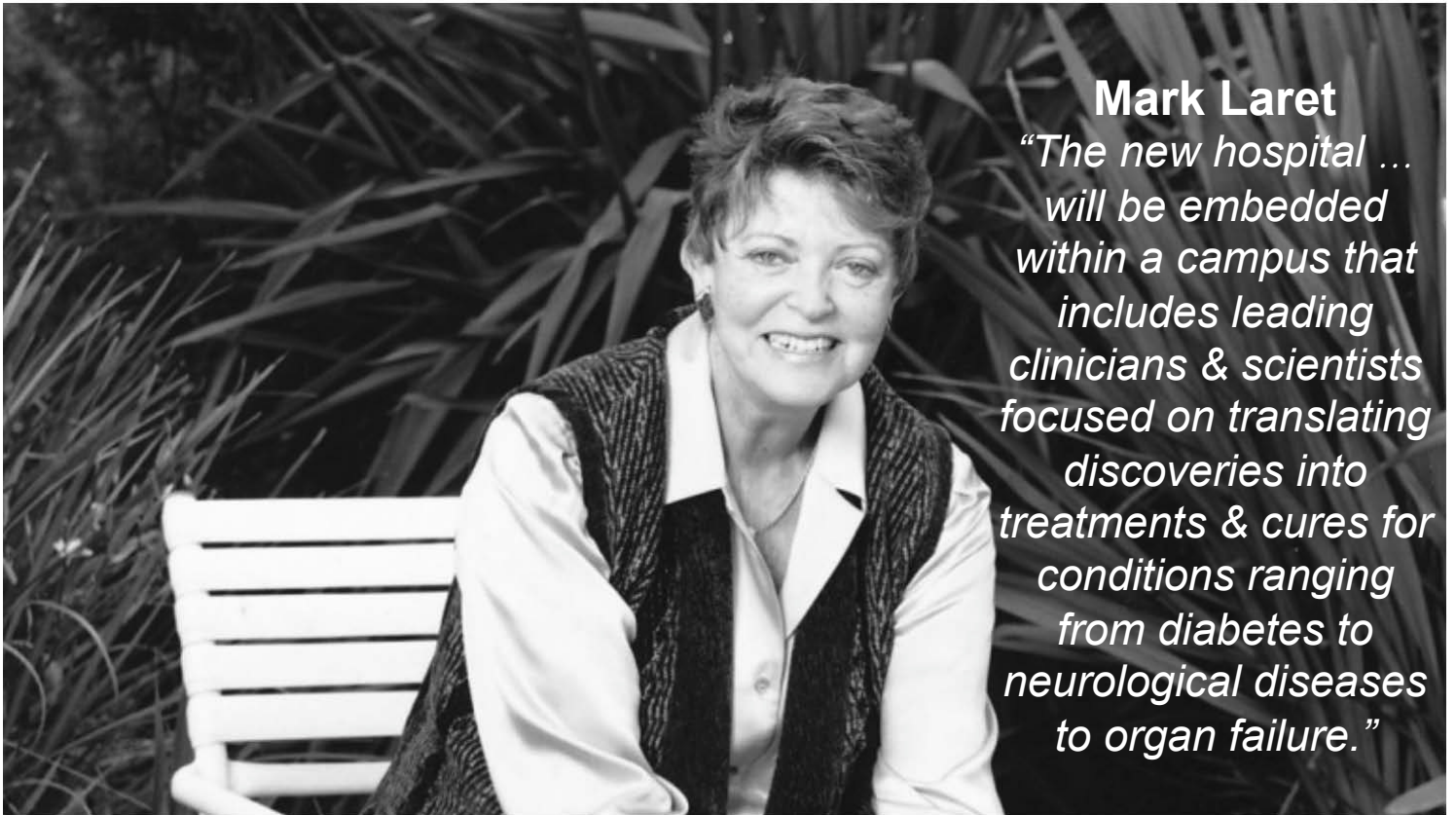
### **Before we start...**

### **PH research space planning in a 2018 context**

- Development of the UCSF-MB campus nearing completion.
- Relative neglect of the UCSF-PH campus threatening its viability as a world class research campus.
- Groundswell of support from faculty and leadership to rejuvenate the PH campus.
- \$500MM Diller gift for a new PH hospital.
- Comprehensive Parnassus Heights Plan (CPHP) - possibility for PH to be “re-born.”



## UCSF Helen Diller Medical Center at PH



**Mark Laret**

*“The new hospital ...  
will be embedded  
within a campus that  
includes leading  
clinicians & scientists  
focused on translating  
discoveries into  
treatments & cures for  
conditions ranging  
from diabetes to  
neurological diseases  
to organ failure.”*

## **UCSF Helen Diller Medical Center at PH**





## UCSF Mission

*Advance health worldwide through ..*

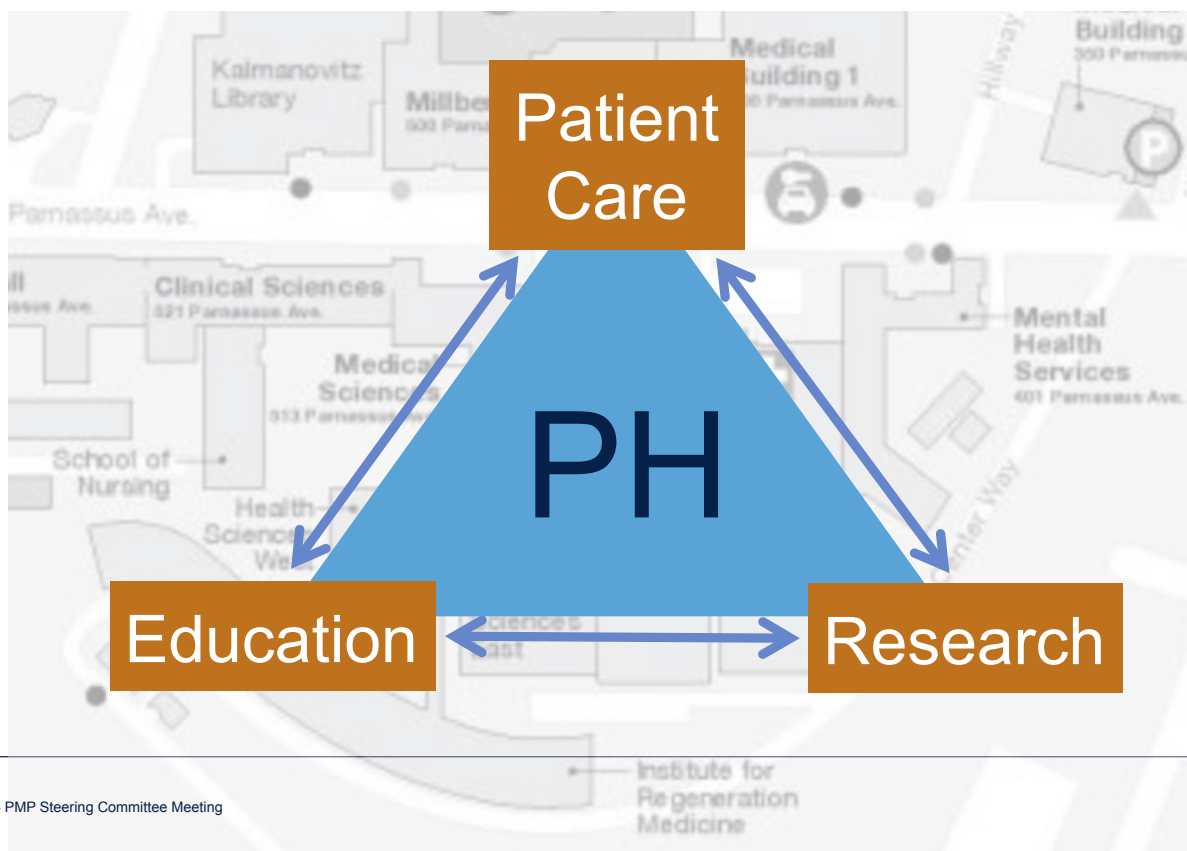
preeminent biomedical **research**

graduate-level **education** in the life sciences and  
health professions

and excellence in **patient care**.

## **RSWG and the CPHP process**

*The unique opportunity to create an integrated world-class UCSF campus at PH*





## **Overview of RSWG Guiding Principles for the PH Research Enterprise**

- 1.** World-class biomedical research campus:
  - A magnet science community
  - Architecture and design that inspires innovation & discovery
- 2.** Blend of research activities - basic, clinical, translational:
  - Not dominated by any research category or program
  - Each research activity represented by a critical mass of faculty
- 3.** Research activities that are integrated with one another and:
  - UCSF Helen Diller Medical Center
  - UCSF education programs

### RSWG - Main Recommendation

- Immediately expand and transform the Parnassus Heights research campus to meet the urgent needs of current and future research programs.
- Plan for an increase in research space from current 550,000 ASF to proposed 875,000 ASF.

#### Phase 1 (immediately):

- (i) Build **Parnassus Discovery Hall** - 150,000 ASF
- (ii) Build **Center for Innovative Medicine** - 75,000 ASF
- (iii) Renovate HSIR-East, HSIR-West, and Medical Sciences

#### Phase 2 (5-10 years)

**New Research Building(s) – 100,000 ASF**

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## **Why should PH accommodate 875K of research space?**

1. Overview of RSWG Process
2. Overview of Current PH Research Enterprise
  - Space
  - Investigators
  - Programs
3. Recommendations for space and other research needs

# RSWG - Overview of Process

## 1. Meetings

- RSWG: monthly, March – December 2018
- RSWG Executive Team: weekly, March – December 2018

## 2. Sources of Information

- Research survey - Vice Chancellor of Research - Spring 2018
- Research space data - Campus Planning, Space Management
- Research funding data – Budget and Resource Management
- National research space ‘benchmarks’ – Perkins Eastman, Jacobs
- Grassroots and leadership – Stakeholder outreach and meetings



## **Overview of Current PH Research Enterprise – Research Space**

## B WORKING GROUP REPORTS

# How much research space is available at PH?

558,000 ASF <sup>a</sup> currently available

Completed	Building	Space (ASF)
1917	UC Hall	26,000
1941	Langley Porter (LPPI)	26,000
1954	Medical Science Building	117,000
1955	Millberry Union	9,000
1955	Moffitt Hospital	14,000
1956	Proctor Foundation	4,000
1964	HSIR East	130,000
1964	HSIR West	109,000
1964	LPPI Butler Building	1,000
1966	Surge	5,000
1972	ACC Building	10,000
1972	School of Nursing	19,000
1979	School of Dentistry	11,000
1982	Long Hospital	3,000
1986	Koret Vision Research	21,000
1991	Kalmanovitz Library	4,000
2005	PSB	8,000
2010	Dolby	41,000
	<b>Total</b>	<b>558,000</b>

• Total space at PH

= 1,777,000 ASF

• 31% = research space

10 buildings are more than 50 years old

20 of 28 HSE/HSW floors remodeled

49,000 ASF research space in last 20 years

(a) Research Space includes: academic office, dry lab, wet lab, wet lab support, & Medical Center academic space = broader characterization than for ICR (only considers academic office space assigned to PI with awards).

RSWG - PMP Steering Committee Meeting

# How much research space is available at PH?

550,000 ASF <sup>a</sup> available when accounting for decanted buildings

Completed	Building	Current	2019-2030
1917	UC Hall	26,000	
1941	Langley Porter (LPPI)	26,000	
1954	MSB	117,000	117,000
1955	Millberry Union	9,000	9,000
1955	Moffitt Hospital	14,000	14,000
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1991	Kalmanovitz Library	4,000	4,000
2005	PSB	8,000	8,000
2010	Dolby	41,000	41,000
2020	Clinical Sciences		75,000
	<b>Total</b>	<b>558,000</b>	<b>550,000</b>

6 buildings to be  
decanted

Clinical Sciences  
is re-opening in 2020

(a) Research Space includes: academic office, dry lab, wet lab, wet lab support, & Medical Center academic space = broader characterization than for ICR (only considers academic office space assigned to PI with awards).

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## How does PH compare to MB: ASF?

	Current	2019-2030
<b>Parnassus Heights</b>		
Total ASF	1,777,000	1,656,000
Research ASF	558,000	550,000
% Research ASF	31	33
% Growth in Research ASF		-1%
<b>Mission Bay</b>		
Total ASF	1,497,000	2,238,000
Research ASF	546,000	864,000
% Research ASF	36	39
% Growth in Research ASF		58%



## How does PH compare to MB: Space Utilization?

1. A healthy research campus requires some underutilized space

2. Old space drives PH space underutilization
  - 30% of HSE/HSW has not been remodeled

3. Remodeled PH research space is hyper-utilized

- Current PH research is projected to require 600K ASF, but has 550K

Parnassus Heights: 55%			
Utilization	% Utilization	Building	Completed
Most	87%	HSE 15	2010
	73%	Dolby	2010
Least	49%	HSE	1964
Average	55%	HSW	1964
Mission Bay: 70%			
Utilization	% Utilization	Building	Completed
Most	83%	Byers	2005
Least	50%	Smith CVRI	2010
	65%	Genentech	2002
Average	72%	Cancer Center	2008

**Remodeling old PH research space will not accommodate growth.**

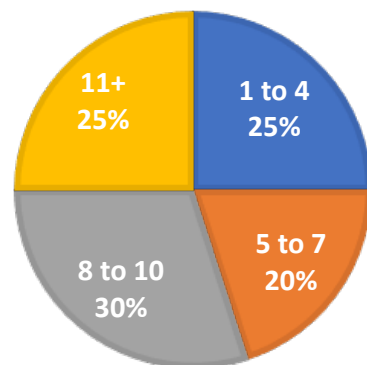
# **Overview of Current PH Research Enterprise – Investigators and Programs**

## Current PH Research Enterprise PH Investigators

- Number of PH PIs<sup>a</sup>: 427 PIs (40% of UCSF PIs)
- Academic research benchmarks suggest even faculty rank distribution
- 55% Senior Faculty: Full Professors are overrepresented at PH
- 23% Junior Faculty: 1/3 fewer Assistant Professors at PH than MB
- PH Group Size: 25% small, 50% medium, 25% large research groups

(a) PI: all PI's of Sponsored Research Projects.

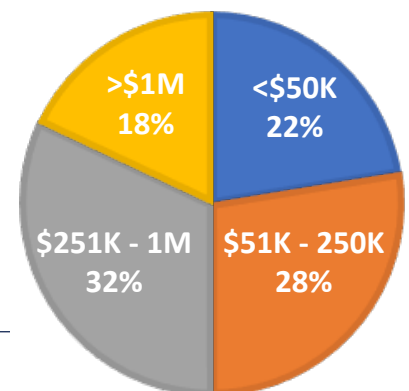
Researchers per PH PI



## **Current PH Research Enterprise PH Investigators – Robust Funding**

- Funding: \$309 MM in annual research funding (direct & indirect, 2016)
- PH ICR/ASF is 14% lower than MB:
  - PH ICR/ASF: \$153
  - MB ICR/ASF: \$177
- Modern space design affords a 15% efficiency
- Suggests that PH ICR/ASF is on par with MB

Direct Costs per PH PI



RSWG - PMP Steering Committee Meeting



# Current PH Research Enterprise

## Types of Research and Research Space

**Types of Research**

(\*2018 Research Survey data)

1. Basic (40%)

2. Translational (21%)

3. Clinical (27%)

4. Population (12%)

- Many PIs moving to MB (Block 33)
- Staying at PH: Tobacco Center, SOD, some SON



**Types of Research Space**

ASF/Researcher

1. Bench/Wet 200

Hybrid 150

2. Computational 100

Hybrid 150

3. Patient Facing 225

4. Hospital & Clinics

5. Community

# Current PH Research Enterprise Basic Science Program

### History of Strong PH Research Programs:

#### Longstanding Programs

Cancer  
Diabetes  
Liver Science  
Lung Science

#### Research that 'stayed' at PH

Cell Biology (SOD)  
Research in Clinical Depts  
(OB/Gyn, Orthopaedics, etc.)

#### 'Post-MB' PH Programs

Craniofacial  
Dev & Stem Cell Biology  
Human Genetics  
Immunology  
Microbial Pathogenesis

### Present: Diverse mix of outstanding investigators

- High-impact fundamental & translational discoveries
- Many #1 programs and investigators
- Strong Centers and Programs (P30, T32 etc.)
- New initiatives that synergistically advance UCSF mission at PH (i.e. Aging)

## Current PH Research Enterprise Basic Science Program

### Challenges:

- **Insufficient space** quality and quantity - no room to grow
- **Gridlock** to remodeling
- **Difficulty recruiting** faculty & trainees – ‘2<sup>nd</sup> tier campus’
- **Fragmented programs** – difficult to co-locate collaborators
- **Shortage of core resources**

*“Despite its international preeminence and extraordinary success by all objective measures including the highest levels of indirect costs per square foot at Parnassus, the center is bursting at the seams...”*

*- Matthias Hebrok, Diabetes Center*

# Current PH Research Enterprise

## - Clinical Research programs involving patient contact

- 249 faculty<sup>a</sup>
- 45% are female
- 189 are PIs on PH-based sponsored projects that involve patient-facing research
- 226 clinical research coordinators
- Diverse, successful & growing programs in multiple clinical departments across schools
- A large portion of UCSF's research funding (\$113.5MM) annually in research funding

- Organ diseases (heart, lung, liver, kidney, brain, bowel)
- Transplant medicine & surgery
- Heme malignancies, immuno-oncology, neuro-oncology
- Rheumatology & orthopaedics
- Symptom science
- Diabetes & endocrine diseases
- Dental & oral diseases
- Health disparities
- Hospital medicine, palliative care
- Imaging & devices

(a) 76% of faculty are "PI" with Sponsored Research Projects.



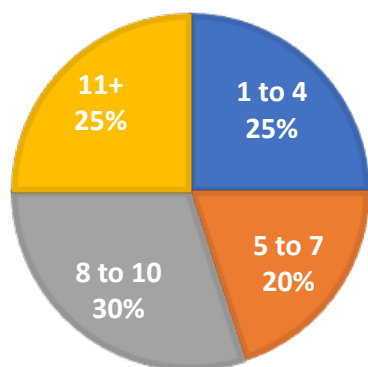
## **Current PH Research Enterprise Clinical Science Programs - Challenges**

1. History of **poor advocacy** to generate research resources from campus leadership.
2. Lack of **properly designed space** for research involving patient cohorts, clinical trials and mechanism-oriented clinical research in human subjects.
3. Lack of **designated research space** in patient care areas of the hospitals and clinics.
4. Suboptimal **interactions and collaborations** with UCSF Health.

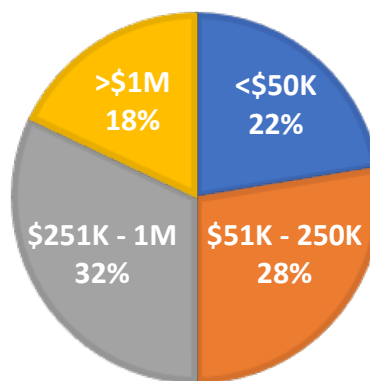
# **How much research space is needed to properly support current and future basic, clinical, and translational research at PH?**

## How much research space is needed at PH?

Factor Considered	Values Used	Explanation
Current PH Research ASF	550,000 ASF	<ul style="list-style-type: none"> <li>Research ASF in 2030 based on Campus Planning analysis</li> </ul>
Current PH PIs	427 PIs	<ul style="list-style-type: none"> <li>PIs of sponsored research projects at PH</li> </ul>
Growth over 20 Years	1-2%	<ul style="list-style-type: none"> <li><b>1% Growth:</b> 521 PIs</li> <li><b>2% Growth:</b> 634 PIs</li> </ul>
Group Size	9	<ul style="list-style-type: none"> <li>PH-specific analysis based on funding and survey: PI+8</li> <li>Consistent with national group size trends: PI+8</li> </ul>



Researchers per PH PI



Direct Costs per PH PI

## B WORKING GROUP REPORTS

# How much research space is needed at PH?

Factor Considered	Values Used	Explanation
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Group Size	9	<ul style="list-style-type: none"> <li>PH-specific analysis based on funding and survey: PI+8</li> <li>Consistent with national group size trends: PI+8</li> </ul>
Modern Design	Core-centric: -15%	<ul style="list-style-type: none"> <li>15% space efficiency for wet and clinical research space</li> </ul>
Type of Research	All Types <i>New: Clinical</i>	<ul style="list-style-type: none"> <li>Addresses the need for all types of research at PH</li> <li>Addresses unmet need for clinical research space</li> </ul>
ASF/Investigator	Core-centric Standards	<ul style="list-style-type: none"> <li>Wet: 170 ASF</li> <li>Hybrid: 135 ASF</li> <li>Computational: 100 ASF</li> <li>Clinical: 190 ASF</li> </ul>
Type of Research Space	Computationally integrated	<ul style="list-style-type: none"> <li>Wet: 45%</li> <li>Hybrid: 18%</li> <li>Computational: 19%</li> <li>Clinical: 18%</li> <li>Plan to accommodate shift in research type over 20 years</li> </ul>
Core Space	20% Cores 15% Animals	<ul style="list-style-type: none"> <li>20% of new ASF of non-computational space for Cores</li> <li>15% of new ASF of wet research space for Animal Space</li> <li>Percentages derived from industry standards</li> </ul>



## How much research space is needed at PH?

Growth in PIs	Group Size: 9 (PI+8)
1%	722,106 ASF
2%	878,724 ASF

Modest growth projections yield a research space calculation of 722,000 - 875,000 ASF.

*Realizing the transformative potential of PH requires that we right size the research for growth and success.*

# Why should PH accommodate 875K of research space?

1. A vibrant UCSF campus of the future requires **transformative new space for research and discovery**.
2. To realize the impact of new hospital and to support the flourishing PH clinical research enterprise, **clinical research** space is urgently needed.
3. PH can achieve the UCSF vision for **Precision Medicine** with an integrated network of outstanding investigators across the **continuum of research**.
4. To realize the potential of **world-class PH-based research programs**, such as ImmunoX and others, space for growth is needed.
5. To **pioneer new research areas**, such as aging, metabolomics, microbiome, and others, space for growth is needed.
6. To **attract and retain junior faculty** to balance 55% senior faculty, space is urgently needed.

## **Recommendation 1**

***How much research space does PH need?***

# Recommendation 1

**Expand and transform the PH research campus to meet the urgent needs of current and future research programs.**

### TWO PHASE APPROACH

#### Phase 1 (Immediate, near term):

- **Construct** cores and a new research building with 150,000 ASF for research to accommodate growth of existing programs and development of new programs.
- **Construct** a clinical research building with 75,000 ASF as a Center for Innovative Medicine.
- **Renovate** the main research buildings (HSIR East and West, Medical Sciences) to modern gold-standard research space.

#### Phase 2 (Medium term):

- **Build** 100,000 ASF of additional research space to meet the ongoing needs of strong and emerging research programs.



# Future Research Space at UCSF-PH: Phase 1

Completed	Building	Current	2019-2030
1917	UC Hall	26,000	
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1954	MSB	117,000	117,000
1955	Millberry Union	9,000	9,000
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1991	Kalmanovitz Library	4,000	4,000
2005	PSB	8,000	8,000
2010	Dolby	41,000	41,000
2020	Clinical Sciences		75,000
Immediate Future	"Parnassus Hall" Research Building		150,000
Immediate Future	Center for Innovative Medicine		75,000
	<b>Total</b>	<b>558,000</b>	<b>775,000</b>

**Propose  
775,000 ASF for  
Research at PH  
In Phase 1**

Renovate HSIR  
East and West and  
MSB

Construct  
Parnassus Hall  
and the Center for  
Innovative Medicine

# Future Research Space at UCSF-PH: Phase 2

Completed	Building	Current	2019-2030
1917	UC Hall	26,000	
1941	Langley Porter (LPPI)	26,000	
1954	MSB	117,000	117,000
1955	Millberry Union	9,000	9,000
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2005	PSB	8,000	8,000
2010	Dolby	41,000	41,000
2020	Clinical Sciences		75,000
Immediate Future	"Parnassus Hall" Research Building		150,000
Immediate Future	Center for Innovative Medicine		75,000
"Phase 2"	Additional Research Space		100,000
	<b>Total</b>	<b>558,000</b>	<b>875,000</b>

RSWG - PMP Steering Committee Meeting

**Propose  
875,000 ASF for  
Research at PH  
In Phase 2**

Renovate HSIR  
East and West and  
MSB

Construct  
Parnassus Hall  
and the Center for  
Innovative Medicine

Construct Additional  
Research Space  
in Phase 2  
To Provide Needed  
Space for Growth of  
Research Programs

UCSF

## **Constructing the new Parnassus Heights research space infrastructure**

### **Critical considerations:**

1. Speed is paramount to rejuvenate PH research space.
  - Capture current momentum of world-class programs
  - Prevent talent flight
  - Compete for best recruits (faculty and students)
2. Urgency in resolving the unmet need for clinical research space and infrastructure.
3. Mindful of unique space needs of each type of researcher.
4. Inclusive and transparent mechanism to solicit input from the research community on space design and adjacencies.

## **Parnassus Discovery Hall**

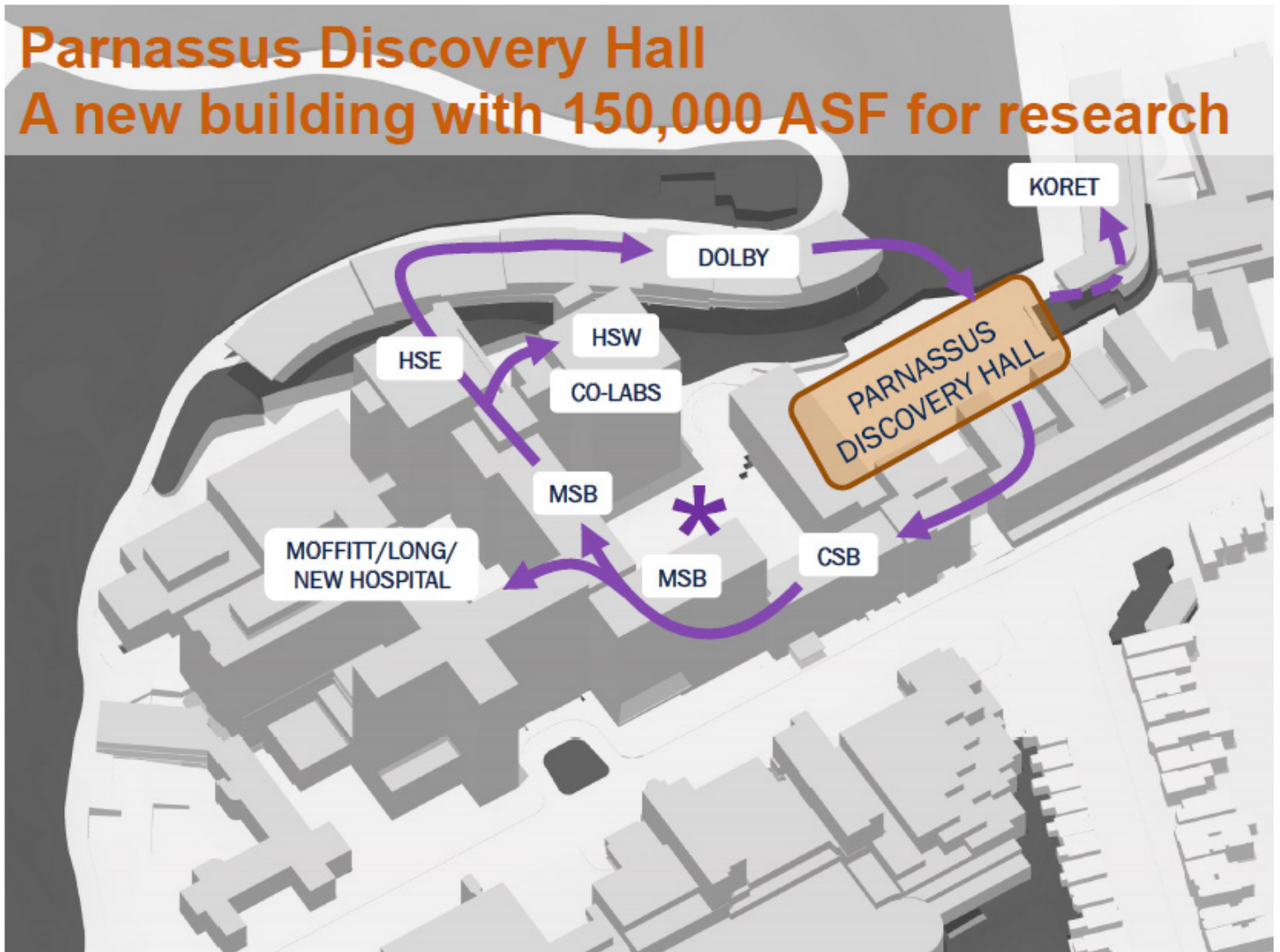
### **A new building with 150,000 ASF for research**

- **A large, modern, and inspiring** new research building to be a **centerpiece** for the rejuvenated Parnassus Heights
- **Speed** of implementation is a crucial design factor
- **Centrally located** near Saunders Court
- Focus on basic and translational science – **wet lab space** with modern space for cores and animal research
- **Near term flexibility** to facilitate renovation of existing research buildings
- **Physically connected** to other PH research buildings (i.e. concourses to Dolby)



## Parnassus Discovery Hall

A new building with 150,000 ASF for research



# **Parnassus Discovery Hall**

## **A new building with 150,000 ASF for research**

### **Programmatically connected:**

- Innovation thrives with fluid boundaries and self-assembled collaborative networks at UCSF
- Create space that encourages this prized aspect of our community
- Focus on interdisciplinary programs nucleated by faculty from multiple departments
- Grow existing world-class research programs
- Create space for emerging programs

## Center for Innovative Medicine (75,000 ASF)

Research space for patient-facing clinical research

- A home for **patient-facing clinical research** at PH (cohort studies, clinical trials, mechanism-oriented clinical research)
- **Located on Parnassus** (adjacent to Helen Diller Hospital)
- Accommodating 12 investigator-led **clinical research units (CRUs)**
  - Customized to needs of investigator groups
  - Desks for coordinators, program managers, data managers
  - Study rooms (visits, procedures)
  - Storage (supplies, records)
- Space for **shared needs** – greeting, waiting, phlebotomy, training, compliance, seminars, communication, recruitment

# UCSF Center for Innovative Medicine

## A home for clinical research (75,000 ASF)

<b>Center For Innovative Medicine</b> Cohort Studies, Clinical Research, & Clinical Trials
<b>12 Investigator Led CRUs</b>  Investigator-led units of groups (coalitions) of 5-10 investigators. Modeled on the Multidisciplinary Clinical Research Unit and the Airway Clinical Research Center.
<b>Complex Clinical Trials Unit</b> <b>Shared Resources for Training, Compliance, Recruitment, Other</b>

*“..actual clinical research activities (such as participant recruitment, interviews, etc.) take place in clinical areas, typically occupying a room that could otherwise be used for clinical work. And often that clinical work (not inappropriately) takes precedence, cutting short research participant interaction.”*

Greg Marcus, M.D.,  
Director of Clinical Research  
UCSF Cardiology



## UCSF Center for Innovative Medicine

### A home for clinical research (75,000 ASF)

#### Center For Innovative Medicine

Cohort Studies, Clinical Research, & Clinical Trials

#### 12 Investigator Led CRUs

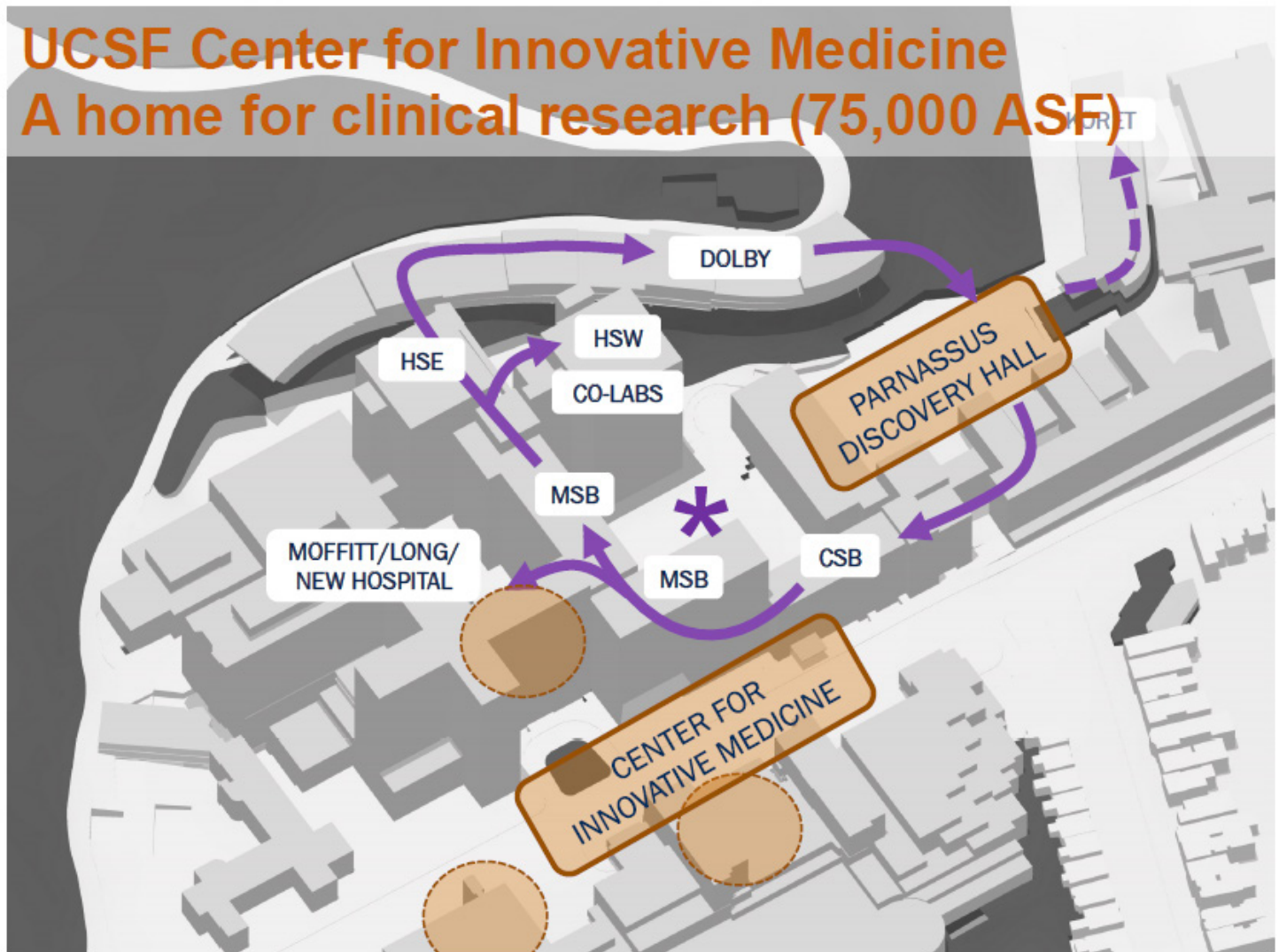
Investigator-led units of groups (coalitions) of 5-10 investigators. Modeled on the Multidisciplinary Clinical Research Unit and the Airway Clinical Research Center.

**Complex Clinical Trials Unit**  
**Shared Resources for Training, Compliance, Recruitment, Other**

#### Other proposed clinical research infrastructure for PH:

- (i) Designated research areas in the new hospital (some shared with education (“*Designated academic areas*”))
- (ii) Overnight stay clinical research unit (OSCRU)
- (iii) Right sized Investigational Drug Pharmacy (IDP)

## B WORKING GROUP REPORTS



## **Center for Innovative Medicine (75,000 ASF)**

Research space for patient-facing clinical research

- 1. Provides currently missing clinical research infrastructure**
- 2. Fosters clinical research:**
  - Showcases UCSF research; encourages patient participation
  - Attracts trainees to careers in clinical research
  - Builds community among CRCs
- 3. Allows **links** between CRUs and basic & translational programs:**
  - Fosters disease biology research & multidisciplinary research
  - Strengthens grant applications (P01s, P30s, CTSI)
- 4. Enables Helen Diller Medical Center to position for **innovation****

# Recommendation 1

**Expand and transform the PH research campus to meet the urgent needs of current and future research programs.**

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- **Construct** cores and a new research building with 150,000 ASF for research to accommodate growth of existing programs and development of new programs.
- **Construct** a clinical research building with 75,000 ASF as a Center for Innovative Medicine.
- **Renovate** the main research buildings (HSIR East and West, Medical Sciences) to modern gold-standard research space.

#### Phase 2 (Medium term):

- **Build** 100,000 ASF of additional research space to meet the ongoing needs of strong and emerging research programs.

RSWG - PMP Steering Committee Meeting



## **Phase 2: (Medium term)**

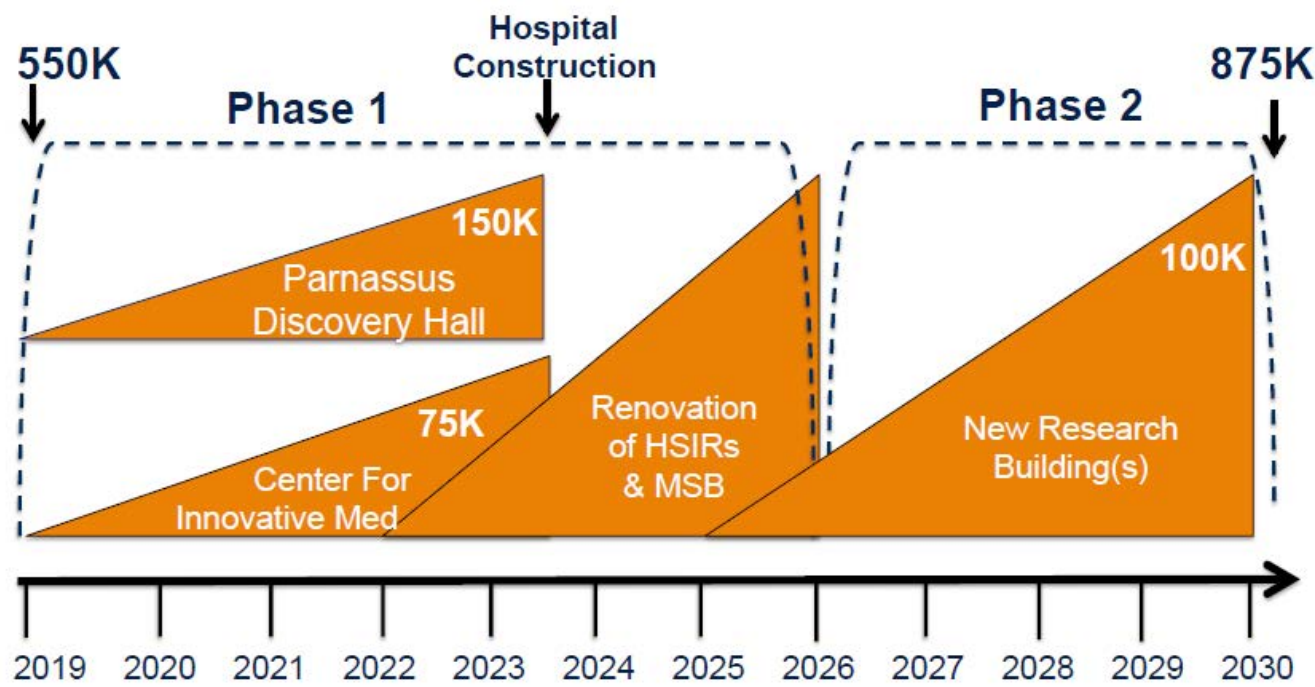
### **100,000 ASF of additional research space**

1. Allow for growth of the PH research enterprise (basic, translational, clinical, population).
2. Provide flexibility for research space that meets future research needs, with new programs across the research spectrum and in emerging disciplines (i.e. AI, microbiome).
3. New space should be centrally located, connected to other research functions, and foster programmatic research interactions.

## **Recommendation 2**

***What kind of research space does PH need?***

## Quickly Realizing the new UCSF-PH Research Campus



### Recommendation 2

**Create inspiring research space with adjacencies and design elements that spur connectivity, community, innovation, and celebration.**

- (i) **Connectivity:** Center research space activities around Saunders Court.
- (ii) **Community:** Create physical and digital connectivity, thoughtful adjacencies, and inviting, right-sized, formal and informal interaction spaces to overcome disciplinary and geographic boundaries.
- (iii) **Innovation:** Co-locate programmatic research groups with critical mass in high quality space that is designed and allocated using inclusive and transparent mechanisms.
- (iv) **Celebration:** Attract and inspire researchers and partners by celebrating UCSF science with art, architecture, and natural beauty.



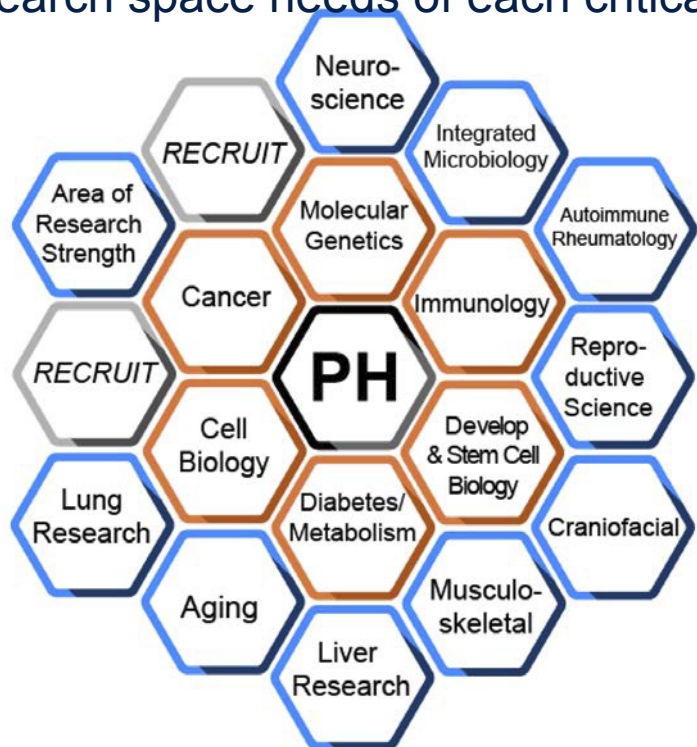
## Integration of the PH Research Enterprise Basic Science Programs

**Challenge:** What are the research space needs of each critical mass of researchers?

**One size does not fit all**

**Disciplines:** research areas with the most PH investigators that integrate all PH researchers

**Topics:** research areas with a critical mass of PH investigators

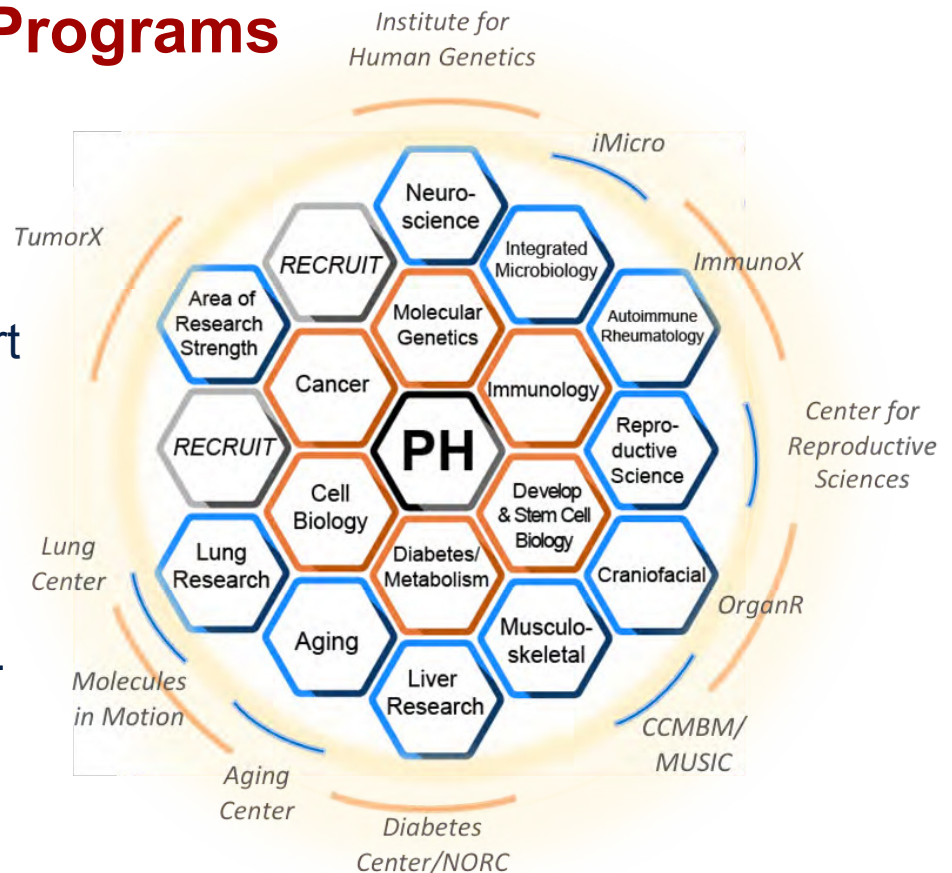


\*Research Survey for PH basic scientists with 50%+ effort: "Please list 2 you identify with most and would like to be collocated with." Survey data supported by funding, Centers, ORUs, and conversations.

## B WORKING GROUP REPORTS

# Integration of the PH Research Enterprise Basic Science Programs

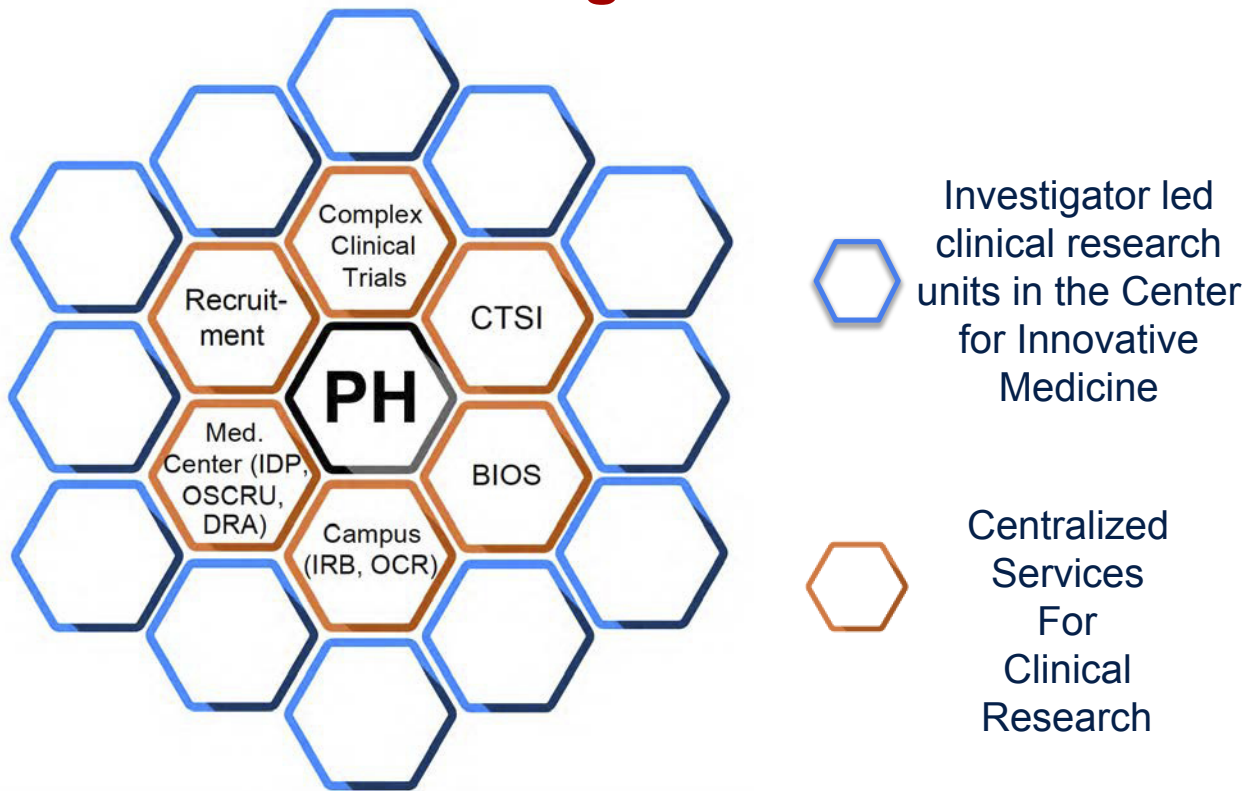
- Programs, Centers, ORUs, and Cores support PH research.
- The same model applies to other types of research.



*\*For illustration purposes, many other Programs, Centers, ORUs, and Cores are not shown here.*  
RSWG - PMP Steering Committee Meeting

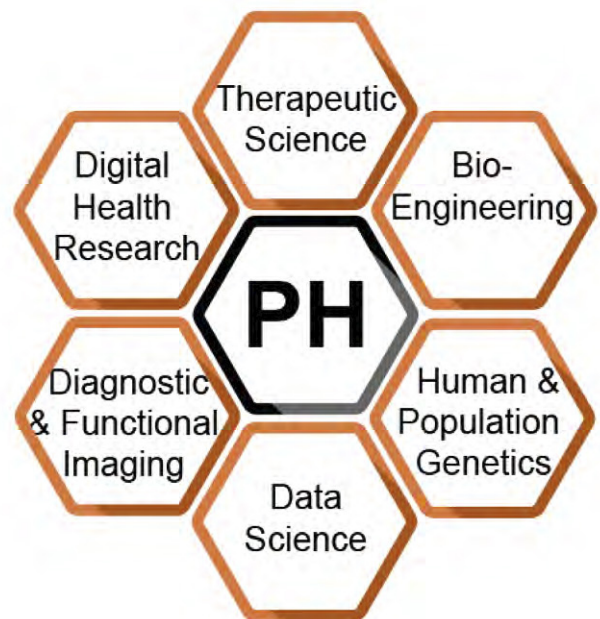
UCSF

## Integration of the PH Research Enterprise Clinical Research Programs



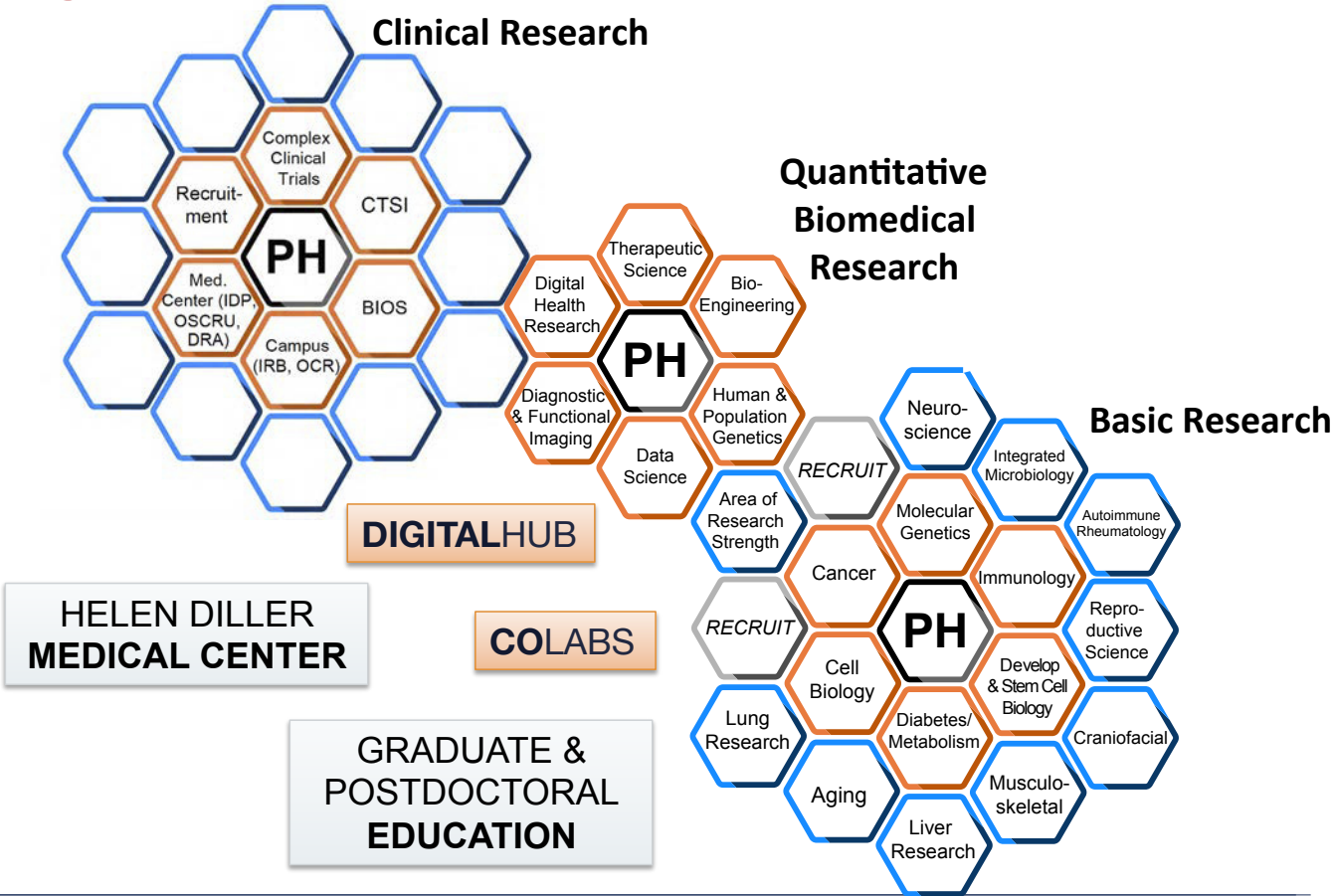
# Integration of the PH Research Enterprise Quantitative Biomedical Research

- Some groups are currently below critical mass
- Disperse investigators (many schools, departments, disciplines, and buildings)
- Strategic investment will augment PH fundamental and clinical impact
- Aligned with Precision Medicine Initiative
- Additional outreach still needed





# Integration of the PH Research Enterprise



## Summary and Conclusions

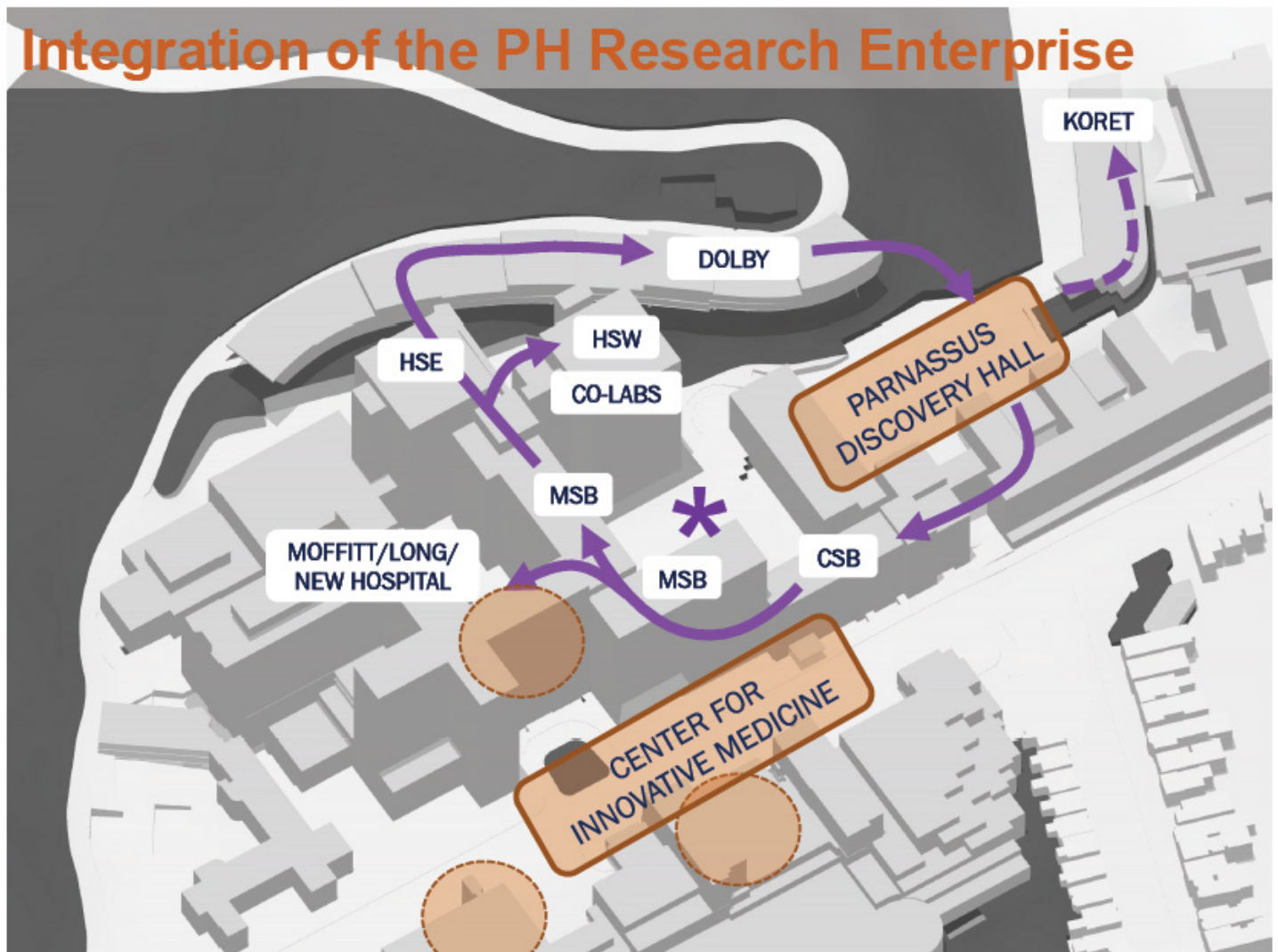
## UCSF PH Research

A world class and thriving enterprise.

Multi-faceted strength across research disciplines, including basic, clinical, translational and computational.

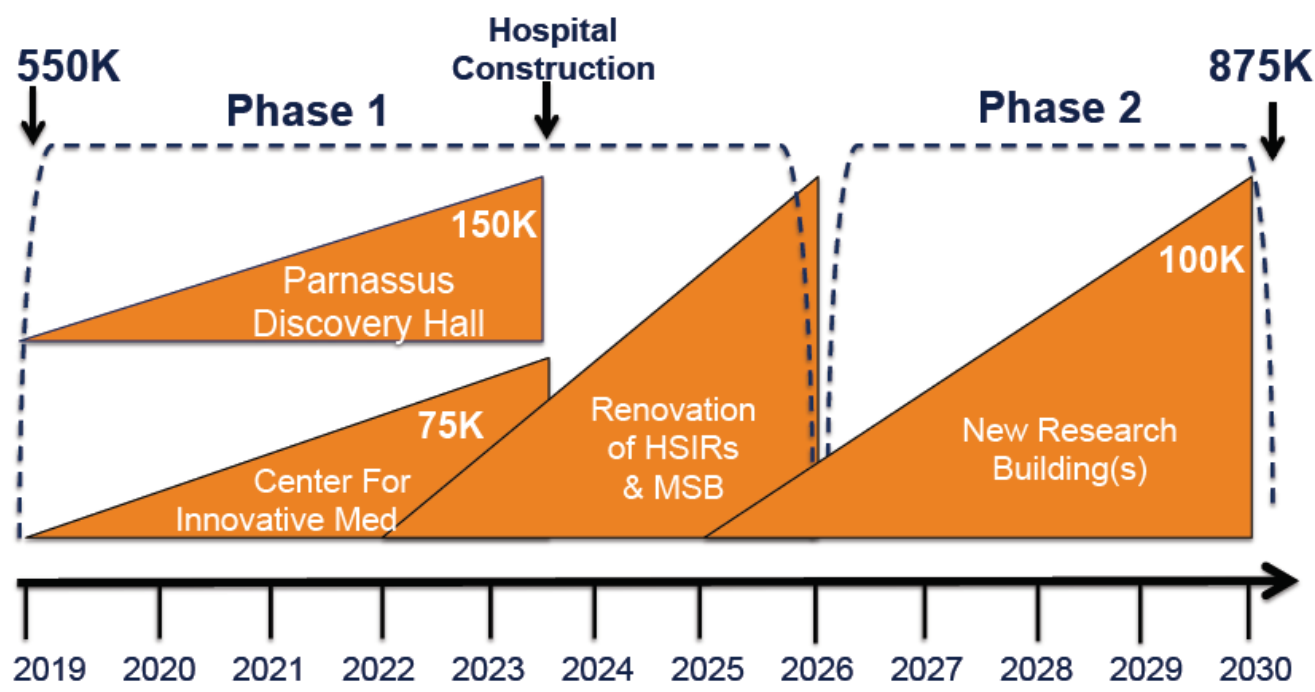
The new Helen Diller Medical Center and PMP process sparks a unique opportunity to create **transformative new space for research and discovery** that will:

- Realize the potential of outstanding PH research programs
- Pioneer clinical research infrastructure and innovation
- Cultivate exciting new research programs
- Advance a vision for impactful integrated research
- Attract and retain talented faculty and trainees





## Quickly Realizing the new UCSF-PH Research Campus



### Guiding Principles

1. World-class biomedical research campus - a magnet science community.
2. Blend of research activities - basic, clinical, translational - not dominated by any research category or program and with each research activity populated by a critical mass of faculty.
3. High quality shared research resources for both bench and clinical sciences.
4. Integration with the UCSF-PH clinical enterprise.
5. Inspiring interaction and research space intentionally designed to provide:
  - high quality research space, co-location of collaborating researchers, and high quality shared space for community, collaboration and communication.
6. Secure space allocation that accommodates dynamic needs and opportunities, programmatically and scientifically.

## WORKING GROUP REPORTS **B**

### **EDUCATION SPACE WORKING GROUP REPORT**

For the full report with appendices, please see:

[\*https://space.ucsf.edu/education-space-working-group\*](https://space.ucsf.edu/education-space-working-group)



University of California  
San Francisco

# A Compelling Vision *for* Education *at* Parnassus

Comprehensive Parnassus Heights Plan  
Education Space Working Group

2/22/2019



An aerial photograph of the University of California, San Francisco (UCSF) campus. The image shows a dense cluster of modern and older buildings, surrounded by greenery and residential areas. In the background, the San Francisco skyline is visible, including the Transamerica Pyramid. A blue semi-transparent banner is overlaid on the image, containing the text.

*Education* excellence is the catalyst for all UCSF missions.



An aerial photograph of San Francisco, California, showing a dense urban landscape with various buildings and green spaces. The Transamerica Pyramid is visible in the background against a clear blue sky. A large blue rectangular text box is overlaid on the center of the image.

We looked to the UCSF 2030  
Education Space Values to  
frame our recommendations.

UCSF 2030 Education Space Values

Inquiry, innovation, and  
investigation

Interprofessional  
collaborative care



UCSF 2030 Education Space Values

Mentorship, connectivity,  
and networks of learning

Aligning education,  
research, and clinical care



UCSF 2030 Education Space Values

Continuous learning

Health and wellbeing

Diversity and inclusion

UCSF 2030 Education Space Values

Empowered and engaged  
patients and communities

PRIDE in our institution

## Major Activities

### The Education Space Working Group (ESWG):

- Engaged with stakeholders in all education mission areas, including students.
- Adopted the *UCSF 2030 Education Space Values*.
- Developed *ESWG Education Space Guidelines* which should guide implementation of the recommendations.
- Issued a call for innovative education space proposals, which generated 14 responses, most targeting near-future needs.
- Worked with Perkins Eastman to evaluate the scope and utilization of current classrooms and recommend a revised portfolio.

### Working Group Roster

- |                              |                                                                       |
|------------------------------|-----------------------------------------------------------------------|
| • <b>Chris Shaffer</b>       | Library                                                               |
| • <b>Kim Baltzell</b>        | Center for Global Health & School of Nursing                          |
| • <b>John Davis</b>          | School of Medicine                                                    |
| • <b>Matt Epperson</b>       | Student Academic Affairs                                              |
| • <b>Marcus Ferrone</b>      | School of Pharmacy                                                    |
| • <b>Amber Fitzsimmons</b>   | School of Medicine & Graduate Division                                |
| • <b>Cara Fladd</b>          | Space & Capital Planning                                              |
| • <b>LaMisha Hill</b>        | Office of Diversity and Outreach                                      |
| • <b>Sara Hughes</b>         | School of Dentistry                                                   |
| • <b>Kirby Lee</b>           | School of Pharmacy                                                    |
| • <b>Chandler Mayfield</b>   | School of Medicine                                                    |
| • <b>Lisa Magargal</b>       | School of Medicine                                                    |
| • <b>Maureen Shannon</b>     | School of Nursing                                                     |
| • <b>Kevin Souza</b>         | School of Medicine                                                    |
| • <b>Hailey Taylor</b>       | School of Dentistry                                                   |
| • <b>Michael Trevino</b>     | School of Nursing                                                     |
| • <b>Sandrijn van Schaik</b> | Kanbar Center for Clinical Skills and Simulation & School of Medicine |



## Endorsements

**We endorse a vision for education space in alignment with the Perkins Eastman “preferred alternative:”**

- **A new education building east of the Library.**
- **Dorms and wellness on the west side.**
- **Clinical activities, including dentistry, on the east side.**
- **A research building west of Saunders Court.**
- **Streetscaping to reduce traffic on Parnassus Ave.**
- **Significant reduction in use of classrooms for meetings.**

**Therefore, this report proposes spaces that support our education programs and human-centered design to support student life, well-being, and learning.**

## **Endorsements**

**We endorse the recommendations of the Academic Senate Space Committee (Appendix E):**

- **Academic Space for Clinicians Policy Task Force Report**
- **Educator and Education Space Policy Task Force Report**

## Assumptions

**This report assumes:**

- **There will be no reduction in overall education space at Parnassus.**
- **Parnassus Avenue cannot be closed to traffic, but we imagine that it could and what a wonderful world it would be.**



# Education Space Working Group Recommendations





## Space Recommendations

Create an innovative central **Education Core** to support active-learning and interprofessional pedagogies.

Expand **clinical simulation spaces** with comprehensive interprofessional skills and simulation capacities that can accommodate all school and UCSF Health needs.

## B WORKING GROUP REPORTS

### Space Recommendations

Establish designated **academic areas for all in clinical buildings** in support of the education and research missions of UCSF.

Revise the portfolio of **classroom and class lab spaces to meet modern education** needs. Provide adequate spaces for campus meeting needs.



## Space Recommendations

Promote a vibrant community to **academic support**  
**student life, well-being, and learning** on our campus.

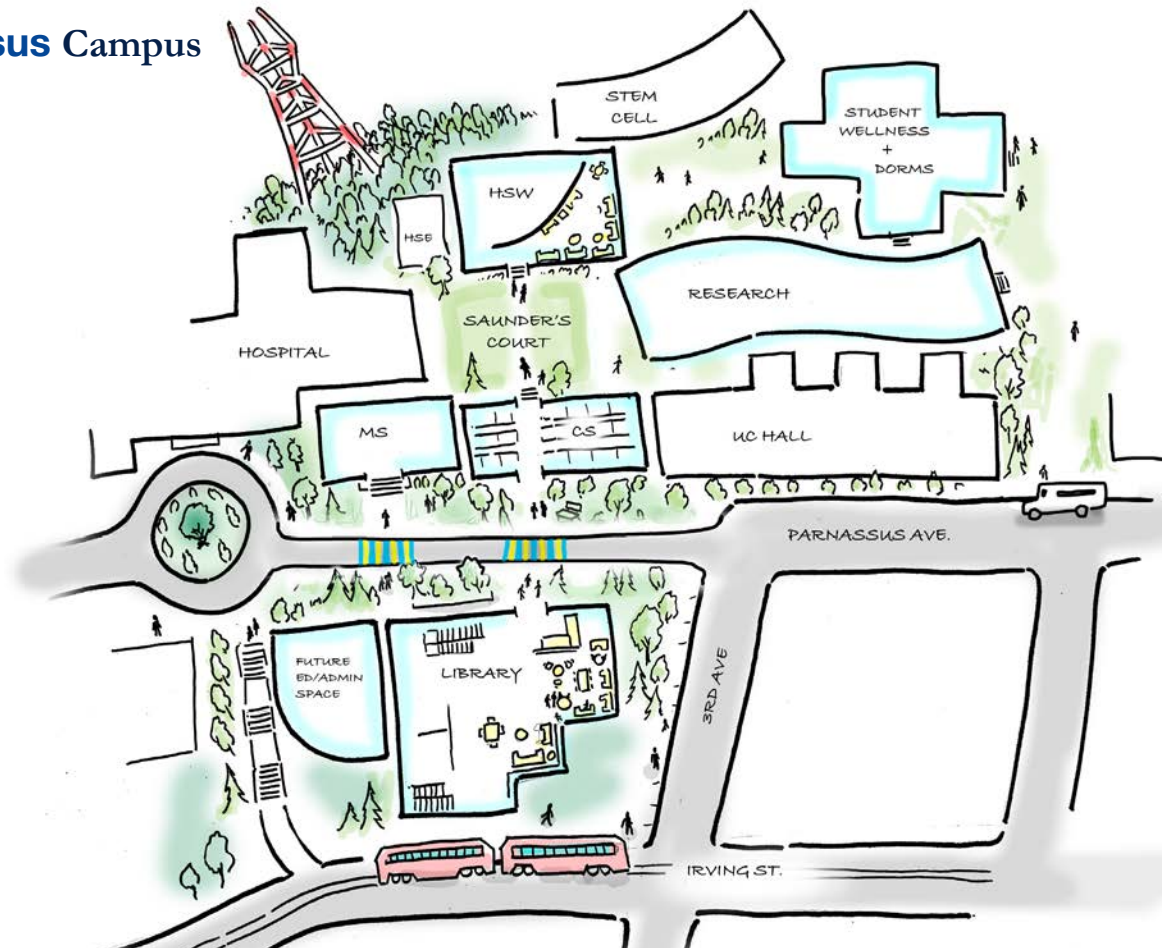




# A Reimagined Teaching & Learning Experience



Future **Parnassus** Campus

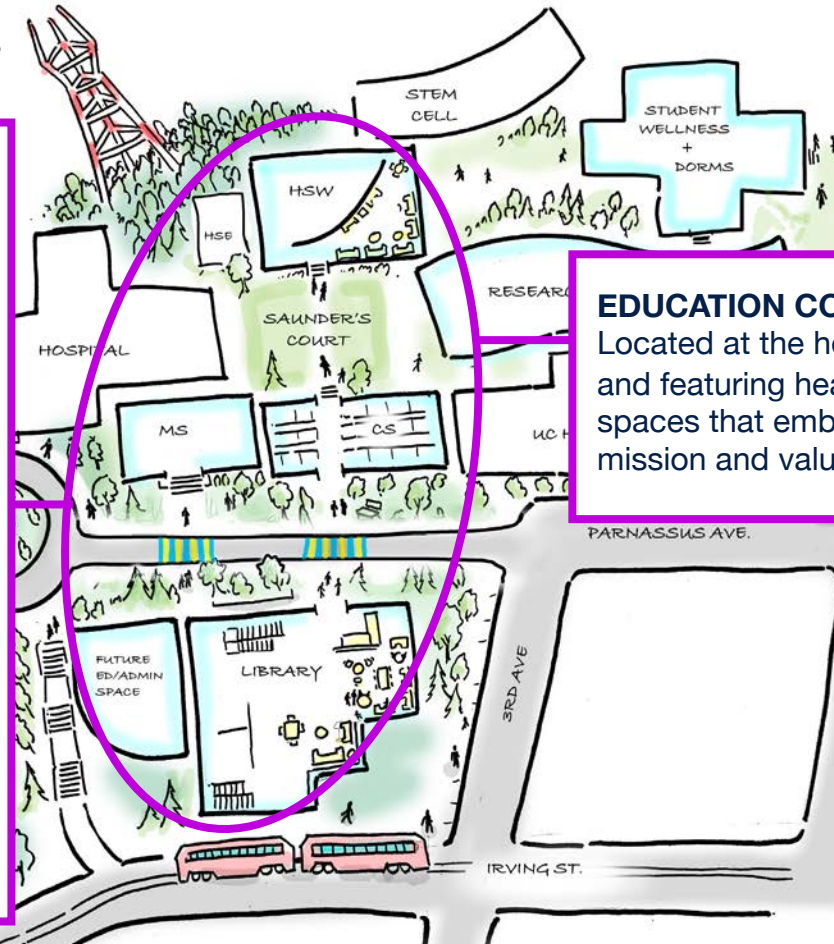


## B WORKING GROUP REPORTS

### Future **Parnassus** Campus

#### Recommendations

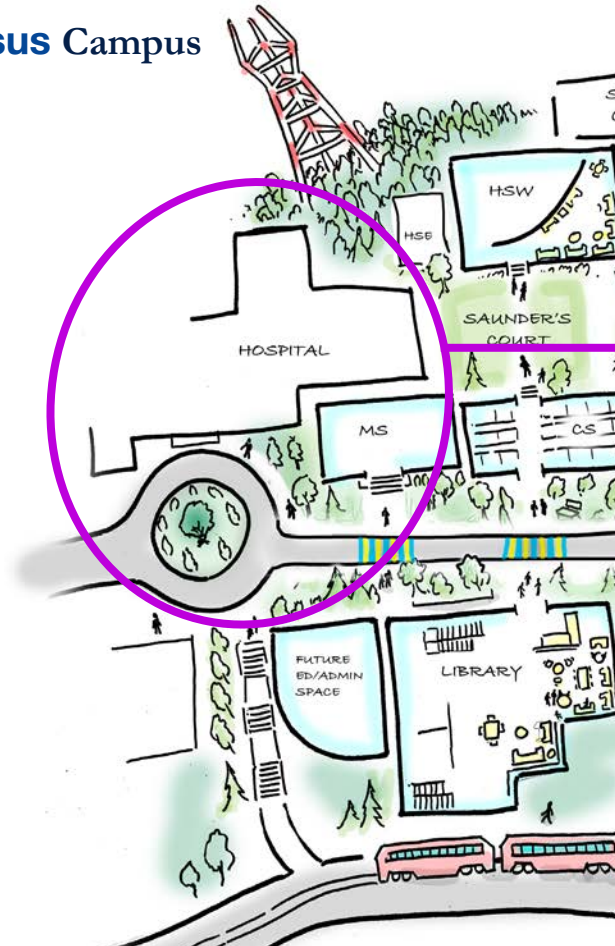
- Create an innovative central Education Core to support active-learning and interprofessional pedagogies.
- Revise the portfolio of classroom and class lab spaces to meet modern education requirements. Provide different spaces for campus meeting needs.
- Expand clinical simulation spaces with comprehensive interprofessional skills and simulation capacities that can accommodate all school and UCSF Health needs.



#### EDUCATION CORRIDOR

Located at the heart of campus and featuring health education spaces that embody the UCSF mission and values.

### Future **Parnassus** Campus



#### Recommendations

- Establish Designated Academic Areas in clinical buildings (i.e. the new hospital) in support of the education and research missions of UCSF.
- Expand clinical simulation spaces with comprehensive interprofessional skills and simulation capacities that can accommodate all school and UCSF Health needs.

#### NEW HOSPITAL

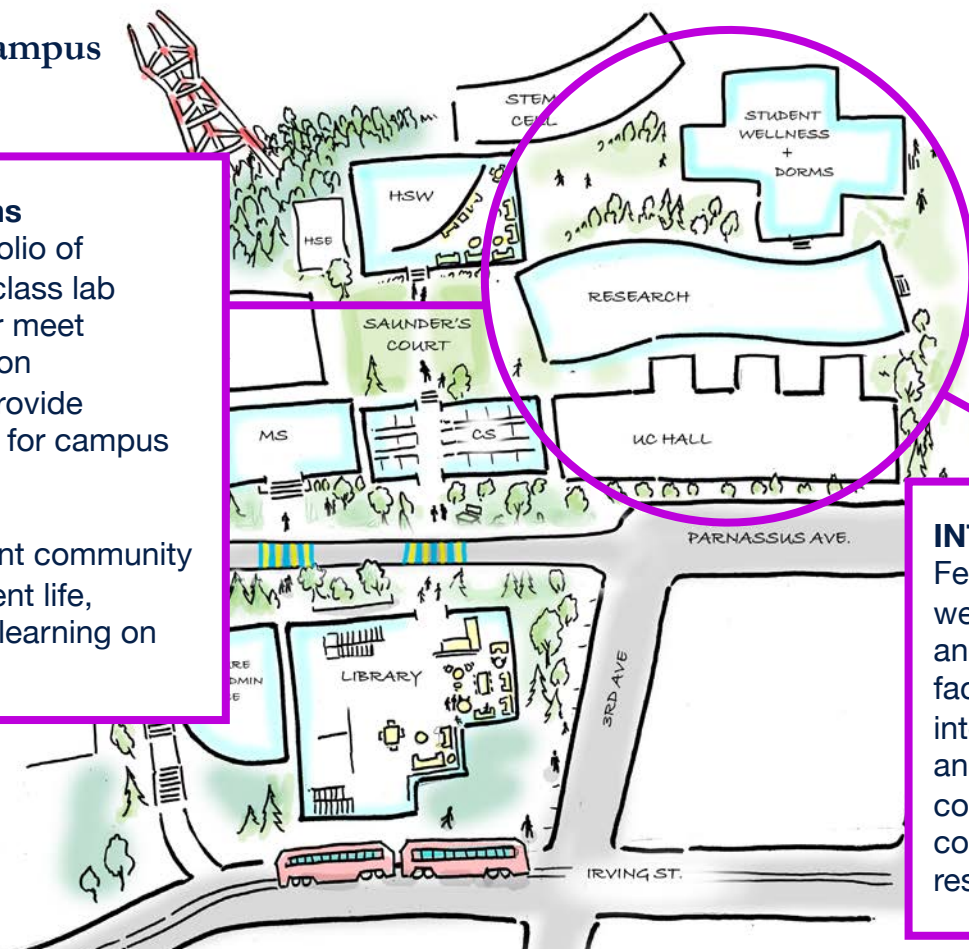
A new hospital that meets the growing patient demand for care and the need for designated active teaching and learning areas in clinical care spaces.

## B WORKING GROUP REPORTS

### Future **Parnassus** Campus

#### Recommendations

- Revise the portfolio of classroom and class lab spaces to better meet modern education requirements. Provide different spaces for campus meeting needs.
- Promote a vibrant community to support student life, well-being, and learning on our campus.



#### INTERDISCIPLINARY SPACES

Featuring spaces that support wellbeing, student life, housing and research. These spaces facilitate interdisciplinary interactions between schools and programs, and collaborations between colleagues in clinical and research environments.



A photograph of a diverse crowd of people. In the foreground, a young man with glasses and a young woman are hugging warmly. The man is wearing a white shirt and glasses, and the woman is wearing a white shirt and has her eyes closed. They are both smiling. In the background, there are other people, including a man with a beard and a woman with a headscarf, all looking towards the camera. The image is overlaid with a dark blue rectangular box containing white text.

A place is only as good as  
the *people* in it.

Pittacus Lore

## Educators & Learners at Parnassus



**AUBREY**  
**Graduate Student**



**MUTHAMMA**  
**Research Faculty**



**BRIANNA**  
**Clinical Student**



**SAMUEL**  
**Clinical Faculty**

## Learner: Graduate Student



### AUBREY

**Pronouns:** they/them/theirs

**Status:** First Year Biomed

**Primary Campus:** Parnassus

**Time on Parnassus:** 12 hours

#### Additional Info:

- Lives in student housing on Mission Bay Campus
- Volunteers at Carry the One Radio to be a part of a broader health and science community on campus

### Pain Points

- Spends the majority of time in lab and misses student experience
- Feels siloed working with only graduate peers and program faculty
- Hard time finding meeting rooms, so regularly meets with mentor at Palios
- Has consistent technology issues in classrooms and meetings

### Needs

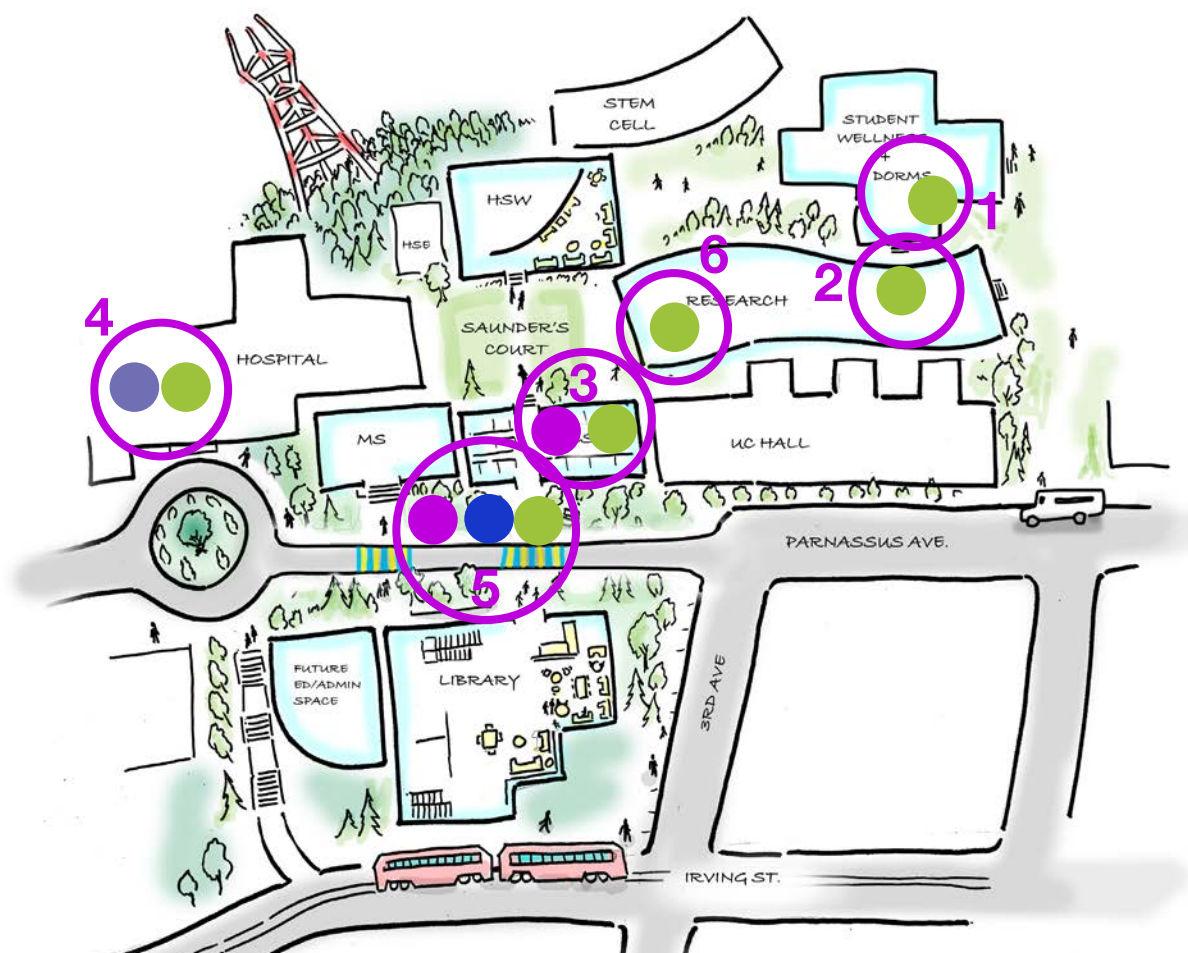
- Sense of community
- More clinical problems to solve
- More formal interdisciplinary learning and collaboration
- Informal settings to interact with faculty and peers
- Bring classrooms up to date with technology

## B WORKING GROUP REPORTS



**AUBREY**  
Graduate Student  
12 Hour Day

- 1) **6 am:** Leaves dorm and goes to gym in Student Wellness Center.  
**Needs Met:** Space to create community, health and well-being.
- 2) **7:05am:** Works in lab with graduate and professional students.  
**Needs Met:** Space for interdisciplinary learning and collaboration.
- 3) **9:10am:** Meets with Brianna to discuss a new research project.  
**Needs Met:** Space for Interprofessional collaboration.
- 4) **11:35am:** Meets Samuel regarding collaboration on translational research.  
**Needs Met:** Space for learning in hospitals.
- 5) **12:05pm:** Checks in with Muthamma and Brianna on the quad and agrees to co-lead a multi-campus research elective.  
**Needs Met:** Modern classrooms with advanced video-conferencing.
- 6) **1:30pm:** Lab-based classes in research building. Meets with study group.  
**Needs Met:** Modern lab-based teaching spaces and small group learning





## Learner: **Research Faculty**



### **MUTHAMMA**

**Pronouns:** she/her/hers

**Status:** Associate Professor

**Primary Campus:** Mission Bay

**Time on Parnassus:** 7.5 hours

**Additional Info:** Serves on two curriculum committees that regularly meet on Parnassus campus

### **Pain Points**

- Always in search of **space to meet and take calls**
- Notices **outdated spaces that lack creativity** during every visit to Parnassus
- Sometimes **gets lost in buildings** when visiting Parnassus
- Consistently has **issues with Zoom** at Parnassus

### **Needs**

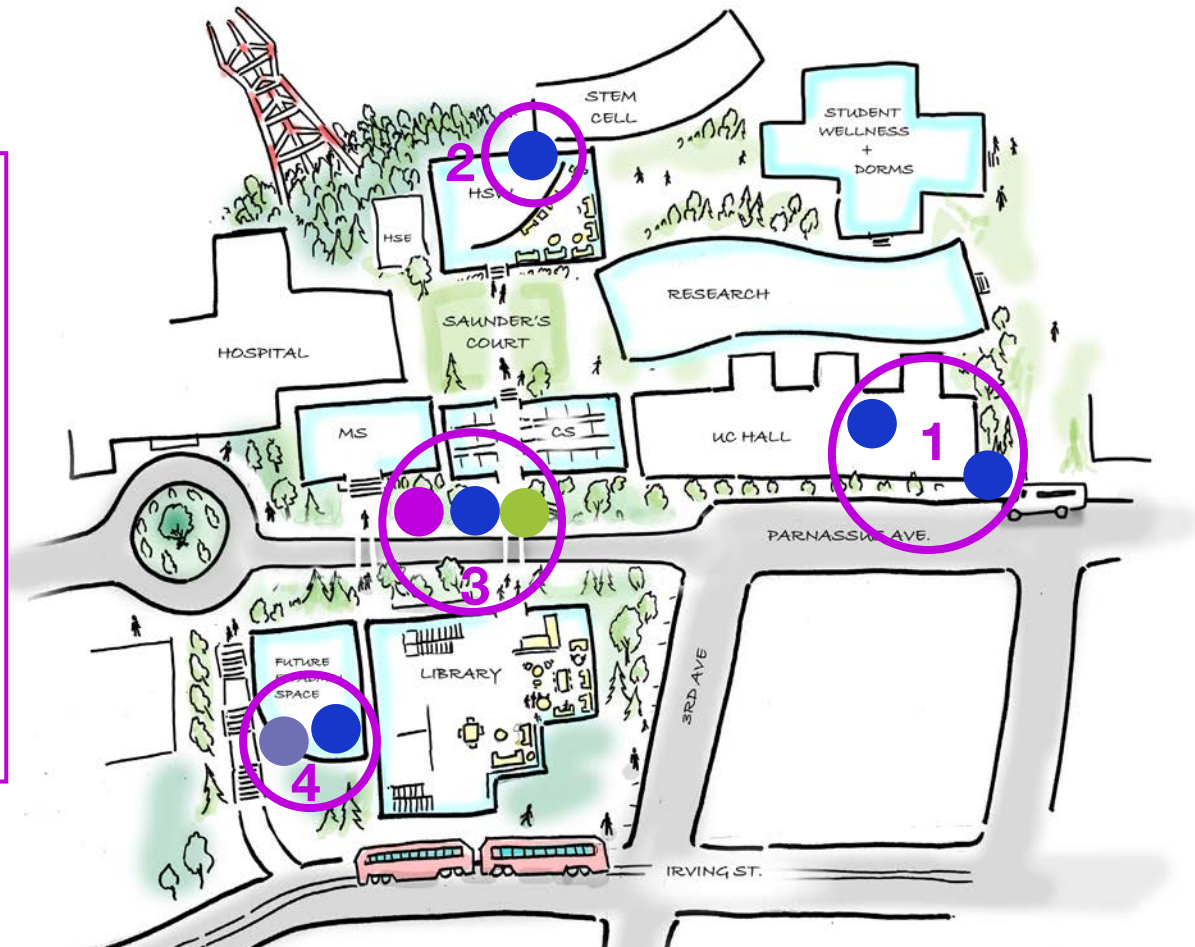
- **Update campus** to complement the Mission Bay campus
- More **flexible spaces to informally meet**
- More **art and color** to encourage creativity and inspiration
- Effective **signage**
- Modern classrooms with **advanced video-conferencing**

## B WORKING GROUP REPORTS



**MUTHAMMA**  
**Research Faculty**  
 7.5 Hour Day

- 1) 7am:** Arrives at Parnassus via shuttle and heads to UC Hall for meeting.  
**Needs Met:** Access to flexible meeting space.
- 2) 9am:** Attend curriculum committee in HSW with remote access to Mission Bay.  
**Need Met:** Advance technology for remote meetings.
- 3) 12:05pm:** Checks in with Brianna and Aubrey on the quad and recruits them to co-lead a multi-campus research elective.  
**Needs Met:** Modern classrooms with advanced video-conferencing.
- 4) 1pm:** Visits the Faculty & Student Success Center to attend a diversity training. Meets up with Samuel afterwards to discuss a research project.  
**Need Met:** Space for faculty training in a creative and inspiring space.



## Learner: **Clinical Student**



### **BRIANNA**

**Pronouns:** she/her/hers

**Status:** Second Year Pharmacy

**Primary Campus:** Parnassus

**Time on Parnassus:** 10 hours

#### **Additional Info:**

- Always in class. When not in class, studies alone and with peers in the Library
- Serves as officer on the Graduate and Professional Student Association

### **Pain Points**

- Has difficulty finding **spaces to meet and work with groups**
- Hard time finding **outlets to charge** laptop and phone
- Wants more **comfortable and welcoming areas** on campus.
- Reluctantly takes **medication for anxiety**, particularly **during exams**

### **Needs**

- **Modular spaces** to get work done individually and collaboratively
- More spaces to **accommodate technology**
- Living room space for **informal learning, community, and study**
- Prioritize and offer more services for **student wellness**

## B WORKING GROUP REPORTS



**BRIANNA**  
**Clinical Student**  
10 Hour Day

**1, 2) 6:50am:** Arrives on Muni to attend morning yoga class in Student Wellness Center.

**Needs Met:** Space for wellness activities.

**3) 8:30am:** Eats breakfast at HSW Redwood Terrace before a meeting.

**Needs Met:** Living room space for informal learning, community, and study on south end of campus.

**4) 9:10am:** Meets with Aubrey to work on a collaborative research project in the new CSB.

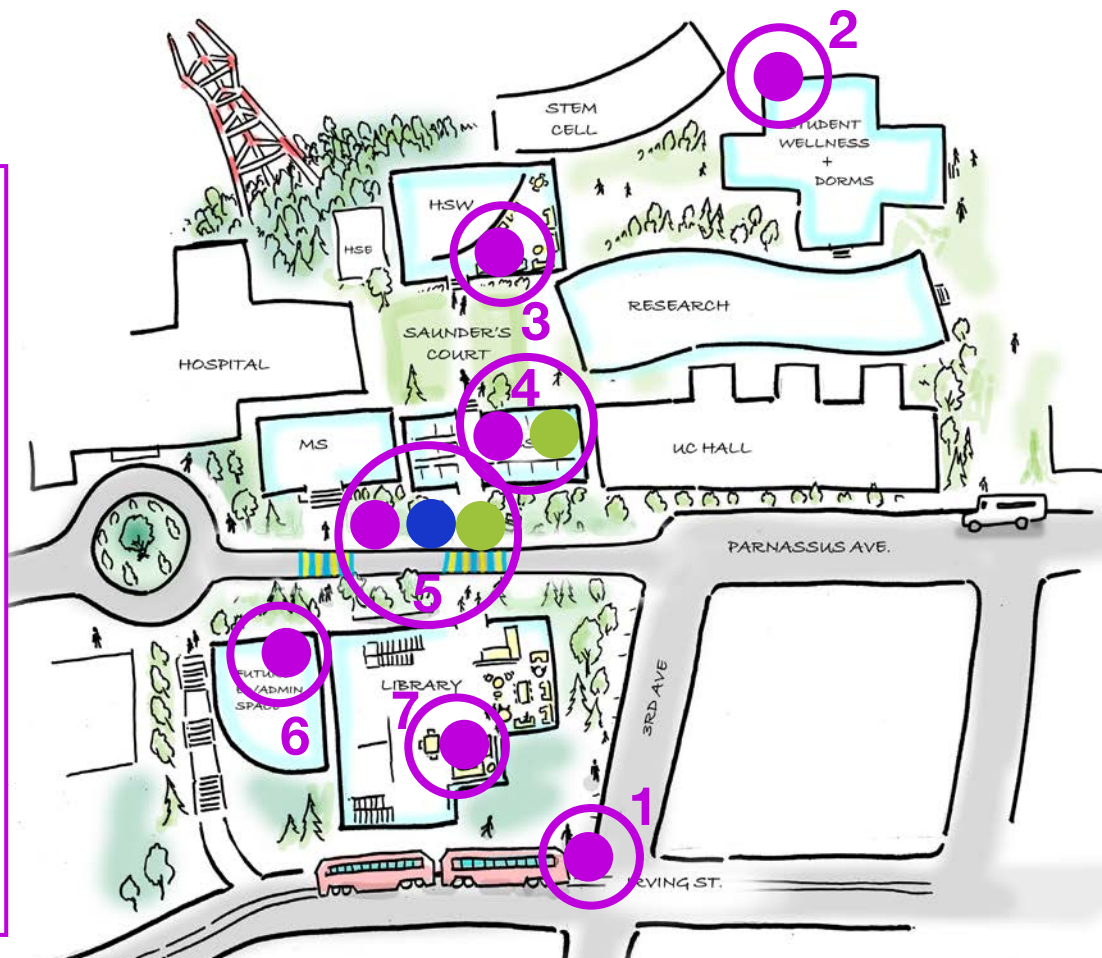
**Needs Met:** Modern classrooms and access to natural light.

**5,6) 12:05pm:** Checks in with Muthamma and Aubrey on the quad and agrees to co-lead a multi-campus research elective. Enjoys lunch on the plaza with friends.

**Needs Met:** Modern classrooms with advanced video-conferencing; community space

**7) 1:05pm:** Studying for Therapeutics class. Meet-up with other pharmacy students for a consultation with a librarian.

**Needs Met:** Modular spaces to get work done individually and collaboratively.





## Educator: Clinical Faculty



### **SAMUEL**

**Pronouns:** he/him/his

**Status:** Professor & Surgeon

**Primary Campus:** Parnassus

**Time on Parnassus:** 16 hours

#### **Additional Info:**

- Comes in early and leaves late
- Interested in applying new technology to surgical procedures
- 3D prints anatomy models in Makers Lab for teaching

### Pain Points

- Few clinicians engaging in **new technology**
- **No surgical skills lab in hospital** for team and student training
- **Minimal collaboration** with simulation experts
- Hard to find **private meeting spaces**
- **Not much interaction** beyond hospital

### Needs

- **Designated academic areas** in hospital
- Greater capacity for **surgical simulation**
- More private and accessible **meeting spaces** throughout campus
- Space to facilitate **interactions outside of the hospital**

## B WORKING GROUP REPORTS



**SAMUEL**  
Clinical Faculty  
16 Hour Day

**1, 2) 5:30am:** Arrives on bike and heads to surgical skills simulation space in hospital.

**Need Met:** Greater capacity for simulation.

**3) 11:35am:** Meets Aubrey regarding collaboration on translational research.

**Needs Met:** Space for academic activities in hospitals.

**4) 12:30pm:** Grabs coffee and runs into colleague before heading to meeting.

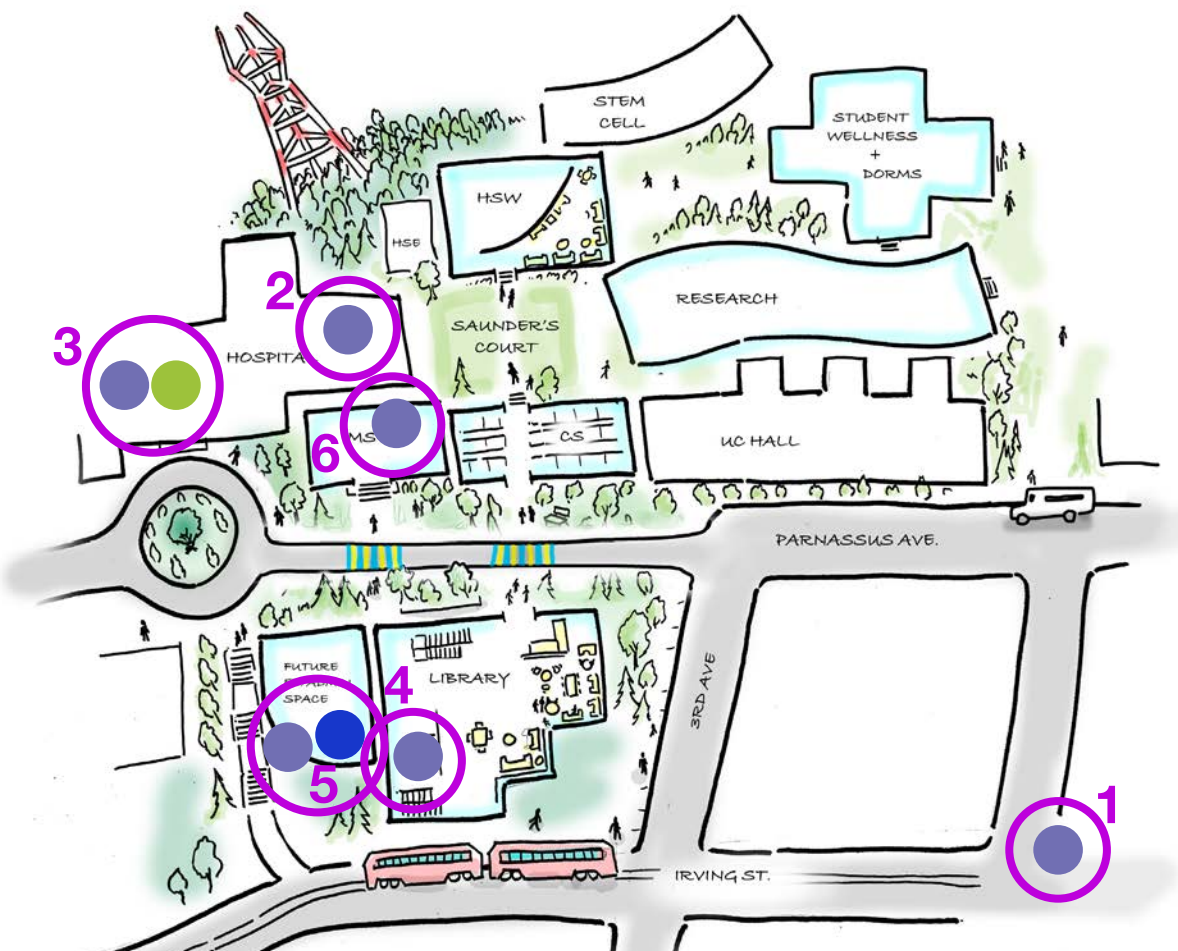
**Need Met:** Space to facilitate interactions outside of the hospital.

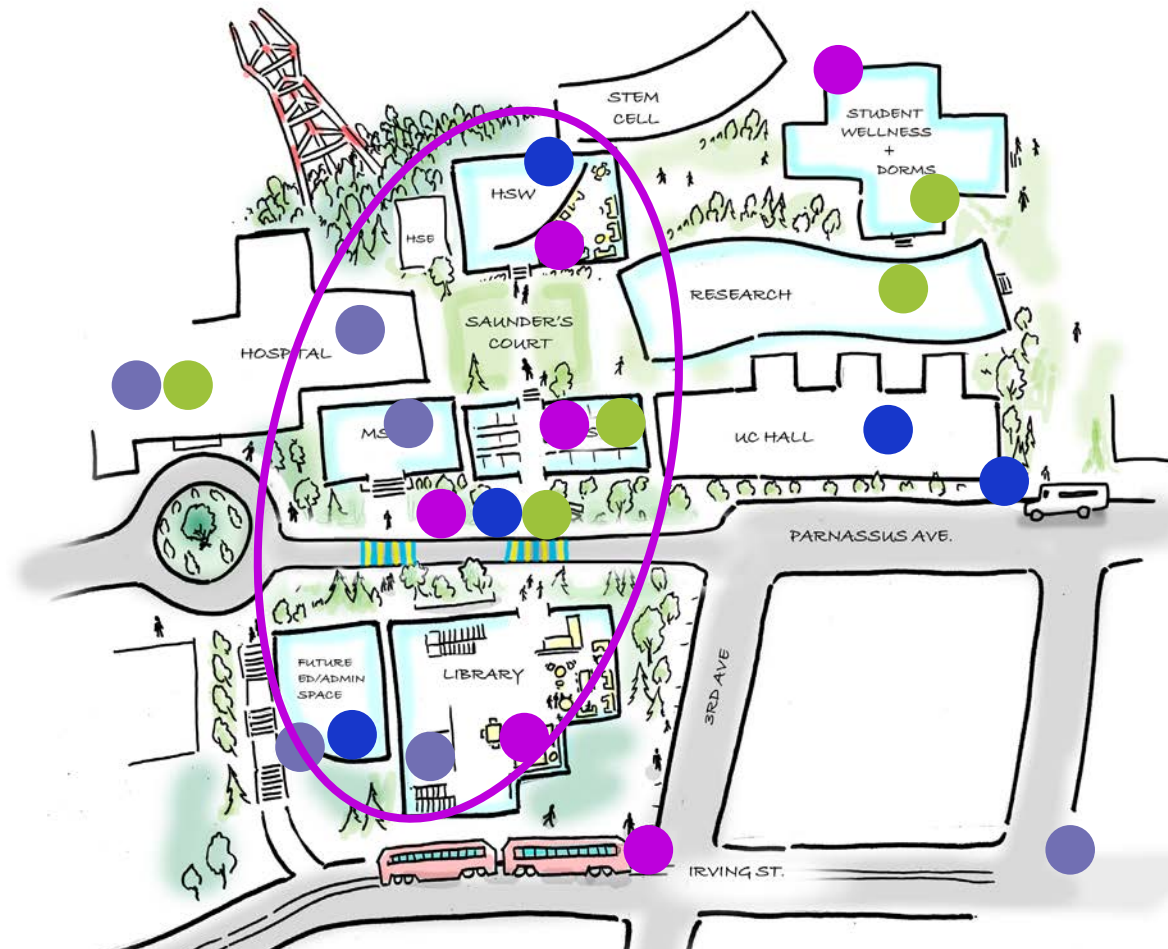
**5) 1:05pm:** Visits the Faculty & Student Success Center to attend a diversity training. Meets up with Muthamma afterwards to discuss a research project.

**Need Met:** Space for faculty training in a creative and inspiring space. Faculty meeting space.

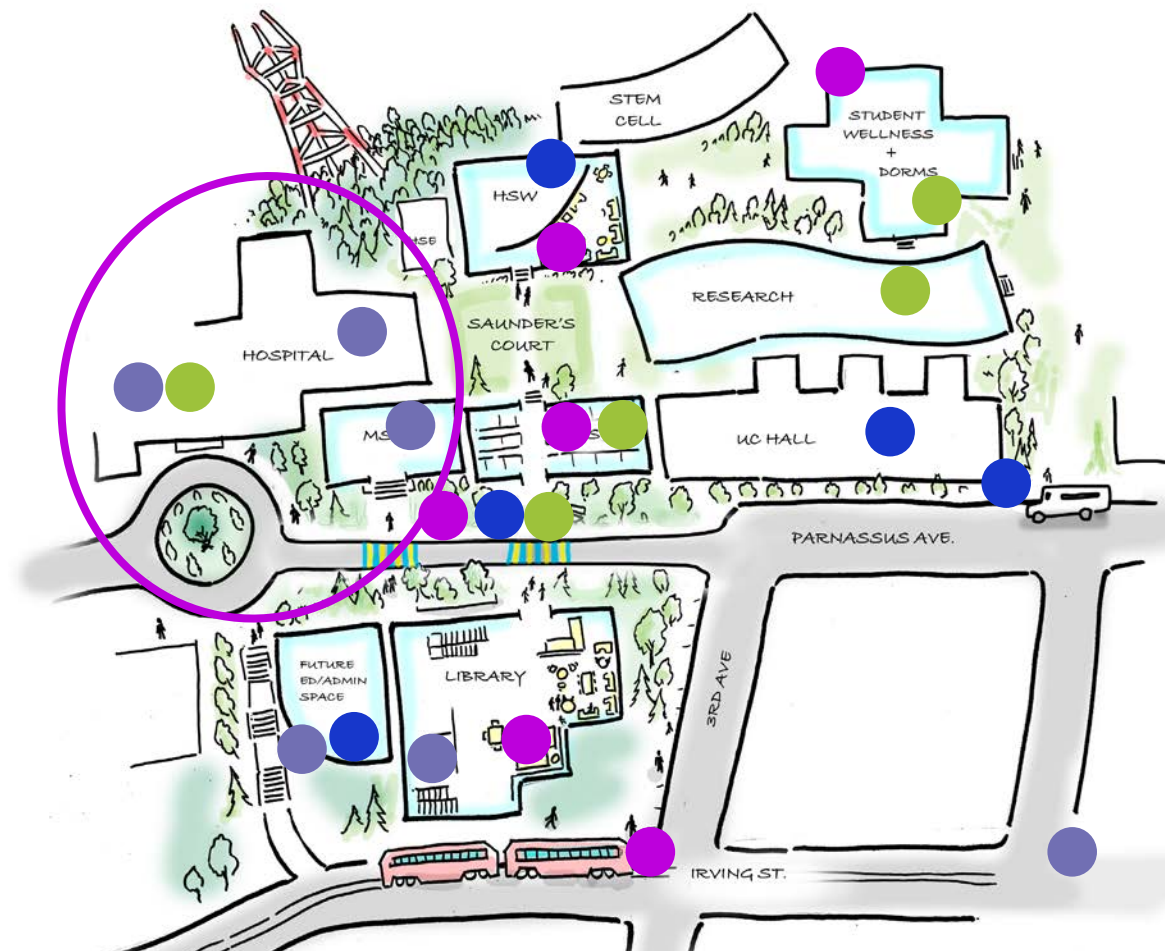
**6) 2:35pm:** Meets with residents in surgical skills simulation space for teaching session.

**Need Met:** Space for academic activities in the hospital.



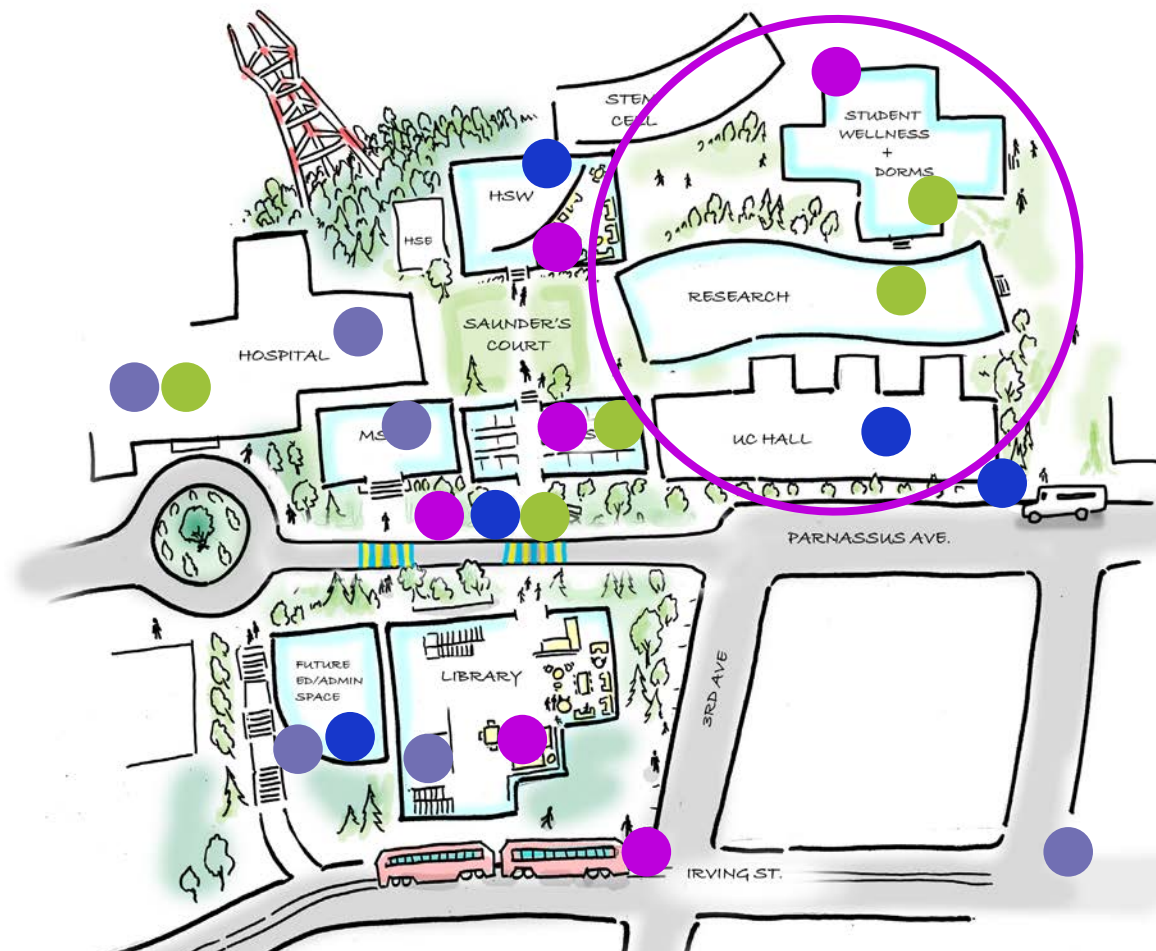


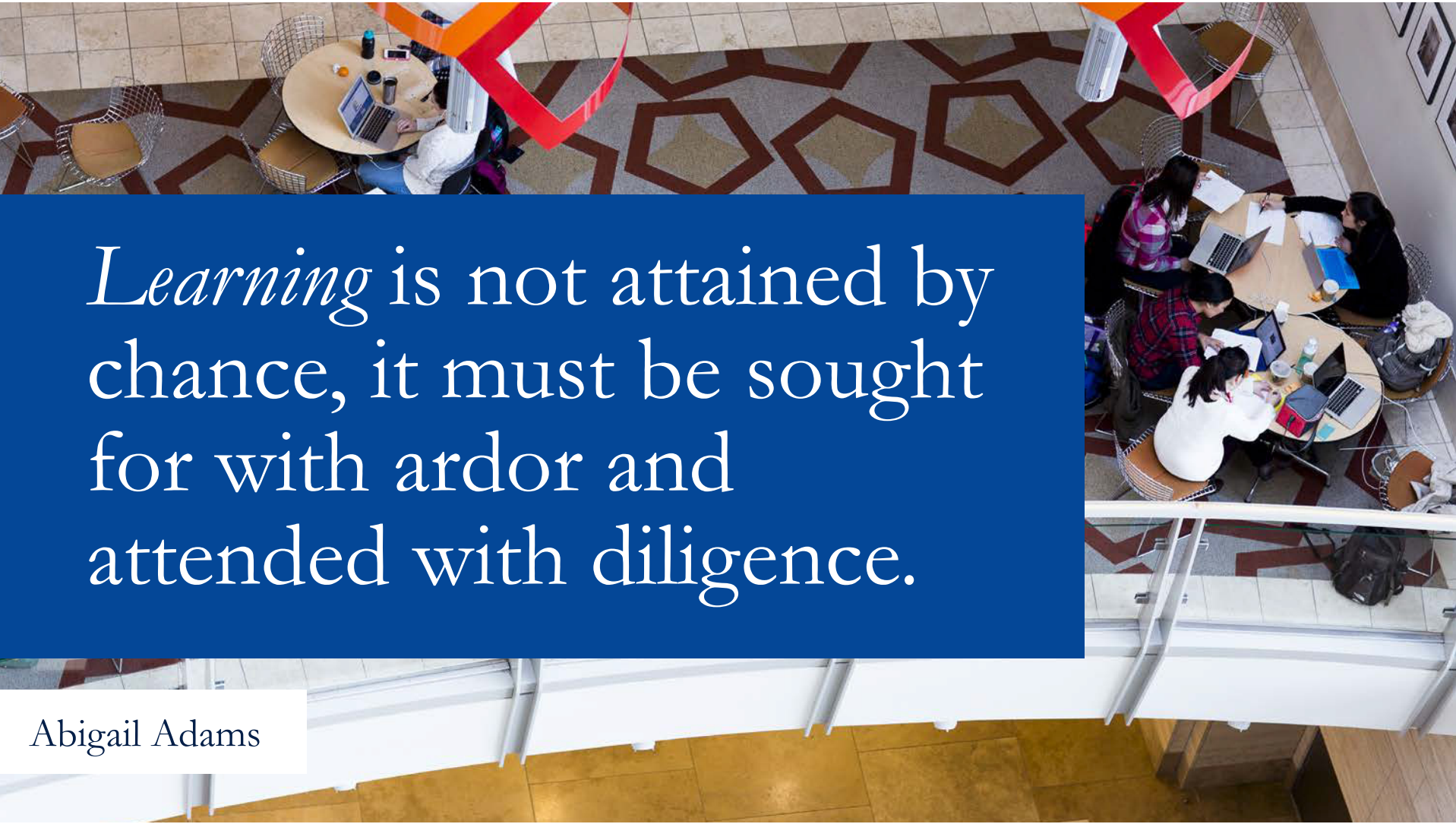
## B WORKING GROUP REPORTS





## WORKING GROUP REPORTS B



A high-angle photograph of a modern interior space, likely a library or study area. The floor is covered in a large, geometric patterned carpet in shades of brown and beige. Several round tables are scattered throughout the space, with people sitting at them, working on laptops and papers. A large, stylized red and orange graphic element, resembling a large 'X' or a stylized letter, is superimposed over the top left portion of the image. A blue rectangular box with white text is overlaid on the right side of the image.

*Learning is not attained by chance, it must be sought for with ardor and attended with diligence.*

Abigail Adams

## Appendices

- A. Education Community Proposals**
- B. Kanbar Center for Simulation – Expansion of Facilities Space Needs**
- C. Designated Academic Areas**
- D. Perkins Eastman Classroom Portfolio Recommendations**
- E. Academic Senate Space Committee Reports**
- F. ESWG Education Space Guidelines**
- G. Library Education Space Principles**

### Space Recommendations

- Create an innovative central **Education Core** to support active-learning and interprofessional pedagogies.
- Expand **clinical simulation spaces** with comprehensive interprofessional skills and simulation capacities that can accommodate all school and UCSF Health needs.
- Establish designated **academic areas for all in clinical buildings** in support of the education and research missions of UCSF.
- Revise the portfolio of **classroom and class lab spaces to meet modern education** requirements. Provide adequate spaces for campus meeting needs.
- Promote a vibrant community to **support student life, well-being, and learning** on our campus.



### **DIGITAL HUB WORKING GROUP REPORT**

For the full report with appendices, please see:

[https://space.ucsf.edu/sites/g/files/tkssra416/f/wysiwyg/CPHP\\_Digital\\_Hub\\_Working\\_Group\\_Report.pdf](https://space.ucsf.edu/sites/g/files/tkssra416/f/wysiwyg/CPHP_Digital_Hub_Working_Group_Report.pdf)



University of California  
San Francisco

# Digital Hub @ Parnassus Heights

November 27, 2018  
Parnassus Master Plan Steering Committee

Julia Adler-Milstein, PhD  
Aaron Neinstein, MD  
Robert Wachter, MD



---

**I am a:** clinician at UCSF

**I want to:** inform a treatment decision for one of my patients by building an on-demand cohort of similar UC patients to compare.



## B WORKING GROUP REPORTS



---

**I am a:** clinician at UCSF

**I want to:** improve the way our current EHR supports medication reconciliation for my clinic's patient population.



---

**I am a:** researcher at UCSF

**I want to:** build a decision support app that delivers real-time risk predictions to UCSF intensive care teams.



## B WORKING GROUP REPORTS



5 Parnassus Master Plan Steering Committee

---

**I am a:** faculty member at Harvard doing cutting-edge robotics research

**I want to:** move to an institution where I can seamlessly collaborate with other digital health faculty and a health system that will allow me to test and refine my designs.

UCSF

---

**I am a:** well-established  
Silicon Valley technology  
company

**I want to:** work with an  
academic health center to co-  
develop a breakthrough  
technology that improves  
population health.





## B WORKING GROUP REPORTS



7 Parnassus Master Plan Steering Committee

---

**I am a:** start-up tech company

**I want to:** pilot test my new solution that improves OR scheduling and throughput.

UCSF



---













**I am a:** third year Orthopedics resident at UCSF

**I want to:** work with UCSF digital health faculty to refine and pilot a new clinical decision support algorithm.



## B WORKING GROUP REPORTS

# UCSF's early successes in Digital Health

<div>         </div>								
Successes	Information Commons  UC Data Warehouse	   	Epic EHR  Clinical Decision Support  Telehealth	 Learning Health System Projects  De-ID'd Data	  	Inside Out Accelerator	Catalyst Program  Entrepren. Center	Clinical Data Request Process  Ops & Clinical Dashboards
Expertise	<ul style="list-style-type: none"> <li>• Bioinformatics</li> <li>• Omics</li> <li>• Data Science</li> </ul>	<ul style="list-style-type: none"> <li>• Data Science</li> <li>• Software Development</li> <li>• Clinical Informatics</li> <li>• Commercial Partnerships</li> <li>• Early-Stage Innovation</li> </ul>	<ul style="list-style-type: none"> <li>• Clinical Informatics</li> <li>• Clinical Analytics</li> <li>• Operations</li> </ul>	<ul style="list-style-type: none"> <li>• Clinical Research</li> </ul>	<ul style="list-style-type: none"> <li>• Health Informatics Research</li> <li>• Health Informatics Policy</li> </ul>	<ul style="list-style-type: none"> <li>• Implementation Science</li> <li>• Service Design</li> </ul>	<ul style="list-style-type: none"> <li>• Licensing</li> <li>• Intellectual Property</li> <li>• Partnerships</li> </ul>	<ul style="list-style-type: none"> <li>• Analytics</li> <li>• Dashboards</li> </ul>

## ... and much more within Departments



**Stefano Bini, MD**

Department of  
Orthopedic Surgery

HealthLoop



**Gabby Schmajuk, MD**



**Jinoos Yazdany, MD**

Department of Medicine

Patient Reported Outcomes  
in Rheumatology



**Xiao Hu, PhD**

School of Nursing

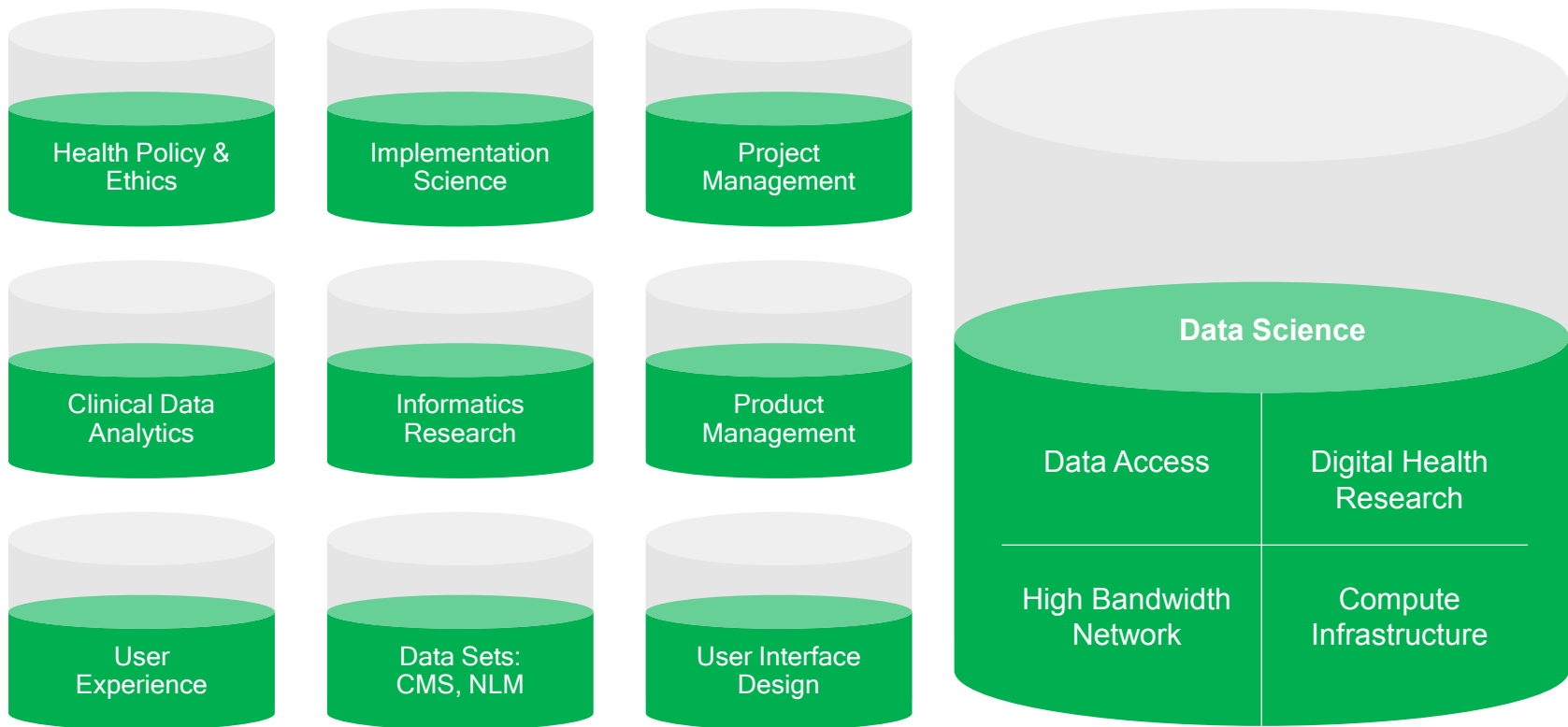
SuperAlarm

## Our digital groups are geographically dispersed...



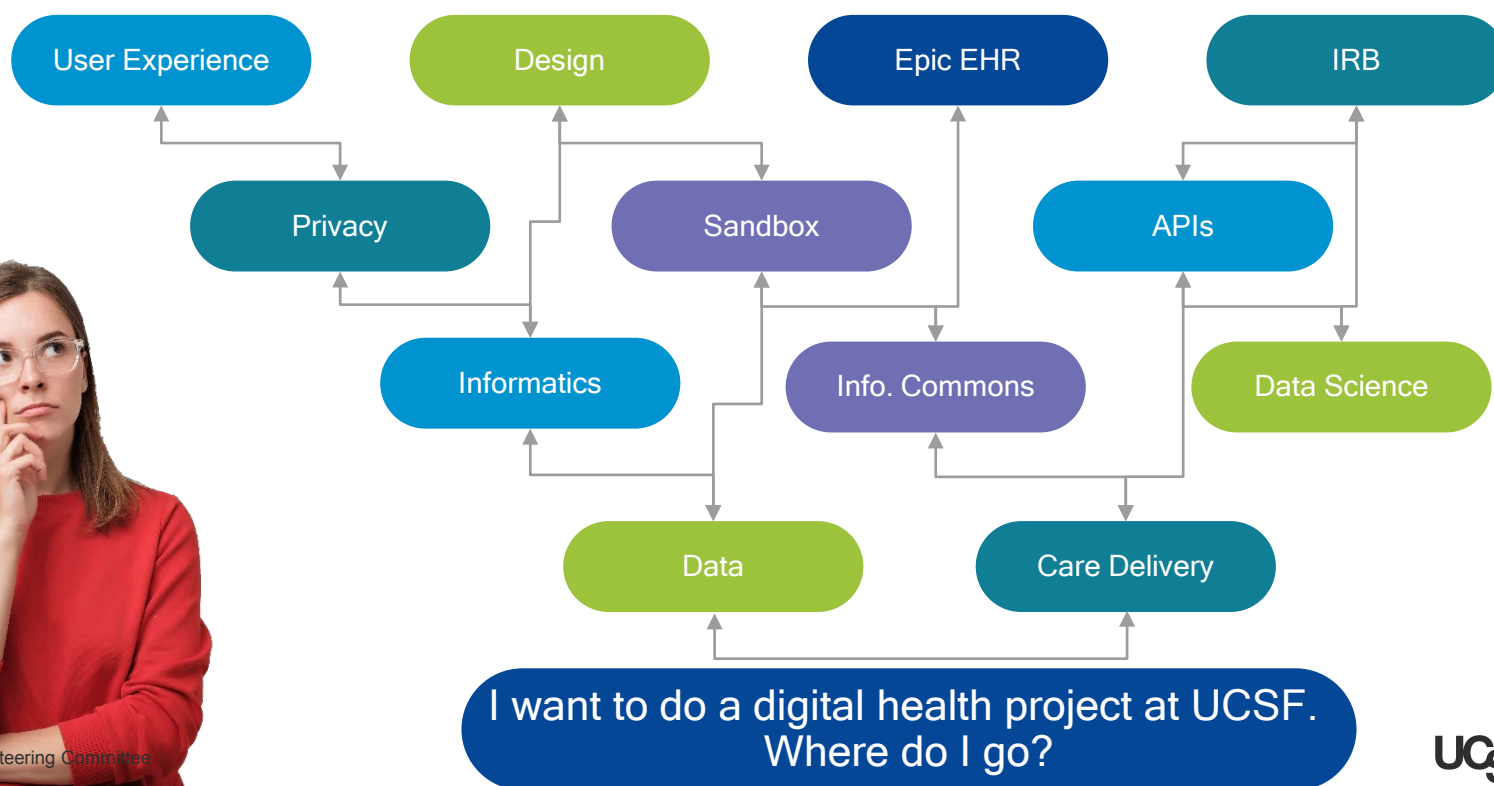


## ... and we have key resource gaps









## B WORKING GROUP REPORTS

... as well as poorly coordinated resources, leading to frustrated UCSF faculty and external partners



## UCSF has an opportunity to be the premier university for digital...



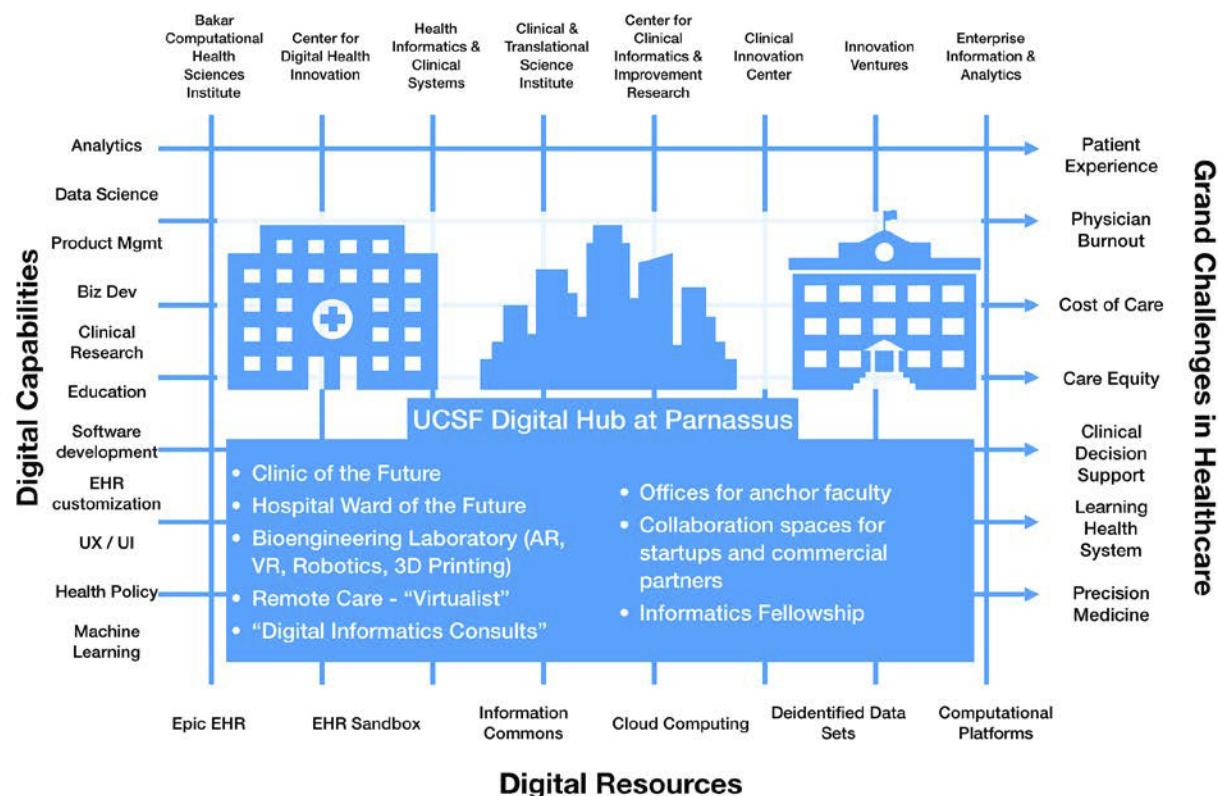
-  ... care
-  ... education
-  ... innovation
-  ... research
-  ... entrepreneurship
-  ... partnerships

# Vision

*To be the premier university in the world for digital, by...*

streamlining Digital Health at UCSF to seamlessly support the needs of clinicians, researchers, trainees, and external partners...

## UCSF Digital Hub Anchor Programs



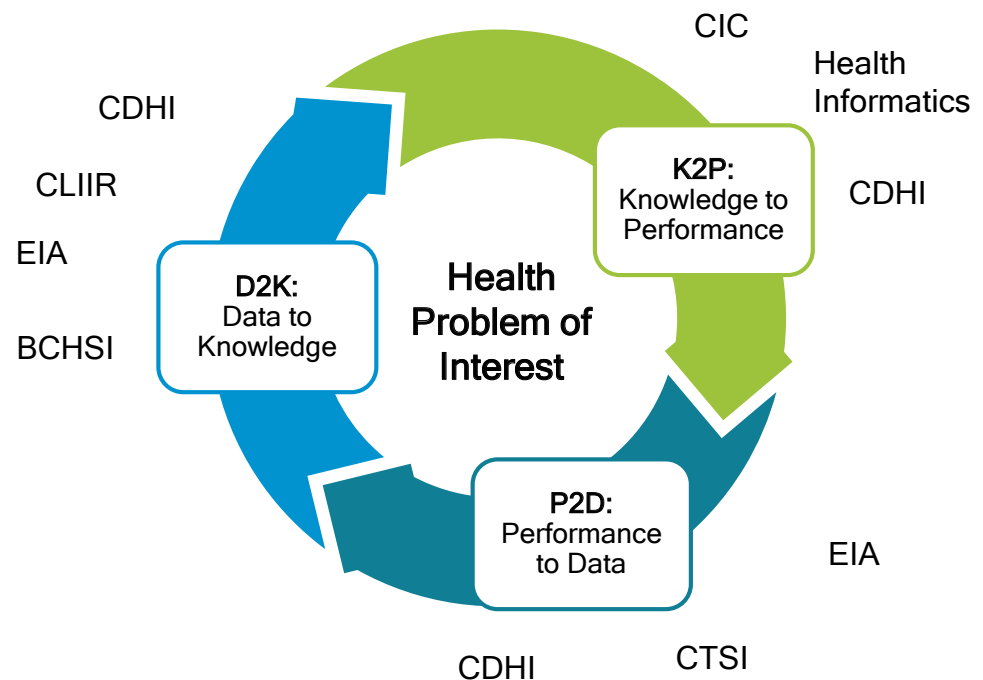
**Note:** BCHSI remains at Mission Bay, but will be core member of the Digital Hub and have a presence at Parnassus



# Vision

... allowing current UCSF Digital Health assets to work together to deliver a true Learning Health System.

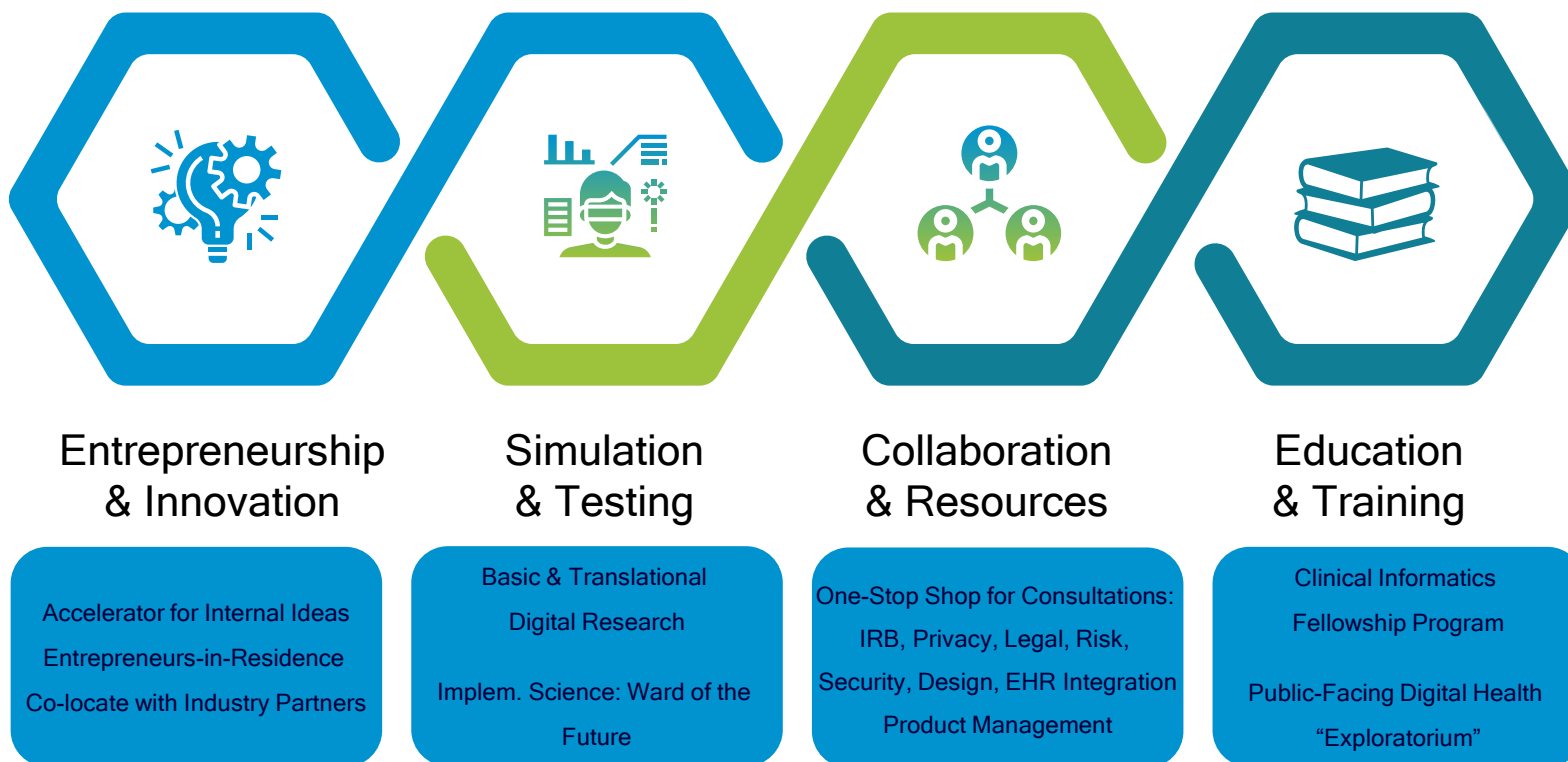
## Learning Health Cycle



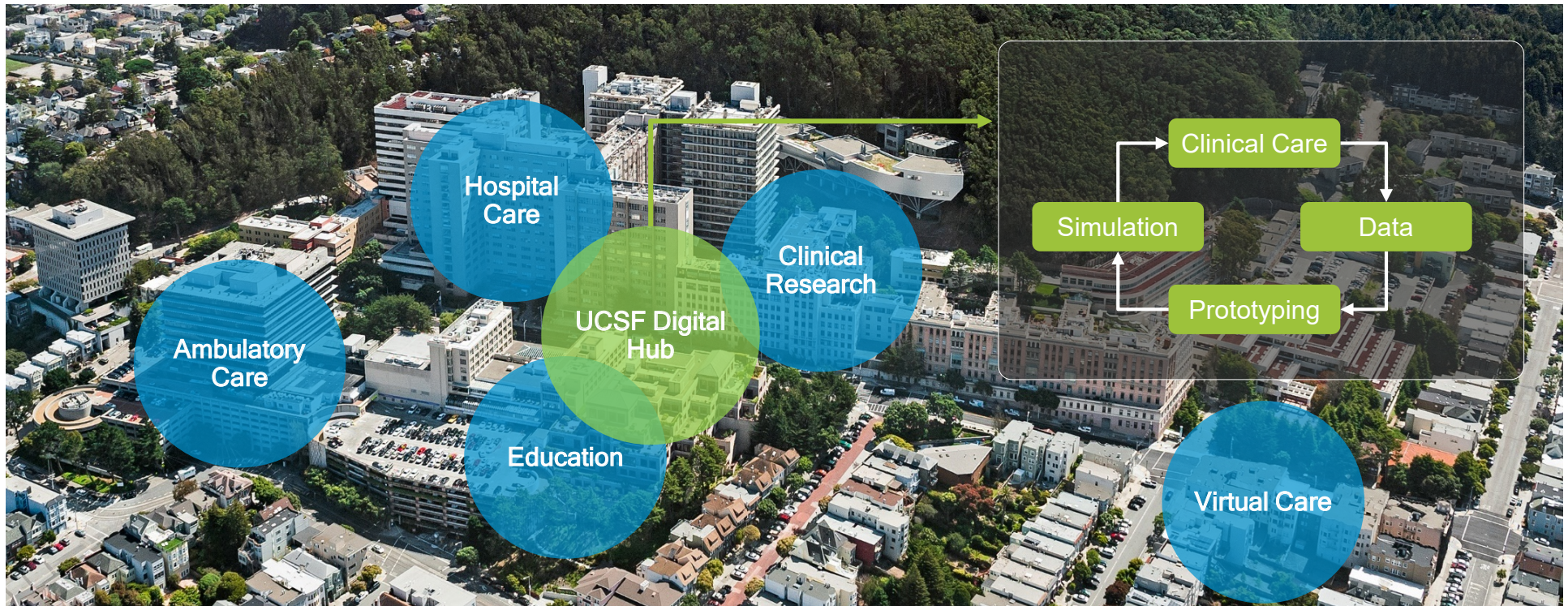
\*With engagement of policy, ethics, patient engagement, disparities groups

## UCSF Digital Hub: Four Core Areas

E  
x  
a  
m  
p  
l  
e  
s



## UCSF Digital Hub belongs at Parnassus Heights




# UCSF Digital Hub - Governance



- Broad representation from community of digital entities and core users (e.g. clinical departments)
- Federated model: maintain autonomy of constituent units while emphasizing cross-cutting projects, communication (between silos and externally-facing), convening, education, collaboratory
- Decision Making & Authority
  - \$1-2M/yr, staff to purpose, 3-5 staff to start
  - Focused on strategic planning, space mgmt., building & managing cross-cutting projects





Unified space @  
Parnassus Heights



New federated program,  
strategy and governance

# Appendix



University of California  
San Francisco

## Working Group Membership



Julia Adler-Milstein



Aaron Neinstein



Steven Bin



Stefano Bini



Rachael Callcut



David Dobbs



Xiao Hu



Carolyn Jasik



Elsbeth Kalenderian



Marc Kohli



Michael Lesh



Chandler Mayfield



Rosa Rodriguez-Monguio



Cara Fladd



Sharon Priest

## Full-Time Occupants - Current & Projected

Team	Current @ Parnassus Heights		FY20 @ Digital Hub		FY25 @ Digital Hub	
	Low	High	Low	High	Low	High
CDHI	12	17	25	50 (Increasing team size & shift staff from MB)	35	80
CLIIR	0	0	10	20		
CIC	8	10	8	10		
CTSI	0	0	5	15	5	25
Dept of Epi/Biostats						
BCHSI	0	0	1	2		
EI&A	0	0	5	15	8	20
Health Informatics	5	10	4	6		
Informatics Trainees	5	10	5	10	8	15
EIR / Incubator	0	0	2	3		
Clinical Dept people			10	15		
Totals	30	47	70	131		



## WORKING GROUP REPORTS **B**



### Entrepreneurship & Innovation

- Collaborative Environment
  - Attract and recruit top talent
  - Strengthen synergies of existing UCSF people and assets
- One Stop Shop for Consultations: IRB, Privacy, Legal, Risk, Security, Design, UX, Product Management, EHR



### Simulation & Testing

- Basic Digital Research: Utilization of large data sets with ML & AI
- Translational Digital Research: Rapid design and prototyping
- Implementation Science: Laboratory Practice. Ward of the Future. Hospital at Home
- Post-Market Digital Surveillance

## B WORKING GROUP REPORTS



### Collaboration & Resources

- Data Science Resources
- Accelerator for Internal Ideas
- Entrepreneurs-in-Residence
- Co-locate with Industry Partners
  - Co-Development
  - Validation



### Education & Training

- Seminars and Events
- Education: Data Science, Informatics, Design, Entrepreneurship
- Clinical Informatics Fellowship Program
- Public-Facing Digital Health “Exploratorium”

### **COLABS WORKING GROUP REPORT**

For the full report with appendices, please see:

[https://space.ucsf.edu/sites/g/files/tkssra416/f/wysiwyg/CPHP\\_CRL-CoLabs\\_Report.pdf](https://space.ucsf.edu/sites/g/files/tkssra416/f/wysiwyg/CPHP_CRL-CoLabs_Report.pdf)



University of California  
San Francisco

# Central Research Labs (CRL)

## PLAN PROPOSAL

CRL Subgroup Report to the  
Parnassus Master Planning Steering Committee

April 27, 2018





2017 CHANCELLOR'S ANNUAL ADDRESS

# State of the University

UCSF

"Excellence"

"Now is the time to start"

"Impassioned engagement of the  
Parnassus Heights-based faculty"

"Incredibly exciting ideas"

"World-class modern facilities"

"Big and bold"



CRL SUBGROUP COMMITTEE

# Mandate



- Design a **new model** for central lab resources
  - Capitalizes on **critical personnel** and **cutting-edge methods & technologies**
  - Drives **collaboration** across disciplines
- Produce high level plans for **contiguous space** housing all CRL components
  - Integrates core activities into one centralized place, *e.g.* sample processing, high-dimensional imaging, cell separation/sorting, genomic analysis
- Maximize **impact & engagement**
- Launch within a **2-year timeline**

CRL SUBGROUP COMMITTEE

# Membership and Process



**NADAV AHITUV, PHD**  
Bioengineering & Therapeutics



**DIANE KAY**  
Space & Capital Planning



**PATTI MITCHELL**  
Capital Programs



**JIMMIE YE, PHD**  
Epidemiology & Biostatistics



**VINCENT CHAN, PHD**  
Pathology



**MAX KRUMMEL, PHD**  
Pathology



**ELIZABETH SINCLAIR, PHD**  
Research Resource Program



**KARIN WONG**  
Space Strategy



**ERIC CHOW, PHD**  
Biochemistry & Biophysics



**TIPPI MACKENZIE, MD**  
Surgery



**MATTHEW SPITZER, PHD**  
Microbiology and Immunology



**HUGH COTTER, AIA**  
Oculus Architects, Inc.



**LINDSEY CRISWELL, MD, MPH**  
Medicine



**ALEX MARSON, MD, PHD**  
Microbiology and Immunology



**SAUL VILLEDA, PHD**  
Anatomy



**DAVID ERLE, MD**  
Medicine



**MICHAEL MCMANUS, PHD**  
Diabetes Center



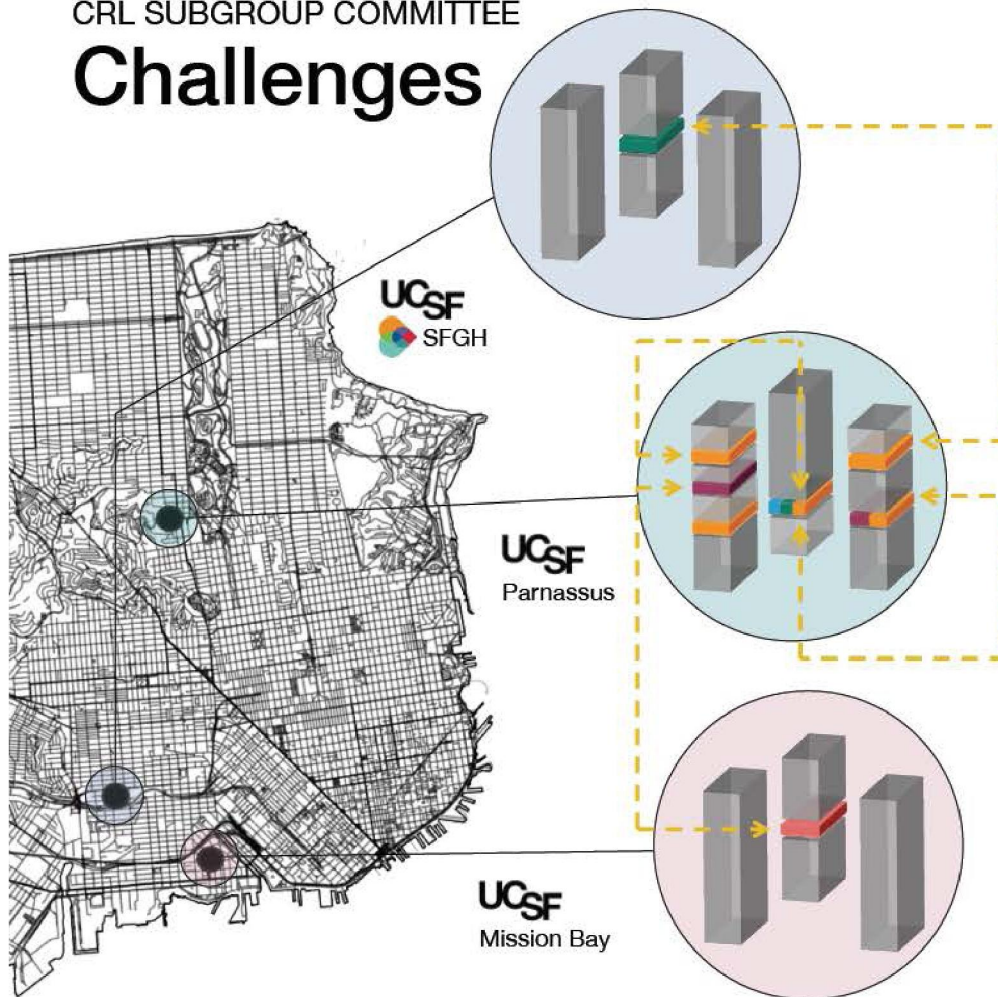
**KATHERINE YANG, PHARM.D, MPH**  
Clinical Pharmacy

## SINCE JANUARY 2018:

- 5 committee meetings
- 7 task forces
- Website
- Email announcements
- Existing facility inventory
- Site visits

CRL SUBGROUP COMMITTEE

# Challenges



- **Fragmented** facilities
  - Difficult to find and use cores
  - Limits collaboration and synergies
  - Inefficient use of space and equipment
- **Lagging investments** in transformative methods & technologies
  - Data sciences
  - Genomics
- **Unreliable** long-term financial support
  - Inefficiencies
  - Inadequate institutional support for cores (9% versus 27% nationally)
- **Retention** of world-class staff



CRL SUBGROUP COMMITTEE

# Goals & Opportunities



- **Rejuvenating Parnassus**

Complete promptly a **highly-visible model for developing big and bold initiatives** at Parnassus

- **Building on Parnassus' strength**

Emphasize **Parnassus' unique strengths** by exploring the biological basis of disease in transformative new ways and by complementing resources available elsewhere

- **Fostering collaboration**

Enhance a sense of community by moving beyond the traditional “core” model and facilitating the **communization of resources, expertise, and data**

- **Creating excellence, responsiveness, and sustainability**

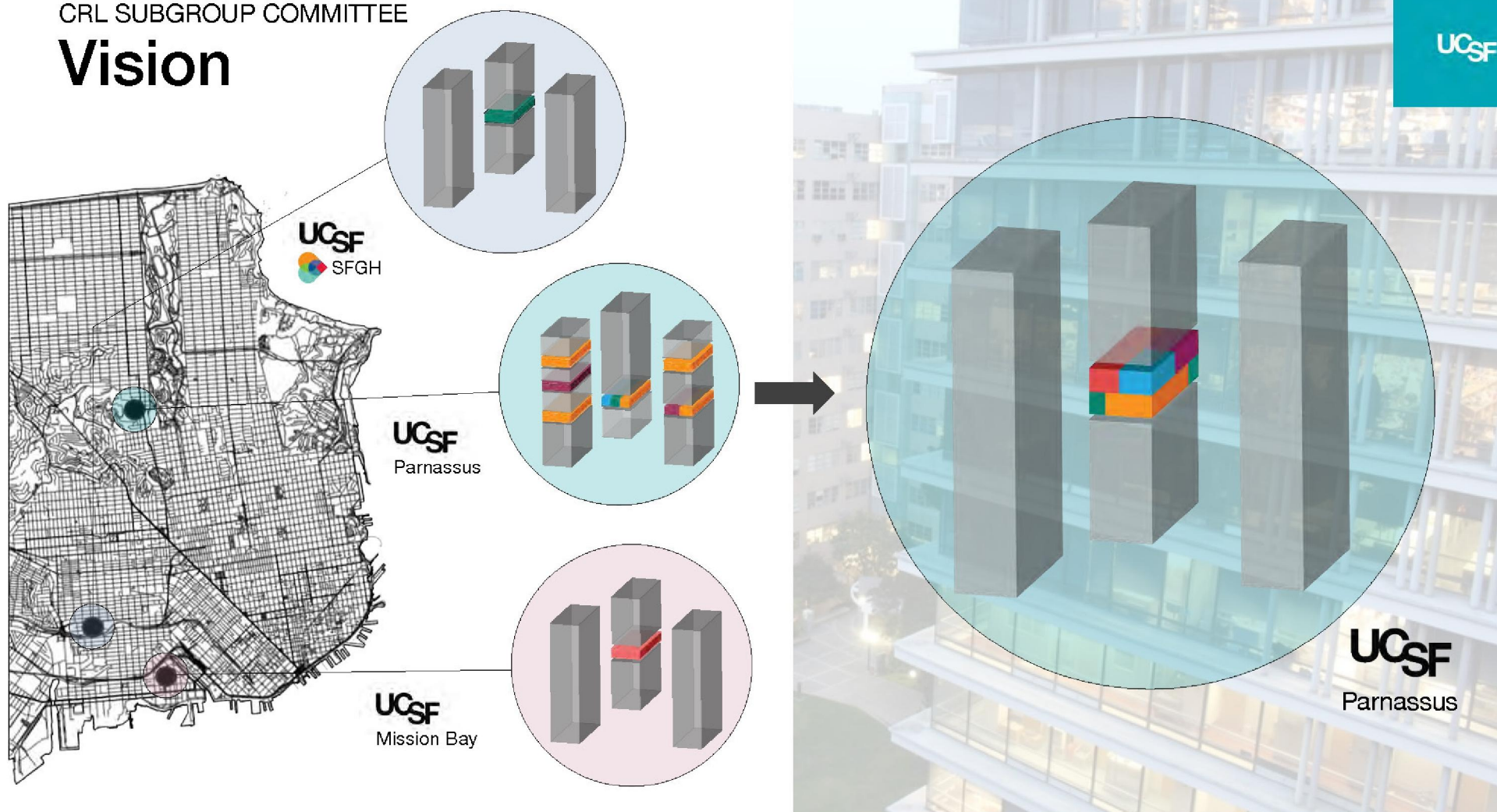
Recruit and retain **excellent people who are engaged and nimble** in recognizing emerging opportunities, and who can promote the sharing of ideas and tools developed in individual labs

- **Supporting education and training**

## B WORKING GROUP REPORTS

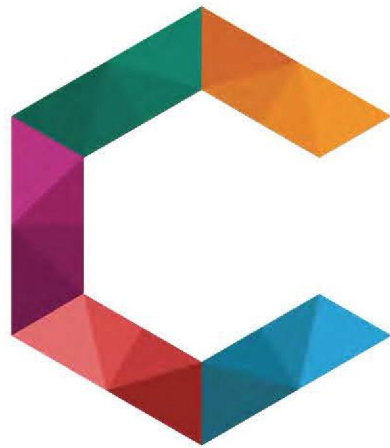
CRL SUBGROUP COMMITTEE

### Vision



CRL SUBGROUP COMMITTEE

# Design Concept



**COLABS**  
AT PARNASSUS

The “C” is a multi-faceted representation of CoLabs: as a logomark; as an interconnected space of shared labs; as an open “ring of collaboration” that will mirror the eventual rejuvenation and space concept at Parnassus.

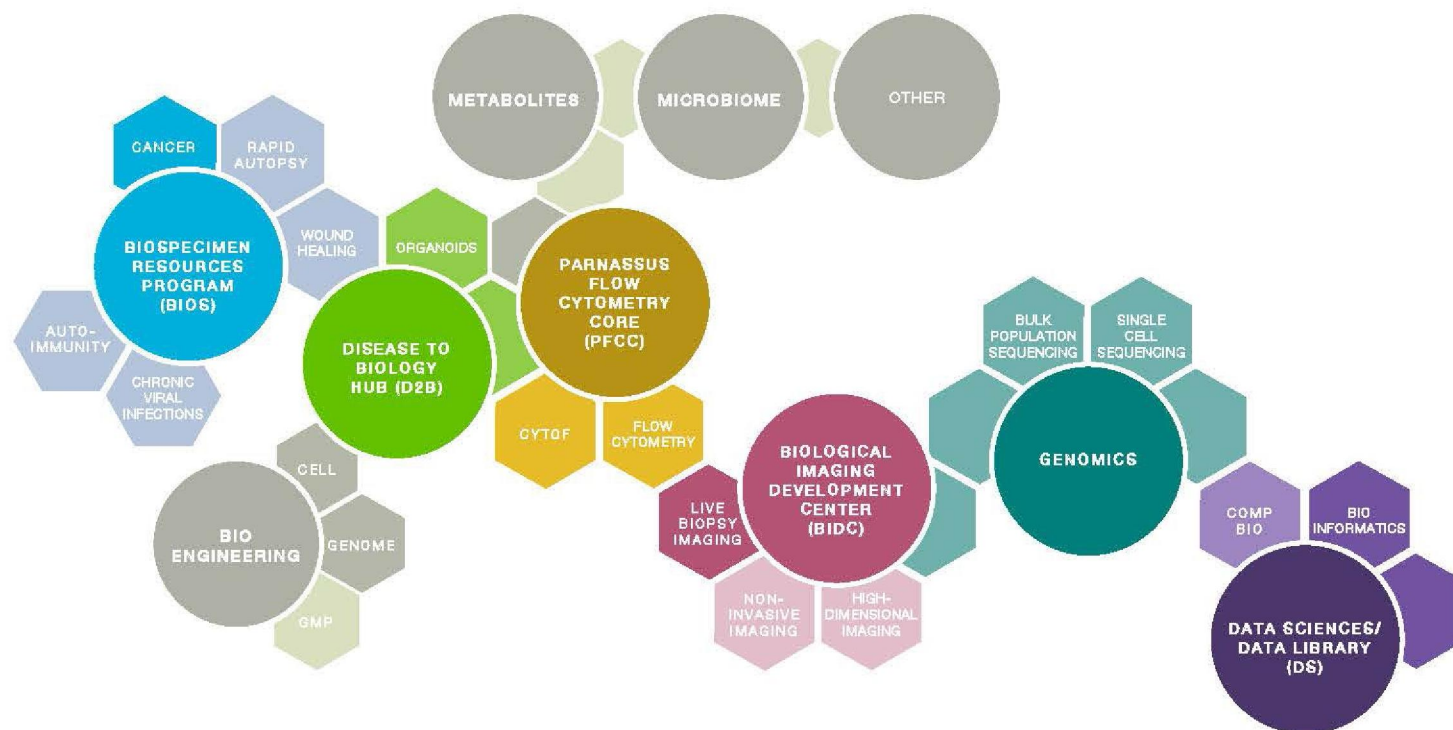




## B WORKING GROUP REPORTS

CRL SUBGROUP COMMITTEE

# CoLabs at Parnassus



COLABS  
AT PARNASSUS



COLABS AT PARNASSUS

# Benefits to Parnassus and UCSF



## **Dramatically lower barriers for interdisciplinary collaborations**

- Allows access to sophisticated approaches essential for cutting-edge science
- Especially important for early stage investigators and clinical-scientists

## **Drive more efficient use of costly sharable resources**

- Reduce costs and need for space in other Parnassus projects that will follow
- Data sharing ensures maximizes benefits of patient-based research

## **Reduce glaring inequities between Parnassus and MB**

- Improve Parnassus morale and build excitement about the future of Parnassus
- Decrease need to travel to MB for important services

## **Enable a new financial model**

- Attract a broader range of funders
- Leverage large project funding to benefit the whole community

## **Provide a visible center for researchers at Parnassus**

- Build a sense of community
- Provide new facilities and personnel for training and innovation

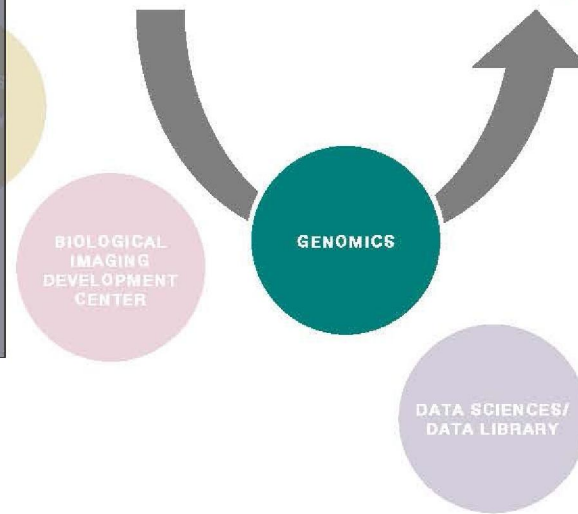
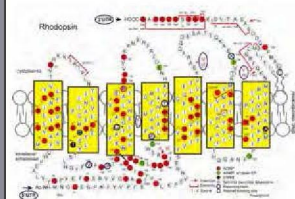


### COLABS AT PARNASSUS

# Single CoLab Use Case



Doug Gould, PhD and Scott Oakes, MD want to use gene editing to cure inherited forms of blindness. They are looking for mouse models for assessing the efficacy of editing a relevant target gene in the retina. Doug and Scott consult with Michael McManus who provides advice about suitable tools. They can develop the required transgene constructs in their own labs or travel to the MB Cell and Genome Engineering Core to work with them. For generation of transgenic mice from ES cells, Parnassus investigators can use either the Gladstone core or an off-campus service provider. Mice are then shipped to Doug and Scott, who genotype them and deliver some mice to the LARC Rederivation Core for preservation. Therapeutic CRISPR AAVs can be produced with help from the UCSF-ViraCore.



#### SINGLE COLAB PROJECT

**Step 1.** Doug and Scott work with the Genomics CoLab director to design the experiment, offering new technologies that raise impact and often save both time and money.

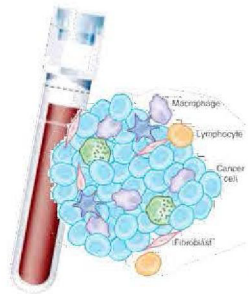
**Step 2.** The Genomics CoLab performs ES gene targeting, microinjects ES cells, helps genotype animals and offers a phenotyping service via UCD liaison.

**Step 3.** The Genomics CoLab biobanks locally or with a UCD liaison.

**Step 4.** The Genomics CoLab produces the CRISPR AAV construct and coordinates with the ViraCore to produce therapeutic AAV.

## COLABS AT PARNASSUS

# CoLabs Projects



## COLABS PROJECT

**Step 1.** Jocelyn works with the CoLabs director to define pilot project of 12 ovarian samples in the pipeline. BIOS works with Jocelyn to identify, consent, and acquire tissue & blood from patients.

**Step 2.** BIOS transfers tissue & blood to D2B technician. D2B technician takes a tissue slice for H&E/IF and dissociates the rest; the technician also isolates PBMCs from blood.

**Step 3.** D2B technician works with PFCC personnel to reserve FACS, sort tumor/immune cells for multi-omic analyses, and runs several stain panels to understand the immune composition.

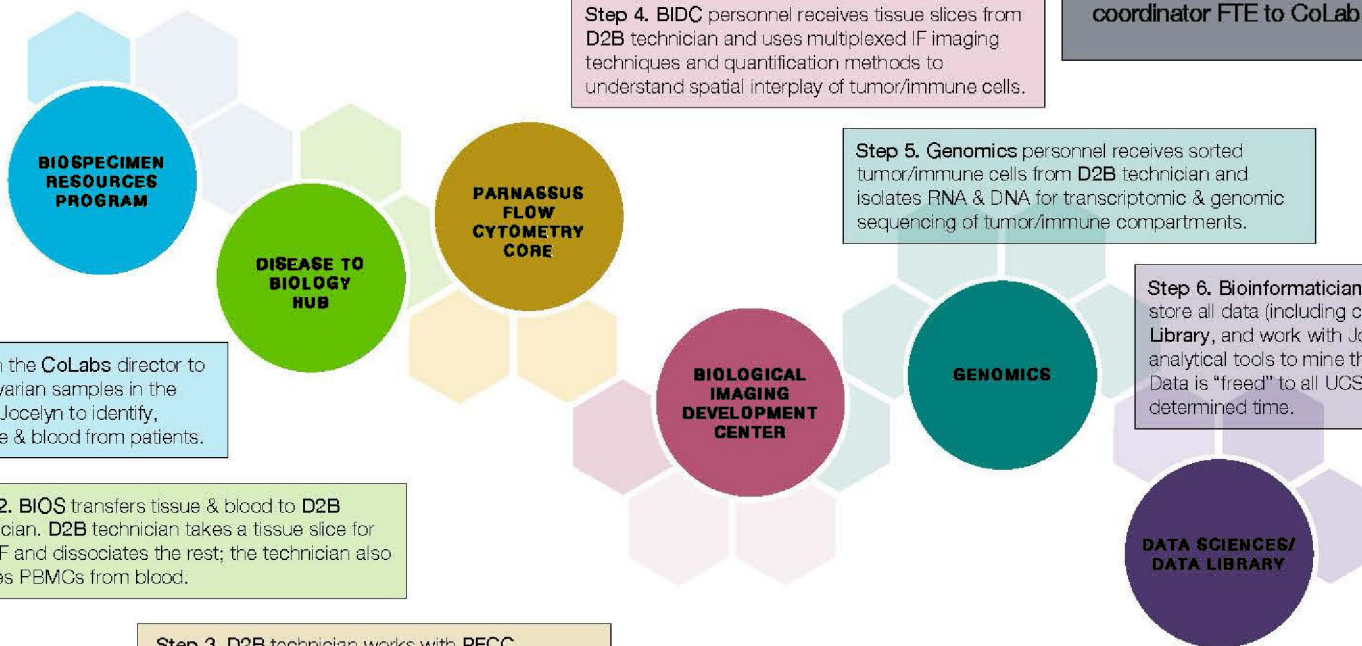
**Step 4.** BIDC personnel receives tissue slices from D2B technician and uses multiplexed IF imaging techniques and quantification methods to understand spatial interplay of tumor/immune cells.

**Step 5.** Genomics personnel receives sorted tumor/immune cells from D2B technician and isolates RNA & DNA for transcriptomic & genomic sequencing of tumor/immune compartments.

**Step 6.** Bioinformaticians receive, curate, and store all data (including clinical) in the UCSF Data Library, and work with Jocelyn to develop analytical tools to mine the ovarian tumor dataset. Data is "freed" to all UCSF investigators after set determined time.



Jocelyn Chapman, MD is keen to understand the immune diversity of gynecological tumors that she is obtaining in the clinic. Like many clinician-scientists, she does not have her own lab with the capacity to undertake this work. Instead, she is able to contribute tumor and blood specimens and a clinical research coordinator FTE to CoLabs.





COLABS AT PARNASSUS

# Impact on Researchers



### Improve services for existing users of Parnassus cores

- PFCC (Flow Cytometry) 140 PIs
- BIDC (Imaging) 51 PIs, 19 departments
- CTSI CRS Sample Processing Core 59 PIs
- IHG Core Single Cell RNA-seq ~50 PIs
- Parnassus Center for Advanced Technology ~15 PIs
- Immunoprofiler Flow/Sequencing and Allied Projects ~25 PIs

### Provide on-site access to key services now only available elsewhere

- Nikon Imaging Center in Genentech Hall 191 PIs, ~15% at Parnassus
- Center for Advanced Technology in Genentech Hall 150 PIs, ~15% at Parnassus
- Transgenic Core at Gladstone ~35 UCSF PIs, >50% at Parnassus
- Functional Genomics Core in Rock Hall 55 PIs, 49% at Parnassus
- Clinical Immunology Lab at ZSFG 27 PIs, all would benefit from access to PFCC

### Unlock access to transformative technologies for existing and new users

- Data sciences for storage and analysis of large datasets (including genomics)
- New imaging and single cell analysis methods
- Advanced gene editing (CRISPR and beyond)
- Massively parallel functional assays





COLABS AT PARNASSUS

# New User Access



New users can enter the CoLabs in one of several ways:

- **Direct access:**  
Access by interacting directly with the CoLabs Director. The new user will typically be the PI and the project will largely be managed by personnel determined by the Director.
- **Sponsored access:**  
Access through collaboration with an existing user (Sponsor). The project will largely be managed by personnel “linked” to the Sponsor’s existing project.
- **Recharge/subscription access:**  
Each CoLab will retain its traditional “core” capacities, e.g. daily users who use a single-piece of equipment

## B WORKING GROUP REPORTS

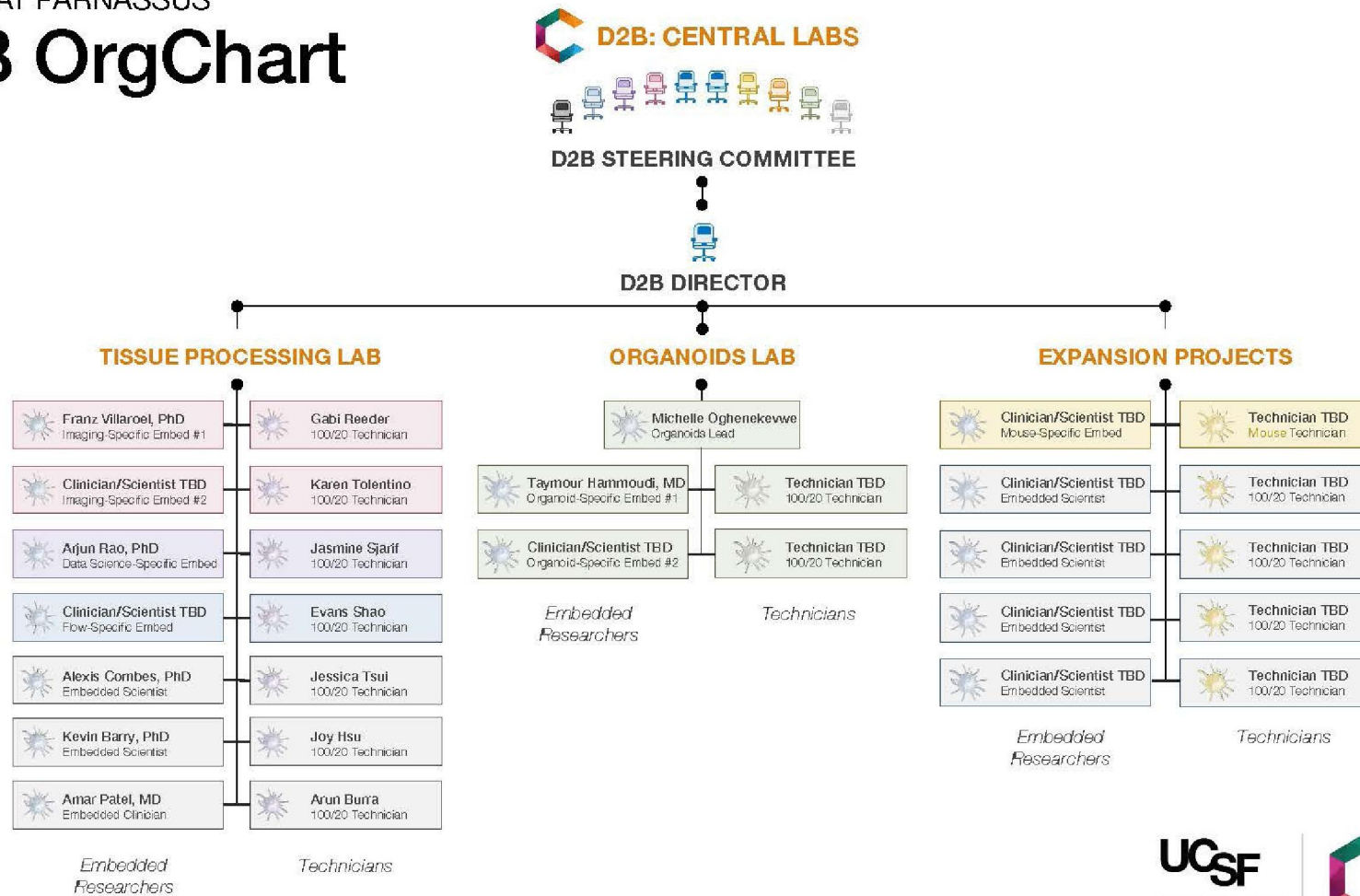
COLABS AT PARNASSUS

# CoLabs OrgChart



COLABS AT PARNASSUS

# D2B OrgChart



## COLABS AT PARNASSUS

# Space Programming



01/ 02 wet labs - 31 knee holes



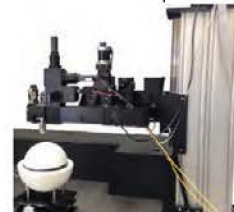
05/ 06 tissue culture rooms - 20 BSC



01 large shared microscope room



05 small microscope rooms



01 large flow cytometry room



01/ 02 equipment rooms



01/ 02 dry labs - 46 desks



03 private offices - 3 desks



03 shared offices - 12 desks



06 small meeting room - 2 to 4 people



02 small conference rooms - 4 to 6 people



01 conference room - 12 to 16 people



01 seminar/ training room - 20 people



01/ 02 break rooms



Estimated program  
space needs:  
**19,251 SQFT**



COLABS  
AT PARNASSUS



COLABS AT PARNASSUS

# Design Considerations



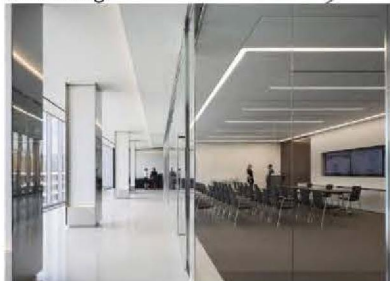
Collaborating



Socializing



Learning



Visual connection



Flexibility



HSW

MSB

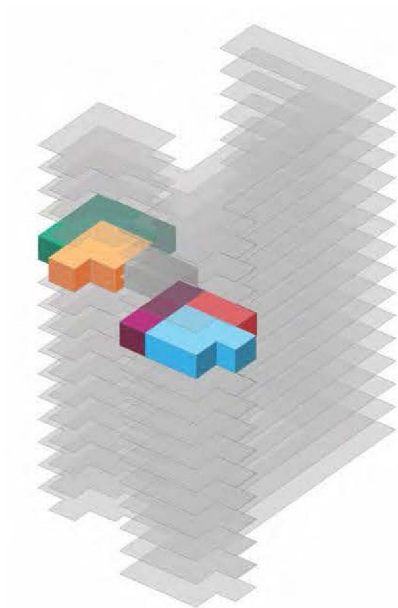
HSE

COLABS AT PARNASSUS

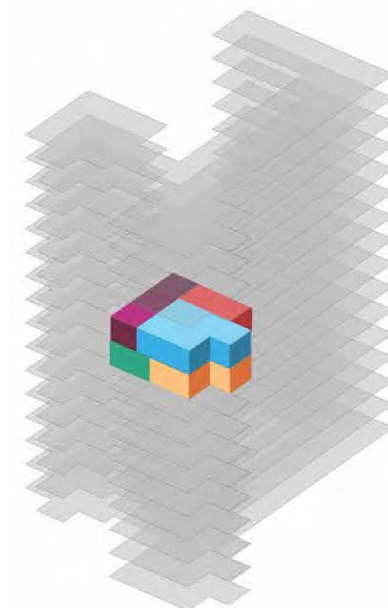
# Space Options Considered



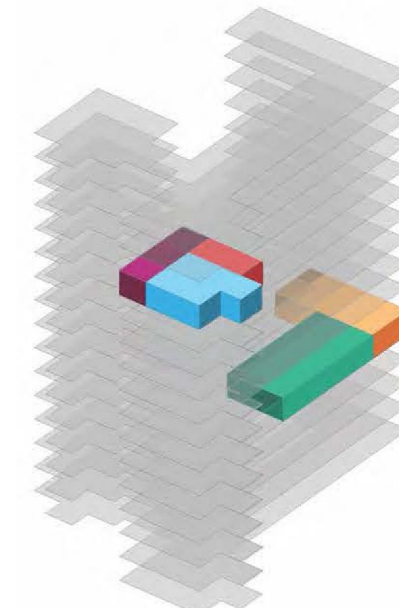
Adjacent



Stacked



Separated



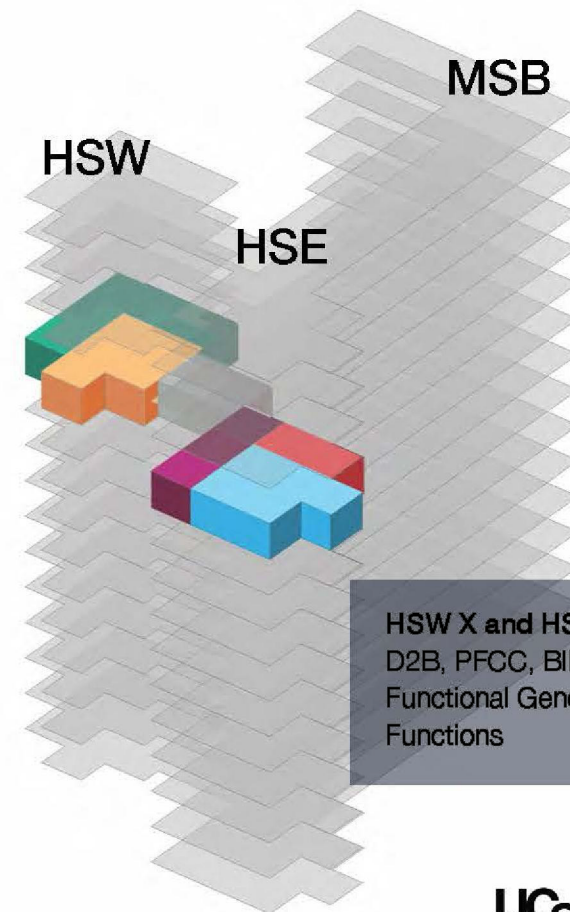
COLABS AT PARNASSUS

# Space Options



## Adjacent Floors

- **Pros**
  - Optimal for integration of all CoLabs
  - Maximizes chance “human collisions” designed to spark innovation and collaboration
  - Enables development of space between HSE & HSW for interaction area
  - Maximizes visibility of the CoLabs
- **Cons**
  - There are no HSIR levels with two floors (HSE & HSW) that are both in urgent need of renovation

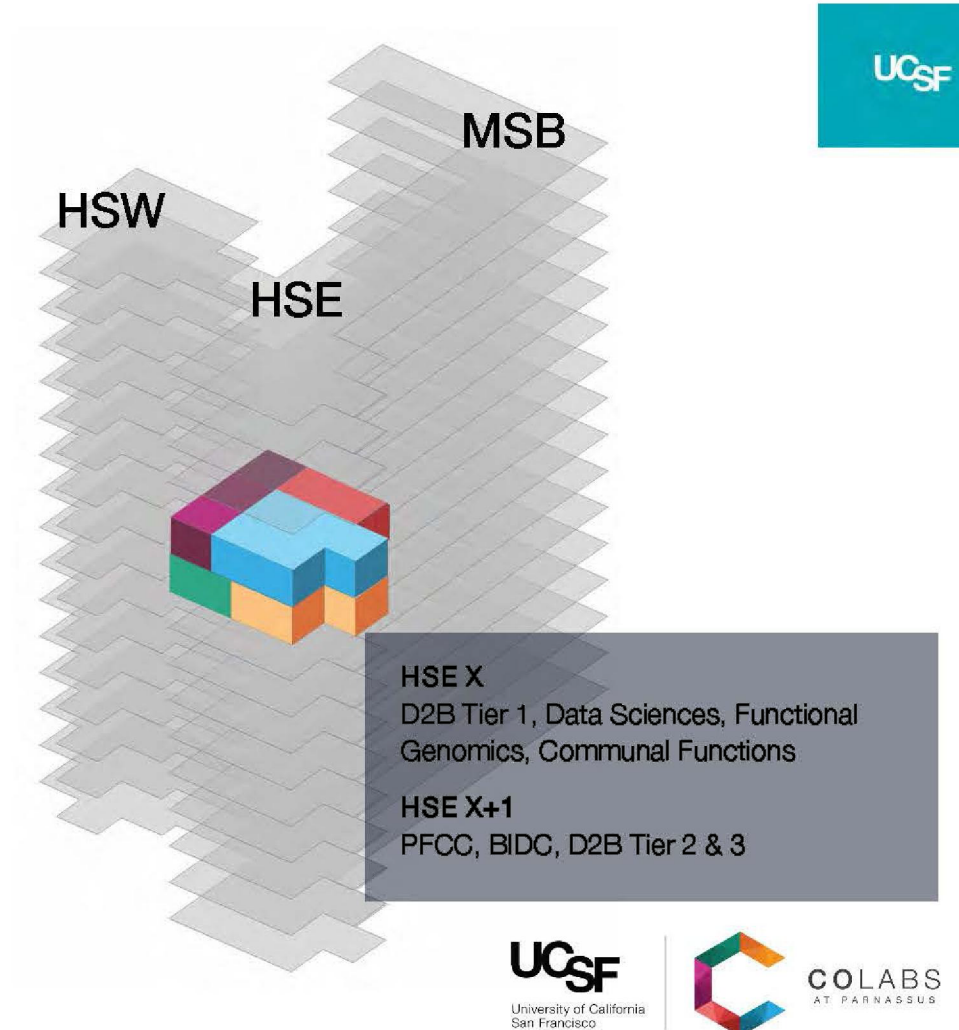


COLABS AT PARNASSUS

# Space Options

## Stacked Floors

- **Pros**
  - Sets of stacked HSIR floors are in need of renovation (HSE4/5/6, HSE11/12/13, HSW14/15/16)
  - Could be developed as functionally contiguous space with inclusion of an internal staircase and an atrium
- **Cons**
  - Does not promote interactions as well as a single-level design
  - Internal stairs/atrium sacrifices space
  - Does not leverage underutilized space between HSE & HSW





COLABS AT PARNASSUS

# Space Options

## Separated Floors

- **Pros**
  - Retains PFCC in existing space
  - Only need to relocate occupants of one floor
- **Cons**
  - Non-contiguous space
  - Discourages interactions
  - Less ability to adapt to new demands for space
  - Requires some duplication of space program elements
  - Requires development of additional space outside of the main CoLabs HSIR floor to accommodate expansion of PFCC and a new BIDC facility



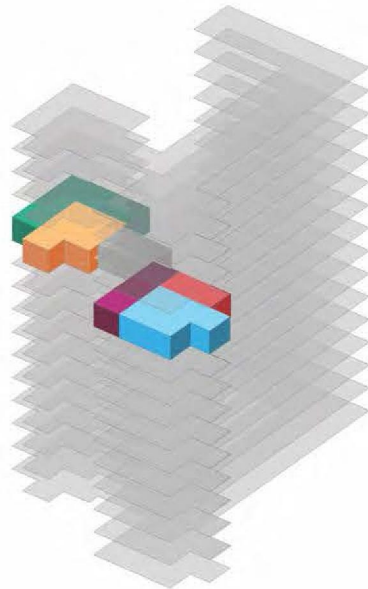
COLABS AT PARNASSUS

# Space Options Recommendations



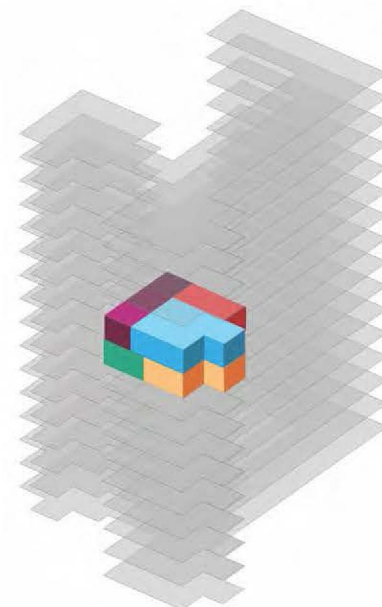
Adjacent

HIGHLY RECOMMENDED



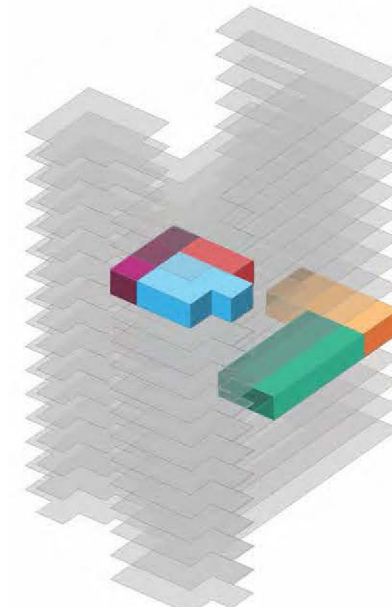
Stacked

VIABLE OPTION



Separated

NOT RECOMMENDED



COLABS AT PARNASSUS

## Adjacency issues



- **Should be centrally located**
  - Increased visibility
  - Better access for those in multiple buildings including the HS towers, MSB, and the Dolby Regeneration Medicine Building
  - Encourages more interactions
- **Uncertainties about future locations of other facilities is a challenge**
  - More information about Parnassus plans could help
  - Waiting for a complete Parnassus plan would introduce major delays
  - The CoLabs design should be flexible enough to allow repurposing of CoLabs space as needed

COLABS AT PARNASSUS

# Financing



- **Start-up costs**

- **CoLabs construction costs:**

- Working estimate is \$30M for 2 tower floors

- **CoLabs equipment costs:**

- Large majority of equipment already exists and can be relocated to CoLabs

- **Displaced labs relocation costs:**

- Estimated relocation budget is between \$400 asf and \$2,000 asf

- **Operating costs**

- **Funding sources:** Recharge, subscription, grants, 100/20 model, & campus support (\$400K/year)

- **Launch:** 2018-2019





## COLABS AT PARNASSUS

# Timeline (subject to change)



## Parnassus CoLabs

### High-Level Milestone Schedule

Parnassus CoLabs High-Level Milestone Schedule		2018												2019												2020													
		Duration	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
CoLabs																																							
Meetings of CRL subgroup	3 months																																						
Voting for program elements																																							
Obtain approval of design/budget/scope	1 week																																						
PMP Meeting April 27 - Approval																																							
Design Team Selection & Design Documents	52 weeks																																						
Mobilize/abatement/demo floor 1*	17 weeks																		*																				
Construction – Floor 1	34 weeks																																						
Mobilize/abatement/demo floor 2*	17 weeks																																						
Construction – Floor 2	34 weeks																																						
Floor 1																																							
Confirm floor 1	2 weeks																																						
Design and construction documentation	14 weeks																																						
Mobilize/abatement/demo/construct floor 1	30 weeks																																						
EHS clears lab for CoLabs construction*	1 week																		*																				
Floor 2																																							
Confirm floor 1	2 weeks																																						
Design and construction documentation	14 weeks																																						
Mobilize/abatement/demo/construct floor 2*	30 weeks																																						
EHS clears lab for CoLabs construction*	1 week																		*																				

\* Dependent events

COLABS AT PARNASSUS

# CoLabs and the Future of Parnassus



## **The CoLabs project is important both as a resource and as a symbol**

Many are deeply skeptical that Parnassus is the best place to do science and acutely aware of the lack of parity with Mission Bay

**CoLabs can help** by:

- Making Parnassus a better, more exciting place to do research
- Providing a highly visible early example of how UCSF is reinvesting in Parnassus

## **The success of the CoLabs will require a real commitment**

There are competing demands for space, funds, and attention

Finding a suitable CoLabs site will be hard

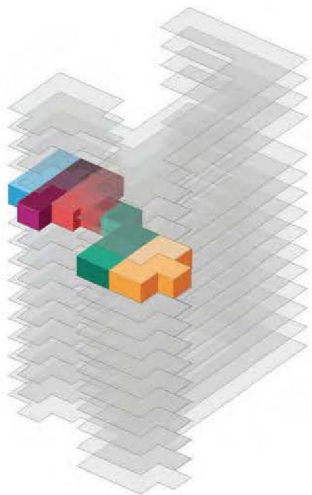
Detailed CoLabs planning must continue over the coming months

An ongoing investment will be required



COLABS AT PARNASSUS

# Summary



## Key principles

- Be “big and bold”
- Start now, maintain a sense of urgency, communicate clearly
- Continue to engage the faculty since many want to help solve problems and identify opportunities
- Make the CoLabs a transformational resource for Parnassus

## Major recommendations

- Focus on site selection since this is currently the rate-limiting step
- We strongly recommend a centrally located, contiguous space (~20,000 sq. ft. or two tower floors)
- Develop a system for working with displaced groups to find good relocation solutions for them
- Funds will be required for ongoing CoLabs operations as well as CoLabs construction (including relocation)
- Many CoLabs activities should begin before the new space is completed

## B WORKING GROUP REPORTS





COLABS AT PARNASSUS

# CRL Task Force Members

## Disease-to-Biology (D2B)

Saurabh Asthana  
 Vincent Chan (lead)  
 Hugh Cotter, Oculus Architects  
 Diane Kay  
 Max Krummel (lead)  
 Tippi Mackenzie  
 Patti Mitchell  
 Jeff Mulish  
 Jeroen Roose  
 Elizabeth Sinclair  
 Matt Spitzer  
 Scott Vandenberg

## Biological Imaging Development Center (BIDC)

Hugh Cotter, Oculus  
 Diane Kay  
 Max Krummel  
 Diana Laird  
 Delaine Larsen  
 Mark Looney  
 Patti Mitchell  
 Matt Spitzer  
 Val Weaver  
 Torsten Wittmen  
 Katherine Yang (lead)

## Flow Cytometry

Hugh Cotter, Oculus  
 Diane Kay  
 Max Krummel  
 Mike Lee  
 Cliff Lowell  
 Patti Mitchell  
 Matt Spitzer (lead)  
 Qizhi Tang

## Transgenic

Nadhav Ahituv  
 Hugh Cotter, Oculus  
 Diane Kay  
 Averil Ma  
 Alex Marson  
 Mike McManus (lead)  
 Patti Mitchell  
 Elizabeth Sinclair

## Physical Environment

Eric Chow (lead)  
 Hugh Cotter, Oculus  
 Diane Kay  
 Patti Mitchell  
 Elizabeth Sinclair  
 Matt Spitzer

## Genomics

Nadhav Ahituv (lead)  
 Andrea Barczak  
 Eric Chow  
 Hugh Cotter, Oculus  
 Lindsey Criswell  
 David Erle  
 Chun (Jimmie) Ye  
 Diane Kay  
 Alberto Marquez  
 Alex Marson (lead)  
 Michael McManus  
 Patti Mitchell  
 Yin Shen  
 Elizabeth Sinclair  
 Ryan Wagner  
 Pui Yan Kwok

## Data Sciences/Data Library (Bioinformatics)

Hugh Cotter, Oculus  
 Lindsey Criswell (lead)  
 Walter Eckalbar  
 Diane Kay  
 Patti Mitchell  
 Elizabeth Sinclair  
 Matt Spitzer  
 Chun (Jimmie) Ye (lead)

## B WORKING GROUP REPORTS

### COLABS AT PARNASSUS

# Current locations of related facilities (partial)

Disease to Biology/Sample Processing	HSE 3 multiple rooms (Immunoprofiler) MSB 1234 (CTSI Clinical Specimen Processing Lab) Fong, Spitzer, Ye labs at PH ZSFG Building 100 (Core Immunology Lab)
Flow Cytometry	MSB 8 (854a/b, 854, 860) MSB 14 (1456) HSE 3 (301D, 302E) HSW 5 (542) HSW 12 (1209)
Imaging	MSB 11 (1105, 1109/S1109A, 1114, 1121, 1123) HSW 5 (536, 539) MB Genentech Hall (Nikon Imaging Center)
Data Sciences/Data Library	HSE 304 Ye lab at PH MB Rock Hall (Functional Genomics Core Bioinformatics)
Functional Genomics (including Transgenic Animals)	HSW 9 (IHG) and HSW 10 (Diabetes Center/PCAT) Marson, McManus, and Ye labs at PH MB Genentech Hall (Center for Advanced Technologies, Cell & Genome Engineering Core) MB Rock Hall (Functional Genomics Core) Gladstone (Transgenic Core) Ahituv and Erle labs at MB

## COLABS AT PARNASSUS

# Preliminary Space Program

Group	Perm Staff	Priv. Office	Shared Office # P	Work Desks	Anal. Stats	Wet Lab Stats	BSC	GSF	Notes
Disease to Biology - D2B									
Tier 1 (Immuno/ Bios/ Organoids)	13	0	0	0	11	0	9	7	1531
Tier 2- CIL	6	0	1	4	0	0	0	3	520
Tier 3- CTSI- Specimen Collection	6	0	0	0	4	0	0	2	455
PFCC Flow Cytometry	10	1	0	0	6	0	2	0	3511
BIDC	5	0	1	5	0	6	4	0	2426
Data Sciences/Data Library	6	0	0	0	0	8	0	0	216
Genomics	9	0	0	0	6	0	16	4	1541
General Admin/ Shared Support	5	2	1	3	0	0	0	0	3610 Allows for private offices for ImmunoX/ CRL director, RRP director, shared office for Strategic Alliance, D2B and Bios managers (total approx. 330 GSF); shared spaces such as Huddle rooms (6); small Conference (2); Large Conf. (1), Seminar/ Training room; Kitchen/ Break; IDF's; Recycling, Electrical Rms.
Shared Lab Support	0	0	0	0	0	0	0	0	450 Shared functions such as gas bottle storage, shared fume hoods, chemical storage rooms.
Sub-total	60	3	3	12	27	14	31	16	14260
Circulation @ 35%									4991 May vary from 15% to 35% in lab suites, but calculated at 35% at this time due to design aesthetic and desire to have open spaces which may increase required SF for various program elements and access to them.
ESTIMATED TOTAL GSF									19251

## Notes

1. This program has been developed based on meetings/calls with each of the individual groups and meetings/calls with full sub-committee members.
2. General Admin / Shared Support includes (3) Management Offices (Private offices for CRL Lab Manager, RRP Manager and shared office for Strategic Alliance, D2B and BIOS); (6) Focus/Huddle Rooms; (2) Small Conference Rooms; (1) Large Seminar Room; (1/2) Break Room; (2) IDF; (2) Electrical Rooms; (2) Emergency Supply Rooms
3. Shared Lab Support includes shared (2) Gas Bottle Storage; (2) Chemical Storage Rooms; (2) Fume Hoods.
4. Hoteling stations not added at this stage; multiple "embedded researcher" stations provided.
5. BSL 2\* Tissue Culture may not be provided.
6. Wet Lab stations are wet lab knee holes and do not include desks adjacent. Some shared desks will be added.
7. All information here should be considered as preliminary and should be fully verified.

## B WORKING GROUP REPORTS

COLABS AT PARNASSUS

### Annual operational support request (first draft)

CoLabs Directors Support	\$ 180,000
Technology Development Projects	70,000
General Lab Maintenance	50,000
Operational Support	100,000
Total Annual cost	\$ 400,000

Courtesy of Elizabeth Sinclair





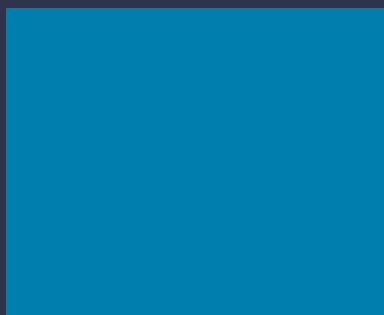
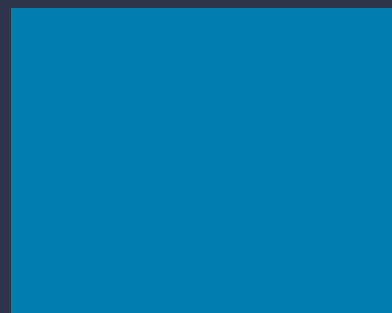
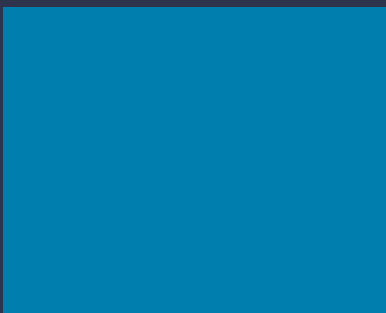
### **C. COMMUNITY IDEAS**

For the full report with appendices, please see:

[https://www.ucsf.edu/sites/default/files/2019-09/ucsf-paranassus-heights\\_community-input-report\\_final.pdf](https://www.ucsf.edu/sites/default/files/2019-09/ucsf-paranassus-heights_community-input-report_final.pdf)



Comprehensive Parnassus Heights Plan  
**COMMUNITY IDEAS**  
JUNE 2019



# Acknowledgments

## Comprehensive Parnassus Heights Plan Community Working Group Members:

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*UCSF Community Advisory Group (CAG)*

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*UCSF CAG/Cole Valley Improvement Association*

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*Haight Ashbury Neighborhood Council*

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*California Academy of Sciences*

Craig Dawson,  
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Sarah Jones,  
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Erica Kajdasz,  
*Cole Valley Neighbor and Business Owner*

Beatrice Laws,  
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Susan Maerki,  
*UCSF CAG*

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*UCSF CAG/Haight Ashbury Neighborhood Council*


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*UCSF Real Estate/Campus Planning*

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The re-examination of Parnassus Heights was sparked by two events: the need to replace the Moffitt Hospital to meet new seismic safety requirements established by the State of California and the need to reconfigure and modernize the campus' academic and research programs.

# 1 Introduction/ Project Background

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The University of California San Francisco (UCSF) is re-envisioning its historic Parnassus Heights campus, home to its professional schools, a hospital and outpatient complex, and a robust and world-renowned research community. Since 1898, the Parnassus Heights campus has been the foundation for UCSF's advancements in discovery, teaching and patient care. As UCSF devotes its attention to the Parnassus Heights campus, the aim is to re-imagine a campus that will continue to support the University's mission of advancing health locally and globally.



The re-examination of Parnassus Heights was sparked by two events: the need to replace the Moffitt Hospital to meet new seismic safety requirements established by the State of California and the need to reconfigure and modernize the campus' academic and research programs. At the same time, this re-envisioning provides an opportunity to look more comprehensively at the entire campus to evaluate whether improvements can be made to building design and functionality, public spaces and pedestrian connectivity, as well as vehicular traffic flow for patients, faculty, staff, visitors and nearby residents and businesses.

To inform the planning and design process, UCSF sought input from community members to identify potential improvements that would further the community's goals for the physical environment in the neighborhoods surrounding the Parnassus Heights campus. The University established a Community Working Group (CWG) comprising 24 members, representing neighborhood groups, city departments, public agencies, and other local stakeholders.

The meetings of the CWG involved presentations and discussions regarding the thematic topics of transportation/mobility, housing, open space, and the public realm. In addition to the CWG conversations, UCSF conducted an online neighborhood survey; a walking tour for CWG members and campus neighbors; and held two Community Open Houses, one in November 2018, and one in March 2019.

The Community Ideas summarized in this document reflect the feedback received from the community outreach activities. This document is a work product that will be submitted to the Parnassus Master Plan Steering Committee to be included in the final design guidelines for the Comprehensive Parnassus Heights Plan.









## 2 Community Engagement Process

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In July 2018, UCSF launched a survey to collect input on how the historic Parnassus Heights Campus can better serve community members, employees, patients and visitors. The survey solicited in-depth feedback on how community members currently use the campus and what changes community members would like to see. Between July and August 2018, a total of 1,139 surveys were collected. The survey was accessible in print and online formats to accommodate participant preferences. Available in English, Spanish and Chinese, the survey reached a broad range of local residents, employees, patients and visitors interested in the future of the Parnassus Campus.

The majority of respondents were residents of the neighborhoods surrounding the campus, both to the east and to the west. The typical survey respondent was a residential neighbor who has lived near the Parnassus Heights Campus for over 10 years and does not have children younger than 18 years of age living at home.

Staff of UCSF promoted the survey through multi-lingual postcards mailed to local residents and businesses near the campus. E-blasts to UCSF list-servs and other established channels were also used to publicize the survey.

## Community Working Group

The purpose of the UCSF Parnassus Campus Community Working Group (CWG) is to provide input into the Parnassus Campus's planning and development projects. The CWG met seven times throughout the campus re-envisioning process and offered feedback and comments on various aspects of the emerging campus concept plan.

The specific charge to this group was to:

- Advise UCSF staff on neighborhood issues and opportunities related to the Parnassus Campus re-envisioning process;
- Articulate key community planning and design principles to be considered by UCSF as it considers future projects;
- Identify recommended strategies and actions for addressing community concerns regarding the physical development of the Parnassus Campus;
- Provide input and feedback to UCSF staff for the purpose of helping the University be a good neighbor to the community at large; and
- Serve as a communication link between UCSF and the community.

## Neighborhood Open Houses



UCSF conducted two open houses during the CPHP process—on November 26, 2018, and on March 20, 2019. The purpose of these sessions was to provide the broader neighborhood community, partners and stakeholders an opportunity to learn about the re-envisioning process and to solicit feedback on emerging ideas on a range of topics that will guide the future development of the Parnassus Heights Campus, including mobility, public realm, campus design, connectivity to nature, programs and amenities, and housing.





# 3 Community Ideas

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The Community Ideas were developed through a formal engagement process with representatives from neighboring communities and city agencies, as well as engagement with the broader community through a survey of area residents and a series of open forums. The 24-member Community Working Group (CWG) was created to identify and capture the community's ideas for a re-envisioned Parnassus Heights campus.

The CWG was not charged with endorsing the final Comprehensive Parnassus Heights Plan (CPHP) that resulted from the University's planning process. Among the CWG members, some expressed support for elements of the CPHP, while others expressed opposition to certain components. The CWG was not asked to, and did not, issue or vote on an endorsement.

At the first meeting of the CWG, UCSF presented the following language regarding the 1976 Regents' resolution establishing a space ceiling at the Parnassus Heights campus: "The projected need for a larger Parnassus Heights hospital facility demands that we take a hard look as to how we can remain faithful to our commitment to abide by the space ceiling. As such we will explore every appropriate avenue to manage our growth and to partner with the community to ensure that the vision for the Parnassus Heights Campus

benefits both the neighborhood and UCSF." The space ceiling limits buildable space at Parnassus Heights to 3.55 million gross square feet, excluding housing. The CPHP contemplates exceeding the space ceiling. Although estimates are still being developed, the CPHP may contemplate exceeding the space ceiling by about 30%, or by approximately 1.15 million square feet.

As a next step, UCSF will continue to engage neighbors and city representatives to discuss the implications of the Preferred Alternative, with specific emphasis on the space ceiling and how best to manage UCSF's future growth to ensure that plans benefit both the neighborhood and UCSF. A number of the members of the CWG have expressed their desire to participate in such a process.



# 1.0 Housing

The community would like to see a range of on-campus housing options provided to students, staff and faculty. Offering additional single-person and family units will reduce transportation demand but will require additional resident-serving uses.

**1.1 Allow for a range of creative housing options** on campus that meet the needs of students, trainees, faculty, and staff. Examples include dormitory-style, smaller size units, adaptive housing, and modular construction. Consider amenities, such as markets, to serve housing tenants and neighbors.

**1.2 Allow for safe and convenient housing for patients and their families** through on-campus and off-campus opportunities. UCSF could continue to serve as an information and referral resource.

**1.3 Avoid displacing anyone by converting existing housing to**

**other uses.** Continue the UCSF practice of avoiding acquiring existing residential property for non-residential use. (note: The Regents' Resolution Regarding the Parnassus Heights Campus Site in the 2014 Long Range Development Plan prohibits UCSF from acquiring or leasing private residential property not only contiguous with the campus site boundaries, but anywhere within the surrounding area bounded by Golden Gate Park, Oak Street, Ninth Avenue, Clayton Street, and Clarendon Avenue.)

**1.4 Minimize impacts of additional housing on traffic and other infrastructure.** Campus housing

should be as pedestrian-friendly as possible; focus new housing on the campus. Any expansion at Aldea should consider traffic impacts.

**1.5 Work with the City to create additional affordable housing and below market rate housing.** Ensure on-going community engagement in future housing planning and development.

**1.6 Create as much housing for UCSF students, trainees, faculty, and workforce as possible.** Consider providing both single-person and family housing at Aldea, ensuring the creation of housing aligns with other points in this document.

## 2.0

## Campus Design

**Community members would like the campus to be more clearly articulated and better organized functionally. They see an opportunity to take greater advantage of the topography and views to, through and from the site.**

**2.1 Create a welcoming environment and a framework to the overall site design that helps make it comprehensible.** Make campus entryways clear and inviting. Take into consideration nearby city street connections, including the intersection of Stanyan and Parnassus.

**2.2 Take advantage of the topography of the site.** Open up view corridors and provide opportunities both within buildings and in the outdoor spaces to enjoy the views. Minimize obstructing views of Mount Sutro wherever possible.

**2.3 Provide open spaces and opportunities for social gatherings throughout the campus.** Provide opportunities for collaborative work.

**2.4 Mitigate the effects of weather and site topography.** Factor in weather and wind conditions when designing outdoor spaces. Create enclosed open spaces to provide more protection from the elements.

**2.5 Make the Parnassus Heights campus easy to navigate through clear and attractive signage and wayfinding methods.** Consider using directional quadrants as a frame for wayfinding—north, south, east and west. Include wayfinding elements along the edges of campus, not just along Parnassus Avenue. Consider developing wayfinding apps.

**2.6 Ensure cohesive and welcoming aesthetics throughout the campus.** Consider having an architectural theme, or a visual design language, that ties together the new construction

and existing buildings/landscape and contributes to a sense of place. Integrate glass with other materials. Keep San Francisco's history and art in mind. Ensure all public areas are welcoming and inviting.

**2.7 Contribute to the University of California's long-term sustainability goals.** The community has expressed its alignment with the UC system's ambitious sustainability goals. Designs should optimize solar access and incorporate green design throughout the campus.

**2.8 Establish the campus heart at Saunders Court.**

**2.9 Design buildings to be flexible, adaptable, and easy to maintain to increase their longevity.**

**2.10 Provide active uses along pedestrian routes on the ground level** as well as along circulation corridors on the upper floors of buildings, especially along the skybridge or tunnels.

**2.11 Ensure that the size and scale of buildings are compatible** with the surrounding neighborhood.

**2.12 Minimize the impact of campus lighting on the neighborhood.**

**2.13 When possible, try to avoid excavation of the hillside.**

# 3.0

## Connectivity with Nature

The community would like to see a greener campus, with more landscaping, trails and open spaces throughout. They especially support the "park-to-peak" connection from Golden Gate Park to Mount Sutro.

**3.1 Connect the campus to other open space opportunities in the city,** such as Golden Gate Park and Mount Sutro. Ensure clear path of travel and navigation for the "park-to-peak" experience. Ensure the service corridor enhances/supports this concept.

**3.2 Enhance access to open space both within the campus and to Mount Sutro.** Help visitors understand and navigate the connections—for example, with a map of campus trails and paths. Incorporate smaller public spaces, such as parklets, niches and

alcoves throughout the campus. Consider a park on the top floor of the parking structure, like the one on top of the Transbay Terminal.

**3.3 Enhance landscaping to soften edges along streets and buildings.**

**3.4 Consider thematic landscaping,** such as Mediterranean and medicinal/therapeutic plants.

**3.5 Encourage ecological and biological diversity,** including the use of native plants.

**3.6 Enhance fire safety.**

## 4.0

## Multi-Modal Mobility

The community would like Parnassus Heights to be a "pedestrian-first" campus, with vehicular traffic dispersed between Parnassus Avenue and Irving Street.

**4.1 Manage vehicular trips to and from the Parnassus Heights campus** using enhanced Transportation Demand Management strategies.

**4.2 Be welcoming and accessible for all modes**—transit, bicycle, pedestrians and autos. Consider “corrals” for personal mobility devices, such as electric bikes and scooters. Add bike lockers for visitors. Offer additional EV-charging stations. Consolidate shuttle and transit stops to reduce the overall footprint; enhance overall system wayfinding; consider locating within a building to provide shelter from the weather; provide user-friendly real time transit information; provide signage to direct traffic in and around campus. Ensure access for emergency vehicles.

**4.3 Implement traffic management and calming measures to maximize pedestrian safety on alignment with the City's Vision Zero policy.** Consider lighted crosswalks, especially along Irving Street. Discourage jaywalking through streetscape improvements.

**4.4 Create a “pedestrian first” campus.** Ensure easy pedestrian mobility through the site using stairs, escalators, elevators, tunnels and skyways, with consideration for those with mobility challenges. Consider an elevated pedestrian crossing (bridge) and/or an underground tunnel across Parnassus Avenue to improve pedestrian safety.

**4.5 Keep current with new technology to enhance transportation options;** coordinate with the City.

**4.6 Disperse vehicular traffic around campus streets.** Possible examples include directing some traffic to Irving Street, creating an additional drop-off point on Hillway and Carl, and directing patient arrivals to Medical Center Way. Encourage staff/faculty to reduce or minimize vehicle trips. Ensure that vehicle traffic does not negatively impact public transit.

**4.7 Create drop-off zones for Transportation Network Companies (TNCs)** to improve pedestrian safety and reduce conflicts between drop-offs/pickups, bicyclists, transit, and through traffic.

**4.8 Create a service corridor to focus commercial deliveries and other operational connections.** Ensure there are north-south pedestrian connections. Provide weather protection for people using the service corridor. Offer a waiting area for trucks; discourage idling in the service corridor.



# 5.0 Public Realm

**Community members stated their desire to create a network of public spaces on campus with improved streetscapes and neighborhood connections.**

**5.1 Provide for an activated campus frontage along Irving Street** that is welcoming and accessible to all modes, especially transit.

**5.2 Improve the streetscape experience of Parnassus Avenue.**

**5.3 Strengthen physical connections to the neighborhood and Golden Gate Park attractions.** Build pathways and connections to bring UCSF people into the neighborhood, especially to patronize local businesses.

**5.4 Place exhibits, such as interpretive signage, in key locations** to help communicate to visitors the history of the Parnassus Heights campus and the discoveries made there. Provide opportunities for visitors to learn about and take pride in the accomplishments of UCSF.

**5.5 Ensure adequate security for all open areas.**

6.0

## Programs and Amenities that Benefit the Neighborhood

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UCSF will continue to provide activities and facilities open to the broader community that facilitate increased integration with the surrounding neighborhood and with the City at large.

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**6.1** Consider providing space on campus to house local non-profit organizations or community health and wellness services.

**6.2** Create program and event spaces to bring people to campus and to encourage evening and weekend activity.

**6.3** Enhance retail, food and recreation opportunities for all campus employees, residents and visitors, both on and off campus.



UCSF will initiate a community engagement effort with the goal of understanding, from the perspective of neighbors and other stakeholders, the potential effects of the Comprehensive Parnassus Heights Plan.



## 4 Next Steps

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Following up on this re-envisioning process, UCSF will initiate a community engagement effort with the goal of understanding, from the perspective of neighbors and other stakeholders, the potential effects of the Comprehensive Parnassus Heights Plan on the neighborhoods that surround the campus and identify ways to offset those effects. This process will occur in tandem with, and serve to inform the preparation of, the Environmental Impact Report on the CPHP. The EIR effort will analyze potential impacts of the CPHP relative to the California Environmental Quality Act (CEQA). UCSF expects to bring the Environmental Impact Report, along with a potential amendment to its 2014 Long Range Development Plan regarding the revitalization and growth of the Parnassus Heights campus, to the September 2020 meeting of the University of California Board of Regents for consideration for approval.



## COMMUNITY IDEAS C

# **ADDENDUM**

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**GROWING PATIENT DEMAND**

**UPDATES TO THE CPHP**

**INITIAL PHASE PROJECTS**

**EXPANDING PATIENT ACCESS**

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# ADDENDUM

## A. GROWING PATIENT DEMAND

The Comprehensive Parnassus Heights Plan (CPHP) – a long-term vision to bolster UCSF’s public mission in research, education, and care delivery at its oldest campus – was published in October 2019 after an extensive two-year process involving hundreds of stakeholders in meetings, workshops and surveys.

The CPHP is a blueprint for modernizing UCSF’s Parnassus Heights campus over the next several decades. Many of the campus’s outdated buildings can no longer support the research, training and health care delivery needs of 21st century science and medicine.

UCSF will update the Parnassus Heights campus over time. The Initial Phase (also called the Initial Sequence in the original October 2109 publication) will include building an architecturally excellent and seismically sound hospital to replace the campus’ 65-year-old hospital that will be out of seismic compliance in 2030. The CPHP builds upon UCSF’s 2014 Long Range Development Plan (LRDP), a framework for guiding physical planning and land-use decisions at all of its locations.

The primary purpose of the CPHP is to provide master plan-level guidance for the overall physical environment at the Parnassus Heights campus. It focuses on the configuration of buildings, the creation and expansion of publicly accessible open space areas, and the consideration of different types of uses within buildings, including those for inpatient and outpatient care, research, instruction, housing, recreation and parking.

## B. UPDATES TO THE CPHP

This addendum provides an update to the CPHP, noting the key changes that have resulted since its publication in October 2019. The plans were updated after UCSF conducted further in-depth analysis to define its anticipated space needs for decades to come.

However, the proposed increase to the Parnassus Heights space ceiling limit – 1.5 million gross square feet (gsf), as cited in the CPHP – remains unchanged.

The next step in the CPHP process is the release of a Draft Environmental Impact Report (DEIR), which analyzes the plan’s potential environmental impacts. The DEIR, to be published in July 2020, will reflect the changes in this Addendum, noting that individual buildings have not yet been designed.

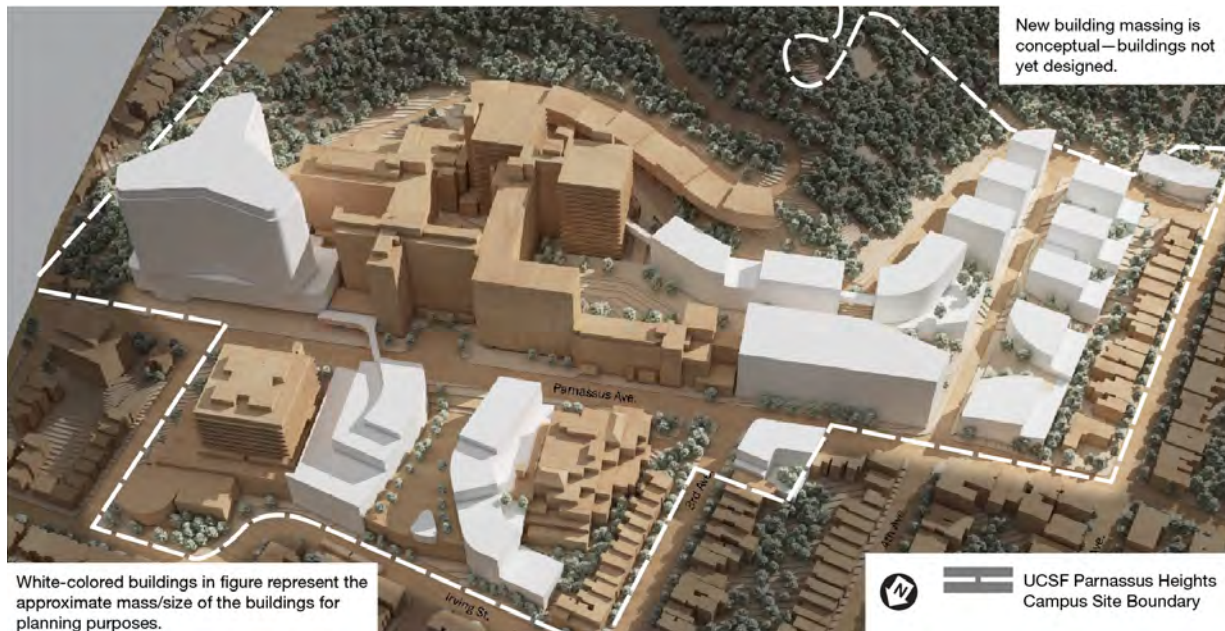
The two key changes from the CPHP, which this Addendum highlights, are:

- an increase in massing of the proposed new hospital and a decrease in massing of other buildings, which is depicted in Figure 1 below and replaces the previous figure found on pages 6-7 in the CPHP; and
- a platform that extends from the new hospital over Medical Center Way into the Mount Sutro Open Space Reserve, which is depicted in Figure 2 below and replaces the illustrative plan on pages 8-9 of the CPHP document.

## Initial Phase Projects

The CPHP proposes four initial phase projects to be completed by 2030. They include:

- enhancing the Irving Street arrival with improvements such as more attractive exterior facades, interior design of the street-level lobby and easier wayfinding signage;
- constructing a new hospital at UCSF Helen Diller Medical Center at Parnassus Heights to provide greater capacity to meet the health care needs of a growing and aging population, to replace inpatient beds in the seismically deficient Moffitt Hospital, and to meet the state seismic safety law by 2030;
- replacing the century-old UC Hall with a new Research and Academic Building to provide state-of-the-art research, academic, and education space; and
- expanding the number of on-campus housing units at Aldea Housing to ease housing pressures in the city by providing below-market rental rates to UCSF students and faculty.



1. Perspective model.



# ADDENDUM

## Expanding Patient Access

At the start of the CPHP process in 2018, UCSF underestimated the capacity requirements the new hospital would need in order to keep pace with the growing demands of the San Francisco Bay Area. The initial proposal in the LRDP called for building a new addition, connected to Long Hospital and built on the site of the Langley Porter Psychiatric Institute. The new hospital will replace the seismically deficient inpatient Moffitt Hospital to meet requirements of the state and University of California.

UCSF is not subject to the City's height limit but does attempt to comply with the established height zones, when possible. As noted in the LRDP, UCSF expected that the new hospital would need to exceed the city's 65-foot height limit for that portion of the site to meet program and operational requirements for modern health care facilities. In parallel with the CPHP process, which provides guidelines for the campus as a whole, UCSF also began developing plans for an architecturally outstanding, seismically safe and environmentally sustainable hospital. This master planning process was informed by additional analysis of future inpatient and outpatient volumes, health care demand forecasts, and in-



2. Illustrative plan.

depth studies of the operational and functional needs of a hospital that would be able to serve the community for decades to come.

Further analysis and assessments have indicated that a larger hospital will be required to ensure that UCSF can continue to meet projected capacity demands of an increasingly growing and aging population in the San Francisco Bay Area. Expanding hospital capacity is important to be able to serve more patients referred to UCSF by community hospitals and health care providers which cannot themselves provide highly complex care such as liver and kidney transplants, chemotherapy for acute leukemia and complex spinal fusion.

In addition, as the needs of modern health care delivery have evolved, spatial requirements for clinical spaces have also grown and shifted to accommodate increases in equipment sizes, associated code requirements, and trends for improved work and teaching hospital environments.

In light of these growth projections, the DEIR cites plans to increase the overall hospital capacity by 42 percent. This would help UCSF meet patient demand based on a projected increase in the Bay Area population of more than 750,000 people over the next decade. A large portion of this growing patient population will be individuals of Medicare age whose complex conditions often require longer hospital stays and more hospital beds.

Constructing a larger hospital will help UCSF address its ongoing challenges. Among them:

- In each of the past three years, between 2,200 and 3,000 patients—on average per year—referred by other hospitals and health care providers to UCSF for its complex care have been denied admission due to lack of hospital beds.
- On average, more than five patients per night spend the night in the Emergency Department (ED) while waiting for a hospital bed, contributing to ED overcrowding, lack of privacy, delayed access to specialized care, and prolonged wait times for patients and their families.
- More than two patients per weekday must spend the night in the PACU (post anesthesia recovery unit), following surgery, creating back-ups, delays, and cancellations for other scheduled surgeries.
- On average, four times each week the hospital goes on “high-capacity alert” as a result of too many patients in the ED, not enough critical care beds, and/or not enough acute care beds. This shortage causes delays of all clinically appropriate movement through the hospital.
- Shared hospital rooms do not provide the privacy or space patients and families need.

All of these scenarios potentially impact UCSF's ability to fulfill its mission to provide high-quality care to all who seek it. The combination of chronic capacity issues and the clear trend toward even higher patient demand volume creates a sense of urgency to build a UCSF hospital that can better accommodate the care needs of the San Francisco Bay Area and strengthen the region's health care system.

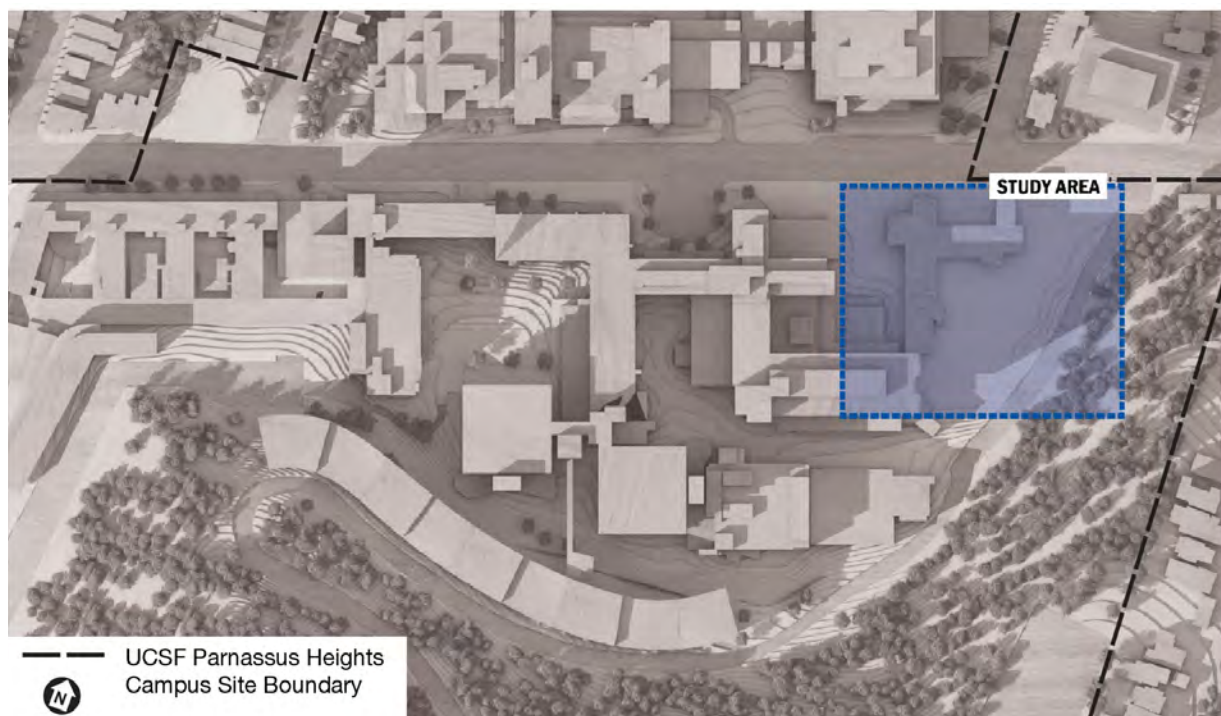
## ADDENDUM

The 1.5 million gsf increase to the space ceiling proposed in the CPHP accommodates this additional clinical space as well as the growth expected in health sciences research and graduate-level education. Since the October 2019 CPHP plan was published, adjustments have been made to reduce space allocations in other areas to accommodate the larger hospital building and remain within the proposed increase of 1.5 million gsf.

For purposes of the 2019 CPHP, the planning team made assumptions about the massing of the new hospital building, in coordination with UCSF Health, and these were shown in three-dimensional models along with conceptual massing for all potential sites. It was expected and explained throughout the planning and community

engagement process, however, that the actual massing of the new hospital building would not be known until early 2020.

As currently proposed, the new hospital would encompass approximately 955,000 gsf, 16 stories (up to 294 feet in height), and have the capacity for approximately 384 inpatient beds (Figure 1). The proposed new hospital and associated widening of Medical Center Way adjacent to the new hospital (which must be done for fire safety purposes), may result in a potential encroachment on the Mount Sutro Open Space Reserve (Figure 2). This encroachment was also not foreseen in the CPHP, but results from a desire to have floor plates be of a sufficient size to accommodate equipment and to limit the overall height of the building.



3. Study area for the new hospital building.



To compensate for this encroachment on the Reserve by the new hospital, UCSF has agreed to release an equivalent or greater acreage of other land within the campus site to the Reserve so that there would be no overall decrease in the size of the Reserve. Figure 3 shows the revised study area for the new hospital building.

Further details on the design details and refinements of this concept will continue to be made available and shared with stakeholders following the next phase of the hospital design.

Figure 4 below updates the CPHP on page 113 to indicate a different site boundary area for the new hospital building.



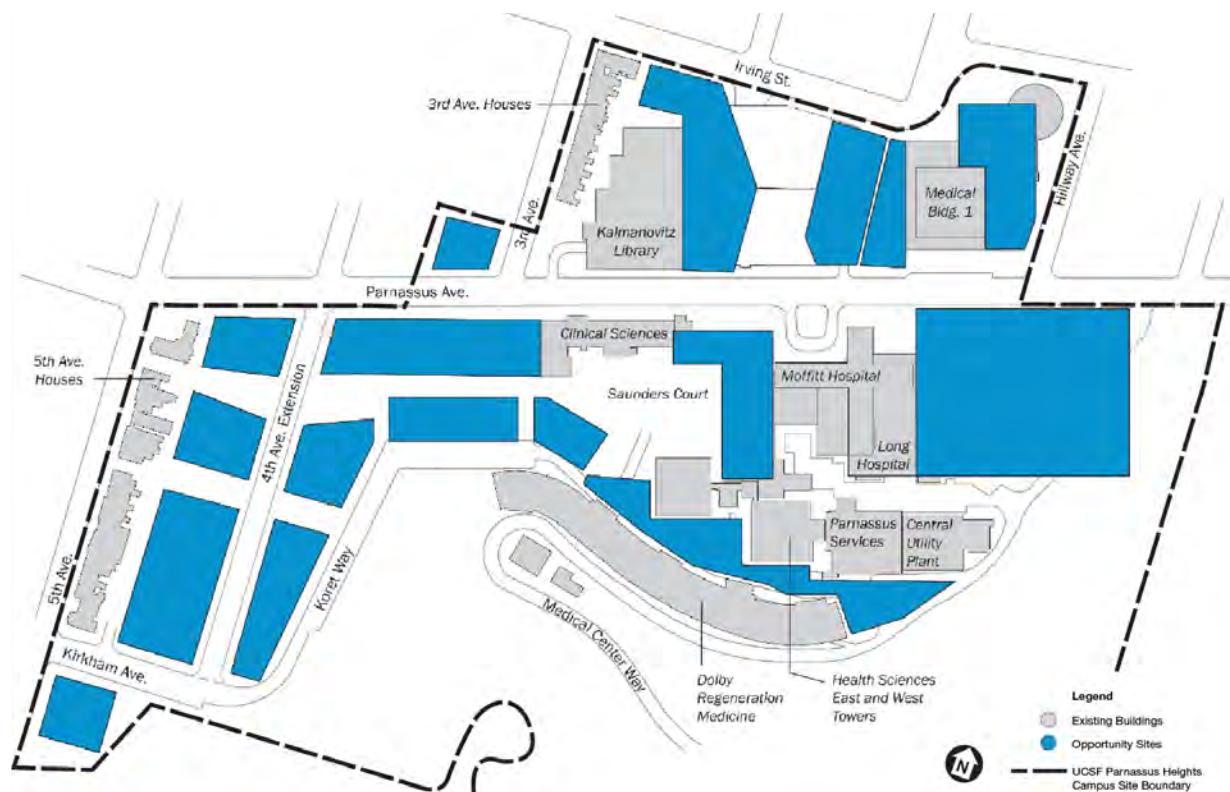
4. Initial project sequence and proposed locations at Parnassus Heights.



## ADDENDUM

The three other initial phase projects are undergoing validation studies to provide additional feasibility analysis and to delve into specific technical details about each of the projects. This additional work will inform decision-making on how to proceed to the next phases of design and implementation.

The revisions described in this Addendum have also required updates to one other figure from the October 2019 CPHP document. The plan for opportunity sites (sites that could be redeveloped with new UCSF uses), shown on page 84 in the CPHP, has been updated to show the revised site boundary for the new hospital site (Figure 5).



5. Opportunity sites for new development at Parnassus Heights.





For illustrative purposes only; image does not represent architectural design.







