

CoLabs initiative



CRL SUBGROUP COMMITTEE December 2017 Charge from the PH Master Plan Steering Committee

- 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, *i.e.* sample processing, high-dimensional imaging, multi-"omic" analyses, and others
- 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

TIPPI MACKENZIE, MD

Surgery



ELIZABETH SINCLAIR, PHD Research Resource Program

MATTHEW SPITZER, PHD

Head and Neck Surgery

Otolaryngology-



HUGH COTTER, AIA Oculus Architects. Inc.

KARIN WONG

Space Strategy



ERIC CHOW, PHD **Biochemistry & Biophysics**



LINDSEY CRISWELL, MD, MPH Medicine

DAVID ERLE, MD

Medicine





ALEX MARSON, MD, PHD Microbiology and Immunology

MICHAEL MCMANUS, PHD

Diabetes Center



SAUL VILLEDA, PHD Anatomy



KATHERINE YANG. PHARMD, MPH **Clinical Pharmacy**



- 5 committee meetings
- 7 task forces
- Website, email announcements
- Existing facility inventory
- Site visits
- Endorsement by PH Master Plan Steering Committee





• 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

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

New concept of embedded researchers



$\begin{array}{c} \text{CRL SUBGROUP COMMITTEE} \\ \textbf{Design Concept} \end{array}$



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.



CoLabs at Parnassus





CoLabs CoProjects

CoProject Example

Pipeline Makes New Science Happen: CLINIC TO LAB AND BACK





COLABS AT PARNASSUS Established Entities to Be Incorporated Into CoLabs



Parnassus Flow Cytometry Core >100 Pl's, ~\$1.6M/year (recharge)



Biological Imaging Development Center >50 Pl's, ~\$750K/year (subscription)



Functional Genomics Core Facility >50 Pl's, ~\$1.1M/year (recharge, grants)





COLABS AT PARNASSUS Net Impact on Researchers

Improve services for existing users of Parnassus cores

- PFCC (Flow Cytometry) >100 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

Unlock access to powerful emerging 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 **Financing**

- Start-up costs
 - Construction, new personnel and equipment
 - Funds identified through campus, philanthropy, EVCP strategic opportunities
- Operating costs
 - ~\$10M annual operating budget
 - Recharge, subscription, & grants will cover most costs
 - Institutional support (~\$850K/year) to support innovation and administration
 - EVCP strategic funds will cover institutional support for first 5 years



colabs at parnassus Current status

Phase 1 will open in temporary space on MSB-8 in 2019

- Start Data Science CoLab, support first CoProjects
- ~4500 sf (plus adjacent existing flow core space)

Space planning for phase 2

- Selected HDR as design firm
- 30+ participants in 3 workshops spanning 7 full days in November and December 2018
- Key goals
 - High impact/visibility, welcoming, promote collaboration, flexibility, efficiency
- Finalizing space program for 23K asf (2 tower floors)
- Includes wet lab, equipment rooms, tissue culture and other lab support, desktop research, teaching lab, conference/huddle, interaction space, admin, lactation room
- Anticipated head count: 79
- Design phase will follow (images at right are test fits and not final designs)

