Appendix A June 8, 2017

UNIVERSITY OF CALIFORNIA, RIVERSIDE

May 18 & May 19

# MULTIDISCIPLINARY RESEARCH BUILDING 1

# TOWN HALL MEETINGS \*

\* revised as of June 8, 2017, to reflect updates in schedule and other details since meetings

### Agenda Highlights & Introductions



### **Task Force Introductions**

Chair: Cynthia Larive - Provost

### Task Force Committee Members

Deborah Deas – Dean, SOM

Milagros Peña – Dean CHASS

Kathryn Uhrich Dean, CNAS

Sharon Walker – Interim Dean, BCOE

Martin Garcia Castro – Assoc. Professor, Biomedical Sciences

Mike Pazzani – VC Research & Economic Development (RED)

- Jeff Kaplan Assoc. VC Capital Asset Strategies
- Barbara Lloyd Office of Vice Chancellor for Planning & Budget

# **Guiding Principles**

1. MRB1 will be organized by multidisciplinary and collaborative research themes.

2. MRB1 assignments will align known core facilities, and additional core facilities will align with the needs of researchers assigned to MRB1.

3. Periodic space review will be conducted to optimize utilization of space in the building.

4. MRB1 is an opportunity to address existing space capacity challenges.

5. The assignment process will be transparent and objective.

### **MRB1** Objectives



The mission of MRB1 will be to support multidisciplinary research that is at the intersection of life/chemical sciences, medicine, engineering and computation.

### MRB1 Site Plan



### MRB1 Project Data

### **PROJECT PROGRAM**

| Additional Shell Space                   | 15,210 ASF                 |
|--|----------------------------|
| TOTAL                                    | 111,910 ASF<br>179,100 GSF |
| Conference, Collaboration, Bldg Support: | 25,341 ASF                 |
| Special Purpose Labs:                    | 10,267 ASF                 |
| Core Laboratories:                       | 5,280 ASF                  |
| Laboratories, Support, Research Offices: | 71,021 ASF                 |

### MRB1 Aberdeen View



# MRB1 Arroyo Plaza



### MRB1 1<sup>st</sup> Level Atrium



### MRB1 4<sup>th</sup> Level Atrium



### MRB1 Write-up and Open Laboratory



### Wet 1 Lab Quantity: 20

### Wet 1: Low Fume Hood Density (BSL2)

**FOCUS:** Primary focus on benchwork, with samples prepared within various support spaces, and occasional fume hood use.



Example open lab with life sciences emphasis.

### Wet 2 Lab Quantity: 09

### Wet 2: Medium Fume Hood Density (BSL2)

**FOCUS:** Imaging and molecular analysis of samples prepared within tissue culture rooms and in fume hoods.



In Type Wet Lab 2, chemical fume hoods typically are located away from lab exits as a best practice.

### Flex 1 Lab Quantity: 09

### **Flex 1: Instrument Intensive**

**FOCUS:** equal focus on wet bench work and dry instrumentation and equipment of various sizes, imaging, and specialized animal procedures; Flex 1 labs are designed for periodic re-configuration of benches and equipment with a robust overhead utility system.



Flex 1 labs are designed for periodic re-configuration of benches and equipment with a robust overhead utility system, to accommodate rapid changes in research.

### Flex 2 Lab Quantity: 08

### **Flex 2: Procedure Intensive**

**FOCUS:** imaging, instrumentation and animal procedures within environmentally controlled rooms, supported by preparation of samples at the bench.



Vibration stabilized optics tables are a common component of instrumentation focused labs that would be found in the Flex 2 type.

#### Dry Lab/Computation Quantity: 10

### **Dry 1: Computation Intensive**

**FOCUS:** computation, modeling, visualization and manipulation of large data sets.



An example of an open computation space.

#### **Distributed Centralized Core Laboratory**

- Around 1,500 square feet, located on the Ground Level
- Purpose-built for specific instruments or processes that have unique environmental or spatial characteristics.
- Potential assignment: MRI Imaging

#### **Distributed Core Laboratories**

- Each distributed core is around 660 square feet, 1 per floor
- Five highly serviced, highly flexible "garages" that can be quickly reconfigured around specific instruments or procedures with minimal effort or expense
- Ground Level distributed core has been partially assigned
- Floors 1-4 Distributed Cores are unassigned and will be determined based on the nature of surrounding research needs

#### **Potential Core Labs for MRB1**

- Imaging:
  - Micro CT
  - multi-photon
  - Electrophysiology
  - CT/PET/fMRI
  - TEM/SEM
  - NMR (small field)
- Optics/laser
- Genomics
- Proteomics/Mass spectrometry
- Histology
- FlowCytometry
- Bioengineering- devices
- Bioengineering-tissue
- 3D printing







ne vs. 30 minutes post-injection











# **MRB1** Special Purpose

### **SPECIAL PURPOSE - IACUC**

Size: Approximately 10,800 ASF

Shell Space: 5,500 SF of expansion space

**Additional Information:** 

Contact iacuc@ucr.edu



### MRB1 Example Floorplan



# MRB1 Example Floorplan - Partial



N LEVEL 3, Enlarged: North Lab Ballroom

# MRB1 Example Floorplan - Partial



#### LEVEL 3, Enlarged: South Lab Ballroom

# MRB1 Scholarly Activity Areas



### **SCIENTIFIC GALLERY**

### **SEMINAR ROOM**

# MRB1 Scholarly Activity Areas





### SCHOLARLY ACTIVITY AREA



## Schedule



### Requirements

### 1. Description of Proposed Research Theme

2. Disciplines Involved

3. Equipment & Infrastructure Needed

4. Team Size & Organizational Structure

5. Existing & Proposed Research (Current + Projected Next 5 Years)

### **Selection Criteria**



### **Expression of Interest Timeline**

| 2017                         |             | 2018                                  |  |    |    | 2019                                       |    |
|------------------------------|-------------|---------------------------------------|--|----|----|--|----|
| RFEI<br>Process<br>May - Jun |             |                                       |  |    |    |  |    |
|                              | RFEI Review |                                       |  |    |    |  |    |
|                              | Jul - Sep   |                                       |  |    |    |  |    |
|                              |             | tifications<br>eptember               |  |    |    |  |    |
|                              |             | MRB1 Fit Out<br>Planning<br>Oct - Dec |  |    |    |  |    |
|                              |             |                                       |  |    |    |  |    |
|                              |             |                                       | Lab Fit Out Construction<br>Jan – Aug 2018 |    |    |  |    |
|                              |             |                                       |  |    |    |  |    |
|                              |             |                                       |  |    |    | Load-In / Move-In<br>(Phased)<br>Aug - Dec |    |
| Q4                           | Q1          | Q2                                    | Q3   | Q4 | Q1 | Q2   | Q3 |

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### **Questions & Answers**



### Post – Meeting Reception & Rendering Review

