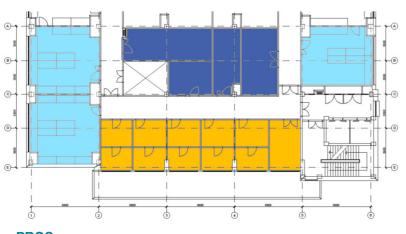
## 2 Brief Development

# 2.4 Precedent Analysis - Existing Facilities

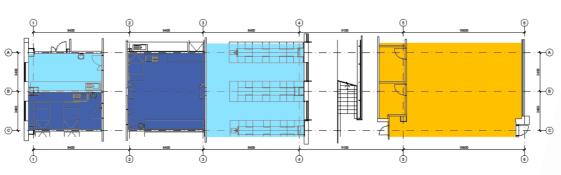
## 2.4.4 Working Group Clusters

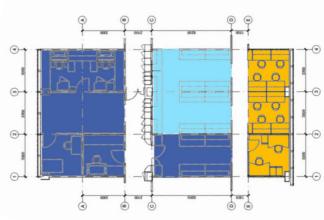


**Primary laboratory** 



Write-up, meeting, quiet hub, office





#### **PROS**

- Primary labs located to perimeter of the building with daylight
- Lab flexibility; divide to accommodate 2 bays each, or open up to allow 4 bays each
- Lab intimacy; provide work spaces for 10 20 people (excl. equipment)
- Local shared equipment rooms located deep in plan
- PI offices to south and north elevations with daylight
- 'Race-track' corridor around central secondary spaces ensures accessibility to all; promotes increased interaction between scientists travelling between lab and write-up

#### CONS

- No large interactive write-up space
- Small 2/3 person write-up rooms located adjacent Pls
- Insular plan with groups assigned to their own lab and writeup
- Little scope for interaction across groups
- Little natural light for the researchers
- Lack of large shared storage space presents issues
- Less feasibility if research group sizes change over time

## **PROS**

- Smaller individual single bay labs for specialist groups located centrally and to building perimeter with daylight
- Central secondary spaces accessible from both sides by all
- PI offices and large open lab are connected visually through large windows
- Open-plan office and labs provide ample possibility for increased interaction
- Labs present more working space than the CRB with 3.4m wide bays instead of the standard 3.3m working bay.
- Range of large, medium and small individual spaces for a variety of uses
- Higher flexibility for research group numbers to change

### CONS

- Primary shared labs split into large 8+ bay central to building and adjacent the atrium
- Labs separated from write-up and PI offices by a large linear atrium as well as feeling further removed due to the requirement of access control
- Atrium and internal rooms lack natural light
- Lab presents concerns over separation of group spaces and facilities

#### **PROS**

secondary laboratory

- Each primary lab has 40 bench-workers with adjacent write-up spaces, PI offices and local equipment rooms
- Benches are double length (4.0lm notionally for two people), in 3.3m wide bays
- Each 'wing' module splits into a series of clusters consisting of a double bay of primary laboratory for 8 researchers plus a single instrument or primary laboratory bay
- The plan is semi-open, with walls separating pairs of bays from adjacent single-bay equipment areas
- Write-up desks are separated from benches by a clean corridor, and are intermingled with PI offices
- Equipment rooms are separated from the laboratories by a main corridor, ensuring accessibility to all and promoting interactions between scientists however this is due to the fact that all equipment in LMB is shared

### CONS

- PI offices break up linear write-up space reducing interaction across groups
- Insular plan with groups assigned to their own lab and write-up
- Scientists at end of wing have to travel longer distances to central technology hubs
- Higher amount of circulation space

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# 2 Brief Development

# 2.5 Space Classifications

The table below outlines the space classifications which have been used to set out specific space requirements for the different activities and functions of the brief.



## **Primary Laboratories**

Primary research laboratory spaces, including communal equipment and bench space within



## **Shared Secondary Labs**

Laboratory support spaces which are shared by multiple user groups within the building. Examples:

- Tissue culture
- Constant temperature / freezer rooms
- Prep. rooms
- Glassware / autoclave
- Microscopy suites



## **Direct Secondary Labs**

Support spaces which are used only by a specific user group, either because of ownership or because they contain highly specialised kit. These spaces usually require adjacency to the relevant primary lab.



#### **Tertiary Spaces**

Tertiary spaces support the laboratory research but are not necessarily part of the laboratory curtilage.

- Archives
- Laboratory storage
- Workshops



### Cellular Offices

Single person offices, used primarily by:

- Heads of Departments
- Primary Investigators (PI)
- Managers



## **Shared Offices**

Offices occupied by 2 or more people, including:

- Write up spaces
- Computational Research
- Administration and Technical Staff



#### **Meeting Spaces**

Fully enclosed meeting spaces, including:

- Meeting rooms
- Board Rooms
- Enclosed break out



#### **Collaboration Areas**

Open areas used for collaborative functions:

- Open break out areas
- Group work
- Collaboration spaces



#### **Social Areas**

Where people might socialise:

- Cafe's (including kitchens)
- Tea points
- Staff rooms



## Specialist Teaching

A space which can only be used to teach a specific subject, examples include:

- Immersive digital environments
- Simulation rooms (medical training)
- Teaching Laboratories (including support spaces)



## **General Teaching**

Space which can be used to teach a range of subjects:

- Lecture theatre
- Seminar room



### Specialist / Other

Non of the above - please avoid putting things is this category where possible. Examples:

- Greenhouses
- Shell and core areas



Lifts, lobbies stairs and corridors. As a rule of thumb if a room could not function without the circulation space adjacent

- then the circulation should be included in the space type category - not circulation



Spaces used to support the function of the building:

- WCs
- General stores
- Delivery areas
- Reception

- Post room



### **Plant**

- Plant areas (including roof top plant - to allow comparison across projects) separate line outside of GIA
- Server rooms
- Comms, rooms
- Risers



## Engineering

Spaces used to support the function of the building:

- Internal walls
- Internal structure
- Interstitial zones (please make a note of these in the template but exclude them from GIA and total plant area)

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