Architectural Design
BMJ Architects
Key Concepts
A New Identity
for the College of Life Sciences
Creating a Unique Facade
“Percent for Public Art”

“Minimum 1% of the estimated development cost shall be utilised for Public Art within that development...to enhance and humanise the public realm in private developments and in the City”

• Providing high-quality art in publicly accessible spaces
• Creating exciting, harmonious and people friendly spaces, streets and developments
• Continuing to add to the City’s cultural wealth and heritage

‘Catalyst’ by Dalziel + Scullion
Design Development  Artwork Integral to the Building
3d Visualisation

The Scales of Life Panels
Modern Materials
Artist’s Maquettes
Fabrication
Final Panels
Space-planning Grid
Introvert / Extrovert
Transparent / Solid
Researchers’ Office
Increased interaction between research groups

Creating spaces for collaboration
Atrium Concept Sketches
Design Concepts
Specific to Research + Users
Level 1
Robotics Lab
High Throughput Robotics Lab

A summary of the briefed requirements for the Open Plan Lab area are as follows:

- Fully flexible lab for robotics experiments
- Mobile tables and servicing access
- Visible to Atrium for ‘public’ engagement
- Access for large pieces of equipment from external drop off

- Views into Atrium ‘Street’
- 9 no. fixed workstations
- Mobile tables arranged into ‘U’-shaped groups
- Fixed benching with sinks along rear wall
- Walliner Service Wing
- Vision panels onto inner rooms

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Level 2
Open Plan Computational Lab
Computational Lab

A summary of the broad requirements for the Computational Lab are as follows:

**Activities:**
- Data based research
- Laboratory Discussion

**Requirements:**
- Open plan laboratory to promote increased collaboration between groups.
- High quality environment conducive to statistically based research – quiet, focused working.
- 70 no. workstations arranged into grouped desks for 4 different research groups:
  - 24 no. Bio-informatics
  - 6 no. Bio-Physics
  - 24 no. Mathematics
  - 15 no. Software Development
- Space provision of 5m² per person.
- 4-6 person desk group arrangements.
- Visual screening between facing desks.
- Visual screening from circulation routes.
- Screens and room dividers to delineate groups into smaller numbers whilst maintaining open plan office e.g. glass screens, low storage, etc.
- Local storage (per user) - pedestal & shelves.
- Blackboards/ whiteboards and poster areas.
- Central storage: Books, coats, etc.
- Good acoustics: Reduce sound transmission/ Quiet ambient noise level.
- Natural daylight and views out desirable.
- Natural ventilation desirable.
- Quiet air conditioning (where applicable).
- Direct access to Collaboration Rooms for group discussions and teleconferencing.
- Access to Staff Seminar Room for group wide discussions and meetings.
- Access to tea/coffee-making facilities.

Collaboration Rooms
Located at ends of Lab

Access to FIT Offices and Seminar Room

Operable windows and views out to Old Hawkhill

Groups of 4 workstations
Fabric central screens
Full height glass and screens

Full height glass screen room divider

Collaboration Rooms
Located at ends of Lab

Views into Atrium

Computational Lab Overview

Office screens and suspended ceiling lights
Office and Computational Labs

BMJ Architects and Ruly + Kerwood developed the following illustrated services strategy for Level 2 (applicable to all office areas on two floors), in conjunction with the ceiling layouts (Ref. Appendix A), to provide the following:

- Key accessible service routes over circulation areas
- Unobtrusive services under raised conditioned ceilings and provide greater floor to ceiling height for increased natural daylight penetration into central areas.
- Suspended ceilings over desks to incorporate lighting (onto work surface) and acoustic panels (sound absorbant) between workstations. Suspended ceilings in north facing P1 Offices allow service routed for power/data to the north facade, where service drops down the column and wall panels provide future flexibility for open plan or workcell areas (as per Level 1).
- Chilled beams (cooling) located over seating areas (over people).

Exposed RC slab areas for chilled beam
Power/Data routes in areas of suspended ceiling with man lighting beam over workstations
Power/Data drop down internally behind external cladding panels and into desks
Operable window over workstations
Radiators concealed by external cladding panels (insulated sandwich panels)
Full height glazing panel (at seating areas)

Diagram 1: Level 1 Computational Chemistry Lab
Section Diagram illustrating ceiling and service drops

Legend:
- Main service run along service routes
- Connections into/foot box of desk desks
- Lighting over desk/data drop down through/above P1 Offices
- Ventilation core fans
Level Mezz
Mass Spectrometry Lab
Level 3
Open Plan Wet Lab