





## The Fleming Centre, St Mary's Hospital Science on Show

The Fleming Centre is a unique project which is distinguished by the engagement between public, patients, healthcare and science, and the ambition to break down silos between different specialisms and engage them with our broader society. This is a project that provides the opportunity to put science and research on display, engaging people with the key issues the Fleming Initiative will address.

Our design seeks to draw the public directly into the heart of the Fleming Discovery Centre where they can see real-life scientific activities being undertaken in conjunction with curated exhibition displays, providing stimulating, visual and physical engagement. The ground floor is envisaged as an extension of the public realm: welcoming, open and accessible.

Our scheme retains, adapts and reuses the Bays. We see them as a vital link to the past, one of the few remaining elements of Paddington's canal-side history. By integrating them into the design we make a very clear statement about building on the past and looking to the future, much as the Fleming Centre will build on the work of Alexander Fleming and take it into the 21st century.





Working model photograph





Fleming Centre foyer leading to a fluid and flexible ground floor

Working model photograph

## Heritage: A dialogue between science and history

- Historic Bays retained and adapted, whilst gaining a new identity as the Fleming Centre.
- New elements inserted within the Bays shell form a dialogue between new and old, and provides public views into the cutting edge laboratories.
- Historic features from the Bays celebrated.
- Double height spaces provide opportunities to experience the full volume of the historic building.
- Reflects industrial heritage of the site with refined and articulate profiled metal facades.
- Copper facades and perforated patterns provide a visual reference to scientific processes from Fleming's groundbreaking research.

## Sustainability: An ambitious and holistic strategy

- Existing building retained and materials reused, saving at least 70 tonnes CO<sub>2</sub>e.
- No basement, saving approx. 65 tonnes  $CO_2e$ .
- Low carbon structure and building fabric.
- Designed for longevity, and circular economy.
  - Bioclimatic and passive design strategies, minimising energy use in operation.
  - High performance facade with recycled copper.
  - Highly efficient, low-carbon building services.
  - Renewable energy from a Water Source Heat
    Pump using canal water.



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Materials explore the industrial and scientific heritage of the site: Perforated metal, timber and the retained historic brickwork





The design will explore ways in which Fleming's ground-breaking research can be reflected in materials and details

- Roof mounted photovoltaic panels.
- Possible use of waste heat from London Underground tunnels.
- Water saving and Sustainable Urban Drainage.
- Biodiverse landscape design and planting.
- Cycle parking encourages car free travel.
- Designed for wellbeing of all users.

Building cross section showing the environmental and sustainability strategy









Design approach for the building: 1. Retain and re-use existing historic Bays building 2. Inse

3. New volume above

4. Sculpting and articulation