

# MRC Laboratory of Molecular Biology (LMB)

Complete	Area	Client	Architect
2012	UK England	Medical Research Council	RMJM Architects

The Medical Research Council's Laboratory of Molecular Biology in Cambridge is a world-class research and innovation centre.

Home to 440 scientists and 160 support staff, the centre provides around 27,000 sq. metres of workspace in two long laboratory buildings. These are joined by a 20 metre high central atrium that contains seminar rooms and a lecture theatre. The glass-clad buildings also house a library, administrative offices, informal coffee spaces and a restaurant.

Mechanical plant that services the building is housed in four stainless-steel clad and a separate energy centre to reduce the effects of noise and vibration on the laboratories. This allowed for a more lightweight construction for the buildings.



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## Services provided

Sandy Brown was appointed to provide acoustic advice to the design team for the proposed development. Key details included:

- architectural acoustics
- internal sound insulation
- building services noise and vibration
- environmental noise emission.

## Special acoustic features

The large atrium uses largely reflective surfaces, increasing the reverberation time in this key space. Incorporating high performance sound absorbers into our design provided an improved level of speech intelligibility in the atrium and allowed control of noise transfer to adjacent spaces – such as offices and meeting rooms.

CadnaA computer modelling software was used to assess and demonstrate compliance with strict planning noise limits. This included incorporating a damping layer into the roof build-up in places over occupied spaces so that the effects of rain noise could be controlled.

Back to back doors and specialist acoustic doorsets were specified for the areas that led to the plant towers and roof top plant rooms as these areas contained potentially noisier machinery than other spaces.