

Princess Royal opens new centre at Edinburgh University



HRH the Princess Royal marked the official opening today of the £54 million University of Edinburgh's Scottish Centre for Regenerative Medicine (SCRM) building.

Designed by architecture practice Sheppard Robson, SCRM is the first large-scale, purpose-built facility of its kind in the UK and is set to become the first laboratory building in Scotland to receive a BREEAM Excellent rating. BREEAM is one of the world's foremost environmental assessment methods and rating systems for buildings. Located at Edinburgh BioQuarter, the SCRM building will provide a sustainable environment for the study and development of new treatments for human diseases based on regenerative medicine.

Edinburgh BioQuarter, located in the South East of Edinburgh, is a medical science park built in partnership between Scottish Enterprise, the University of Edinburgh, NHS Lothian and Alexandria Real Estate Equities, delivering commercial outcomes from the world-class medical research being undertaken in the University of Edinburgh and at NHS Lothian.

Professor Charles Ffrench-Constant, Director of the MRC Centre for Regenerative Medicine, said: "Sustainability is central to the design of the new SCRM, and nowhere more so than in its science. An iconic building, visually striking and functionally state-of-the-art, this new facility provides the magnet we need to recruit the brightest and the best and so maintain our world-leading science and train the next generation of doctors and scientists in the exciting new field of regenerative medicine."

Luke Thurman, associate at Sheppard Robson, said: "The building's internal form mimics a 'pebble in a pond' effect with smaller, darker spaces, such as the cell culture rooms, positioned in the centre of the building while laboratory spaces are positioned in the middle and write-up spaces are located next to the outer walls, allowing for natural ventilation and lighting."

The building has achieved SCRM's objective of BREEAM Excellent rating through the choice of materials, active and passive sustainable systems and an efficiency of design and detailing.

"As well as the integrated approach to sustainability and the reduction of embodied energy, the placement of the plant on the mezzanine floor within the middle of the building has reduced service runs and simplified connections of the complex service requirements of the lab building," said Thurman.

"This goes some way towards improving the flexibility of the building and its ability to change with developing technology; a key requirement of all end users."

Externally, large openable windows at the ground and first floor ensure that natural light is maximised and an open window can provide local cooling and ventilation as required. These glazed screens are augmented with vertical fixed louvres or fins that provide the solar shading required to minimise heat gain. Active sustainability systems include rainwater recycling and a ground source heat pump, powered by the photovoltaic panels on the roof, to reduce energy consumption within the building.

Sheppard Robson worked as part of a design team that included consulting engineers Buro Happold and contractor Miller Construction to deliver a building designed for 250 people but able to accommodate up to 350. The 8,700 sq m building delivers a 22% reduction in carbon emissions against industry benchmark figures while 76% of its energy is contributed from

renewable sources.

The treatment of the external spaces and integration into the landscape strategy for the BioQuarter ensures that the external environment to SCRM is as much a part the building as it is part of the overall master plan site.

“The building is designed to complement the environment within which it sits. The cantilevered laboratory is clad in aluminium fins, which provide maximum impact on arrival to the site while also maximising the views of the surrounding landscape and minimising solar gain,” said Thurman.