The new Terrence Donnelly Centre for Cellular and Biomolecular Research has created an international buzz in the architectural community after receiving a prestigious Royal Institute of British Architects’ International Award, recognizing high architectural standards and contribution to the local environment. Located at the heart of the medical and health sciences district in the city of Toronto, this 2005 addition to the University of Toronto, was designed by Behnisch, Behnisch and Partner of Stuttgart, Germany, in collaboration with architectsAlliance of Toronto.

It has been documented that 80% of scientific breakthroughs occur outside the laboratory environment in social settings. With this in mind, the university asked the architects to incorporate the themes of interaction, flexibility and openness into the design for this research centre.

The result is a 12-story sustainable building with a transparent skin that allows the outside world a view into the scientific domain. It contains both laboratory spaces and offices, and is set back from the street, thus creating a new public plaza and green space as well as commodious entrances for 2 of the university’s heritage buildings.

According to Walter Bettio and Deni Papetti of architectsAlliance, “each of the building’s 4 facades speaks to its orientation in terms of its design, materials and function of the interior space.” The west facade is perhaps the most striking, incorporating a dot matrix design of ceramic frit on glass, representing the double-stranded DNA helix. Up close the pattern appears abstract, but seen from a distance the dots create an unmistakable helical pattern. The east facade also references the DNA molecule with coloured glass panels arranged in a...
The Left Atrium

science. This architecture is for human use, to serve a purpose.”

In planning the design of the Salk Institute, Kahn recognized the importance of informal and social spaces by separating the studies from the laboratory spaces and creating green areas: “The gardens became outdoor spaces where one can talk. Now one need not spend all the time in the laboratories.” Salk’s vision of research is experienced within this new Toronto facility.

The Terrence Donnelly Centre for Cellular and Biomolecular Research sets a standard for the future of research facility design, and perhaps
other medical buildings as well, as medical treatments involving multidisciplinary associations become increasingly important, both in research and clinically. The future of hospital design could also be inspired to incorporate architectural elements promoting discussion and forward-thinking.

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