

# UC launches Ada Rutherford professorship

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The 2010 and 2011 earthquakes have prompted a rethink on the way the architectural and engineering professions work together.

The Royal Commission report following the earthquakes says architects and engineers need to collaborate more effectively, right from the concept stages of the building project, University of Canterbury's architect-in-residence Tim Nees says.



*Tim Nees, UC's architect-in-residence*

The best way to effect change on a long-term basis is to raise understanding and awareness within the tertiary education sector, he says. The University of Canterbury is taking the lead by initiating this change with the appointment of Nees as its architect-in-residence within the College of Engineering, it is developing a masters in architectural engineering programme and it has established the Ada Rutherford professorship in architectural engineering.

"We now have a great opportunity to establish strong relationships across the engineering and architecture disciplines and promote a culture of collaboration," Nees says.

"Broadening undergraduate and graduate engineers' exposure to architecture and architects, to drawing and design as well as analysis and computation, will produce a new generation of structural engineers able to contribute to design collaborators with architects and other construction industry professionals.

"There is never one ready solution to a building design. Design is a reiterative process. The more complex the project is, more expert contributors are needed to define and interpret the requirements and more iterations and changes may be necessary to refine the design.

"A common complaint is that there is never enough time and not enough budget in the fee structure to work in this manner. Professional rigidity can counter the ability to satisfy all the demands of a project. This is because nine times out of 10 sufficient information is not gathered or shared early enough in the design process.

"If architects and engineers and other building consultants can come together to share information before any design assumptions are made, an appropriate design concept will emerge more quickly, one that will require less redesign and less refinement. Time spent upfront leads to efficiencies at every subsequent stage.

"Communication is key. Collaboration requires open communication. Creative communication is a give and take process. It requires a good understanding of each other's professional language to build a working team. For engineers to be taught the language of architecture, how the creative design process works, and the way architects think, will open the door to effective collaboration.

"This, in turn, must lead to better outcomes for New Zealand society – better and safer buildings, a richer built environment, more efficient design and delivery processes, greater professional satisfaction. Collaboration will

improve the quality of New Zealand's commercial and public buildings and housing. When structural requirements are more seamlessly knitted into the building design, the opportunity to improve cost ratios and employ sustainable resources is enhanced. Appropriate design leads to gains in spatial character, no matter what a client's building budget may be. Building functionality and performance will improve. Individual wellbeing will also therefore improve.”

The Warren Education Trust and the Ada Rutherford Trust are partnering with the University of Canterbury to achieve these goals. From the outset, their support will set the stage for collaboration.

Pro-Vice-Chancellor (engineering) Professor Jan Evans-Freeman says she is delighted by the sponsorship of \$2.5 million for the new position. It will enable us to respond to concerns raised by the recent Royal Commission's findings after the Christchurch earthquakes, and to collaborate with a wide range of partners both nationally and internationally in the delivery of an exciting new programme in the future.

The University has set up the Ada Rutherford professorship in architectural engineering to support expanding the awareness, teaching, research and dissemination of architectural engineering. Jim Rutherford was an alumnus of the university whose professional and business career has spanned more than 60 years in New Zealand and around the world. A \$2.5 million endowment, made in memory of his mother Ada Rutherford, is Jim Rutherford's legacy to the University of Canterbury.