



## **Fourth International Conference 2008** **Building resilience: achieving effective post-disaster reconstruction**

### **student Competition**

Wednesday 30 April – Friday 2 May 2008, Christchurch, New Zealand

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#### **introduction**

Undergraduate and graduate students of architecture and related design fields were invited to participate in a competition that attempts to bring out innovative ideas to radically improve post-disaster reconstruction strategies for developing countries.

#### **results**

29 projects were submitted to the competition. One project was disqualified for not respecting the minimum requirements of the competition. The projects were exhibited between April 30 and May 2, 2008 parallel to the 4<sup>th</sup> i-Rec conference in Christchurch, New Zealand.

Seven universities were represented in the competition:

- Université de Montréal, Canada
- Ryerson University, Canada
- Politecnico Di Milano, Italy
- Victoria University of Wellington, New Zealand
- Universidad Javeriana, Colombia
- University of Auckland, New Zealand
- Shahid Beheshti University, Tehran, Iran

The projects were evaluated by an international and interdisciplinary jury composed by:

- Mr. John Hewitt, Architect and urban planner, Unitec and Resilient organizations, New Zealand
- Dr. Lee Boshier, Professor Loughborough University, UK
- Dr. Jennifer Duyne, Anthropologist, World Habitat Research Unit, Switzerland
- Abdur Rehman Cheema, Student, Massey University
- Iftekhar Ahmed, Architect, School of architecture, Univ. of Melbourne, Australia

After a comprehensive appraisal of the projects, the jury developed a list with the following evaluation criteria:

1. Cultural and contextual sensitivity
2. Environmental sensitivity (e.g. use of local and/or recycled building materials with low environmental impact)

3. Economic viability
4. Technical feasibility
5. Time effectiveness
6. Community involvement and use of local skills and labor
7. Modularity, adaptability to individual requirements and upgradeability
8. Sensitivity towards collective requirements (communal spaces, water and sanitation, etc)
9. Comfort, safety and privacy
10. Innovativeness
11. Replicability
12. Quality of the presentation

### awarded projects and statement of the jury

"The jury was impressed by the high quality and originality of all projects reflecting enthusiasm, commitment and creativity. We (the jury) would like to compliment and congratulate all participants for their projects, which gave us the challenging task to select among the many good projects the outstanding ones. Based on the above criteria the jury finally proposed to award two projects:

#### **1. Emergency shelter proposal for the Rocinta Favela in Rio de Janeiro (Brazil) by Jacob Whitehead, Duncan Scott, and Jalin Young, School of Architecture of Victoria University of Wellington, New Zealand**

This project was awarded for its contextual sensitivity, the modularity, flexibility and upgradability of the proposed solution. The proposed emergency shelter assistance is cost effective and makes use of locally available resources including recycled material. The students recognized the critical importance of involving the community right from the beginning instead of treating them as passive victims by proposing their involvement in the site preparation and the collection of building material. The involvement of the community however was not just considered in terms of labor but also instrumental in terms of fostering social cohesion.

The proposed shelter solution is accordingly technically simple as to allow the community participation in building the shelters. The shelter design recognizes the importance of open spaces that may be closed at a later stage (horizontal extension) and also foresees the possibility of vertical extensions. It proposes an interesting settlement layout and communal spaces. The shelters are simple but beautiful and can easily be personalized. The project is well-presented, with good drawings and relevant information.

#### **2. The "Colorful Black Box" by Celia Holmes, Abbie Whangapirita, Hayley Wright and Hester Borren**

This project was selected for the award for its originality, a outstanding capacity to plan upon a critical understanding of local social conditions, and for its profound empathy and understanding of informal urban dwellers' key concerns. The students understood two critical issues:

- An excessive upgrading of the habitat could inflate the value of the land occupied by the urban poor and hence their eviction. Paradoxically, this means that housing security of the project's target group is contingent upon *perpetuating* the vulnerability of the site!
- Due to eviction risk, urban poor without formal land titles are not much inclined to invest in their shelter but tend to spend their resources in movable assets (e.g. TV, kitchen equipment, vessels, etc). In case of a disaster, priority should be given to protect these movable properties. Based on these contextually and socially highly relevant and accurate

observations the project proposes to build a storage space (a black box).

While evaluating the projects we could not avoid noticing that the most outstanding projects focused on housing assistance to the landslide affected favela dwellers in Rio de Janeiro, Brazil. Only after the announcement of the award we found out that all these projects were developed under the guidance of the Brazilian architect Daniel Abreu e Lima, Lecturer at the School of Architecture of the Victoria University of Wellington. We would like to compliment Ms. Daniel e Lima for having been conveyed to her students”

The previous statement of the jury was presented by:

Jennifer Duyme Barenstein, PhD  
World Habitat Research Unit  
Department of Environment, Constructions and Design  
University of Applied Sciences of Southern Switzerland  
[www.worldhabitat.supsi.ch](http://www.worldhabitat.supsi.ch)

On behalf of the jury

Christchurch, 2 May 2008

### **prizes**

The organizers of the competition will contact the authors of the awarded projects to give them a 500 CAN\$ prize to each of the two winning teams. A certificate of award will also be delivered to these two groups of students. The organizing committee congratulates all the participants of the 4<sup>th</sup> i-Rec competition.

### **next exhibition**

The projects will be next exhibited at the Faculté de l'aménagement of Université de Montreal (Montreal, Canada) parallel to the conference "Building Abroad", organized by the IF Research Group – grif. The exhibition will take place in October 23 - 25, 2008. All the participants are invited to attend the exhibition.

**Gonzalo Lizarralde**

i-Rec