The Canadian Precast/Prestressed Concrete Institute (CPCI) launched the Precast Concrete Wellness Bench Competition for Architectural and Engineering students in October 2021 to all Canadian Universities. Students were invited to submit their projects highlighting the opportunities that precast concrete offers in terms of construction, safety, structural strength, design innovation, social value, maintenance and durability. This year’s theme was on wellness and students had to design a bench using precast concrete while carefully considering the various dimensions of this theme along with the technical understanding of precast concrete systems.

We are pleased to announce the following winners of the 2021-2022 Wellness Bench Design Competition. “The jury was impressed with the quality, creativity and ingenuity of all submissions this year and we want to congratulate all of the teams for their hard work and eagerness to learn more about precast concrete as a durable, sustainable, resilient and efficient building material,” says Ariane Sabourin, CPCI’s Communications Manager. The top three teams will have the opportunity to work with a local precast concrete producer to fabricate and install their bench at the location of their choice.

THE JURY PANEL:

- J. Robert Thibodeau, Architect and President, Thibodeau Architecture + Design
- Carl Weber, Structural Engineer and Owner, Bluerock Engineering Ltd.
- Steven Van Wyk, Quality Assurance Manager/Plant Engineer, Stubbe’s Precast
“Sprouting out of the ground at Point Pleasant Park Nova Scotia, the Union Bench provides an engaging and unique resting experience for way finders. Our vision is to create a modular bench that promotes wellness through rest, exploration and play. Half-submerged below ground, the bench creates a semi-private nesting experience for young parents to rest while their kids play. The change in elevation encourages young children to explore and interact with the surrounding landscape. The modularity of the bench transcends the design beyond the scope of this project, it encourages the creativity and imagination of others to create their own form of the Union bench. Planters surrounding the bench further enhance your experience with nature by bringing life to the tip of your senses, the smell of blossoming flowers and the touch of gentle spring grass, are all within your grasp. The Union bench provides a safe and comfortable experience that considers the wellness of individuals as well as communities.”

View the first prize project poster here
Our project goal is to design a precast concrete bench that follows a theme of wellness, is creative in design, is safe to use and adds environmental value. The Arc Bench is designed to be modular and easy to construct as a precast concrete system. Our design is inspired by holistic models of life such as the circle and the National Wellness Institute’s six dimensions of wellness. Our bench is in the shape of an arc and features different types of seating, ergonomic surfaces, and a planter to promote wellness. Through structural analysis and material selection, we designed our bench to be safe to use. Our structural calculations helped us determine whether our bench would be stable. We chose materials that would provide adequate strength and reduce the bench’s environmental impact. The Arc Bench team will work with a local precast concrete producer to fabricate their Wellness Bench.”

View the second prize project poster here

Submitted by:
Adam Janis, Cory Wong, Owen Rains, Suzanne Du, Tu Anh Le

Supervisors:
Qi Zhang, Civil Engineering Technology
Katie Henderson, Architectural Building Technology

SECOND PRIZE – $1,500
THE ARC BENCH – BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY (BCIT)
The project aims at creating a bench that expresses a welcoming atmosphere and reflects a comfortable and airy space. Exploring the idea of expressing lightness in contrast to the material’s properties — dealing with the concept of positive and negative voids in the design to embody a form that displays an open, welcoming, and light social space. They are designed with different low and high elevations layers, allowing for diverse interchangeable sitting arrangements. They invite the user to interact with the environment and integrate movement into the user’s well-being. The bench blends with nature through its twisting form and atmosphere that the planters create. The planters surround the seating space to create an intimate connection with nature forming a tranquil reflection space. Wellness is not the absence of sickness; instead, it is the search to find their best potential and well-being actively. The project strives to achieve wellness by creating a safe space for either isolation or gathering. The form encourages a positive connection through nature, comfort, and lightness with the surrounding.”

Submitted by:
Raegis Nepomuceno, Ka Long Frank Wong, Kevin Shum, Jesse Adamson

Supervisors:
Ehab El-Salakawy, Department of Civil Engineering
Ralph Stern, Department of Architecture

View the third prize project poster here
HONOURABLE MENTIONS

The following four projects received an honourable mention from the jury panel who agreed that they were creative and innovative and they appreciated the opportunity to review all of them. View their posters at the links below:

**THE MONTRIVER BENCH**
Submitted by: Ziyi Wang (Carleton University), Yiren Zhang (Carleton University) Fenglin Liu (Carleton University), Yijing Yuan (Carleton University)
> MORE INFO

**THE DADEALLION BENCH**
Submitted by: Bill CM Tang (University of Waterloo), Lindsay Lee (McMaster University), Satvik Bajaj (McMaster University), Seonhyeok Kim (McMaster University), Xinyu Li (McMaster University)
> MORE INFO

**THE LOTUS BENCH**
Submitted by: Diana Youssefian Sahzabi (UBC Okanagan), Josephine Wong (UBC Okanagan), Fred Mark Caranguian (UBC Okanagan)
> MORE INFO

**THE ETERNITY BENCH**
Submitted by: Boyang Yu (McMaster University), Boming Jiang (McMaster University), Meixi Lin (University of Toronto), Zehua Shuai (McMaster University), Linyu Zhou (McMaster University)
> MORE INFO

Congratulations to all of the teams on their hard work and great submissions. Details on the 2022-23 Design Competition will be announced soon. Check our website for updates:

http://www.cpci.ca/en/resources/academic/

THE WELLNESS BENCH