Upcycling trees into works of art

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When construction work started in earnest at LKCMedicine's dual campus, 29 trees had to make way for its two new buildings. But rather than discarding them, LKCMedicine teamed up with NTU Museum on an upcycling project that would unite the whole NTU community in the name of sustainability.

LKCMedicine Executive Vice-Dean for Administration Professor Lionel Lee said, "LKCMedicine's underlying ethos is humanity in medicine and one way this is expressed is through our respect for nature and the resources of this world. When it became clear that these trees could not remain, I challenged my team to find a way to give them a new lease of life. The timing was fortuitous and I am very happy that we were able to contribute our trees to the upcycling efforts of NTU."

NTU had already salvaged some 100 trees that had to make way for campus development projects. The trees were mainly common Acacia rainforest trees and Albizia trees, which are best known as the scourge of Singapore roads as their shallow roots and brittleness make them very vulnerable to storms.

To strengthen the timber, the logs had been left outdoors behind Graduate Hall 1 to air-dry. With the addition of the new logs from the LKCMedicine sites, NTU Museum Deputy Director Faith Teh and LKCMedicine Deputy Director and Head of Medical Library & Heritage Centre Caroline Pang set about engaging the NTU community to turn these logs into works of art.

But the giant log pile, which had become home to a microcosm of bugs, beetles and ants, did not offer inspiration easily. It took Cultural Medallion winner and master sculptor Han Sai Por to see their potential. She hand-picked four logs, which she transformed into sculptures for NTU Museum's collection.

The four sculptures by Cultural Medallion winner and master sculptor Han Sai Por highlight the meaning and philosophy behind education and learning

To bring out the potential of the wood and inspire more people, Ms Teh and Ms Pang decided to process the logs into planks first. Ms Pang said, "Processing the timber was very challenging as we had no experience. But through ingenuity and sheer determination, we got it done."

With the help of experts, they painstakingly examined the logs and found that heart rot, a condition which hastens fungal growth and insect infestation once felled, had taken root in some of the logs. Working against time, they rescued 77 logs and some 10 big branches. Over a period of more than six months, the timber was:
debarked;
• cut into six to 10cm thick planks;
• kiln-dried over 12 weeks to reduce moisture content to 25 per cent to prevent cracking and warping; and
• fumigated.

With the wood ready, NTU faculty from the Schools of Art, Design and Media (ADM) and Electrical and Electronic Engineering, the Pioneer and Crescent hall fellows and resident students, and a handful of final-year students joined the project. Using even the scraps, they pushed their artistic abilities and created everything from interactive furniture to stationery and jewellery boxes. Other local artists and designers also contributed designs for unique pieces of furniture.

The resulting collection, which totals more than 50 objects of art, is currently on display at LKCMedicine’s Experimental Medicine Building (EMB), before the pieces are moved to locations around campus. For example, ADM Visiting Artist Fabrizio Galli created a bespoke piece called tête-à-tête, which will be permanently displayed at EMB; while a set of 13 unique benches will go to various locations and institutions.

NTU ADM Visiting Artist Fabrizio Galli sits on his artwork, tête-à-tête, which he designed for LKCMedicine

NTU Associate Provost for Student Life Associate Professor Kwok Kian Woon said, "This project is yet another excellent example of NTU's commitment to environmental sustainability, a theme which is central in our research, teaching and in our campus life. These trees, which have been part of our history and heritage, have been transformed into artworks, sculptures and furniture, which we can all use and enjoy. They will continue not only to have a symbolic presence, but a physical presence on campus."

The enthusiasm displayed by the NTU community in giving these trees a new lease of life was so contagious that one of the appointed contractors involved in fabricating the designs returned to his carpentry skills to fashion several pieces, which he donated to NTU. Even the project leaders, Ms Pang and Ms Teh, were inspired.

Faith Teh and Caroline Pang, who led the project, were inspired along the way to create a unique set of benches

Ms Teh said, "Some of the branches were very thin, almost unusable. Keen not to waste anything, I thought why not turn these branches into pencil-shaped benches."

Ms Pang added, "This inspired me to add birds' legs to these benches. After all, birds would have sat on the branches to take a rest."

Finished with painted eyes, the six "For-Rest" benches, each with its own personality, make for a comfortable perch, remarked the creators.

The Co-op@NTU shop is made from timber from the upcycled trees

In addition to the art works, the wood was also used as teaching material for the final-year students and fittings for two spaces in the HIVE – the Co-op@NTU shop and the CoLab4Good.

The wood contributed to one further artwork, Apollo's Dream, which was commissioned by LKCMedicine to commemorate the inaugural student cohort. The 54 students each contributed one clay disc depicting their interpretation of the theme. These are interspersed with clay discs from
lead artists Suriani Suratman and Hiroko Mita as well as five wooden discs from the upcycled trees. The impressive installation, which consists of three components, will be officially unveiled on 11 August.

See upcoming events for exhibition and launch details.