

Creative solutions for healthcare

Team creates robotic suit to help nurses carry heavy loads and bags top prize in NUS medical challenge

✔ **TATIANA MOHAMADROSLI**

Concerned that his sister, a nurse, was frequently complaining of back aches, Mr Rustam Shariq Mujtaba created the Armasuit, a soft robotic suit for nurses to help them carry loads of up to 100kg.

The pharmacy student from the National University of Singapore (NUS) said tasks such as lifting, transferring and re-positioning patients were some reasons for the back aches.

He explained this was a chronic problem faced by nurses around the world, not just in Singapore.

Together with three of his friends, Mr Rustam, 22, took part in the Medical Grand Challenge 2020, organised by the NUS Yong Loo Lin School of

Medicine.

The challenge is a student-led medical innovation programme that aims to encourage students across various universities and faculties in Singapore to come together and explore creative solutions to meet healthcare needs.

“The nurses saw back pain as an occupational hazard they could mitigate by taking painkillers or visiting a chiropractor, but they deserve better,” said Mr Rustam.

And so the Armas suit was invented, and it will be marketed to hospitals and nursing homes, where nurses are more involved in physically demanding engagement with patients, he said.

Mr Rustam and his team members bagged a \$20,000 cash



The team that created the Armas suit, which helps nurses carry loads of up to 100kg.

prize for clinching first place in the Open category and an additional \$4,000 for winning the people's choice award in the finale last month, held over

video conferencing app Zoom.

He said: “I was ecstatic when we won, especially since it has been a difficult period of coordinating the project due to

Covid-19. I'm glad we pushed on and never gave up.”

CHILDHOOD MYOPIA

Another team participating in the challenge was Good Pupils, with a wearable device called EyeDream, which aims to address childhood myopia in Singapore.

Team member Clarisse Hing from the Yong Loo Lin School of Medicine said the device gives a gentle buzz when the user's reading distance is too close and aims to prevent overly long periods of eye strain.

Good Pupils took second place in the Nascent category and pocketed a cash prize of \$15,000.

Said Ms Hing, 20: “Joining the competition has made me feel inspired and excited to explore the possibilities of medical innovation.”

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