

## **HKBU** works on eliminating drug side effects

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The research findings pave the way towards the mass production of purer, cheaper and safer drugs



Scientists from Hong Kong Baptist University (HKBU) have developed a novel technique that can produce pure therapeutic drugs without the associated side effects.

The approach, which uses a nanostructure fabrication device, can manipulate the chirality of drug molecules by controlling the direction a substrate is rotated within the device, thus eliminating the possible side effects that can arise when people take drugs containing molecules with the incorrect chirality.

Dr Jeffery Huang Zhifeng, Associate Professor in the Department of Physics at HKBU, and his research team devised a novel approach to manipulating molecular chirality through macro-scale control in collaboration with Sichuan University, Guangxi Medical University and the Southern University of Science and Technology.

It involves mediating the manipulation with helical metal nanostructures (i.e. metal nanohelices) that are in the shape of a helical spring, and they have a characteristic size of one-thousandth of the diameter of a human hair.

Published in the renowned international scientific journal *Nature Chemistry*, the research findings pave the way towards the mass production of purer, cheaper and safer drugs that can be made in a scalable and more environmentally-friendly way.