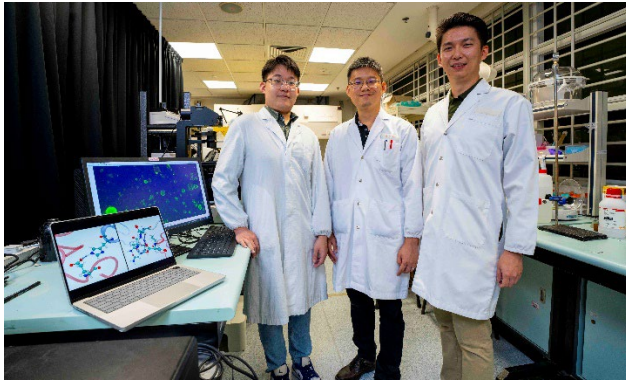


Learning from caterpillars to create self-assembling capsules for drug delivery**Learning from caterpillars to create self-assembling capsules for drug delivery**

NTU scientists have developed a versatile drug delivery system, inspired by nature. Harnessing the self-assembling properties of proteins from moth caterpillars, the researchers created nanosized capsules that can trap and deliver various drugs. The scientists first identified self-assembling proteins from the tough outer layer of moth caterpillars. The nanocapsules were created using synthetic versions of the Proteins. Compared to other methods, self-assembly is a cost-effective and environmentally friendly way to manufacture nanostructures. The nanocapsules containing drugs were successfully taken up by cells and can potentially be used for a wide range of biomedical applications, including drug delivery and gene therapy. The researchers are applying for a patent for their innovation, which was reported in *Nature Nanotechnology*.