Scientists develop nanoscale vesicles for cellular deliveries

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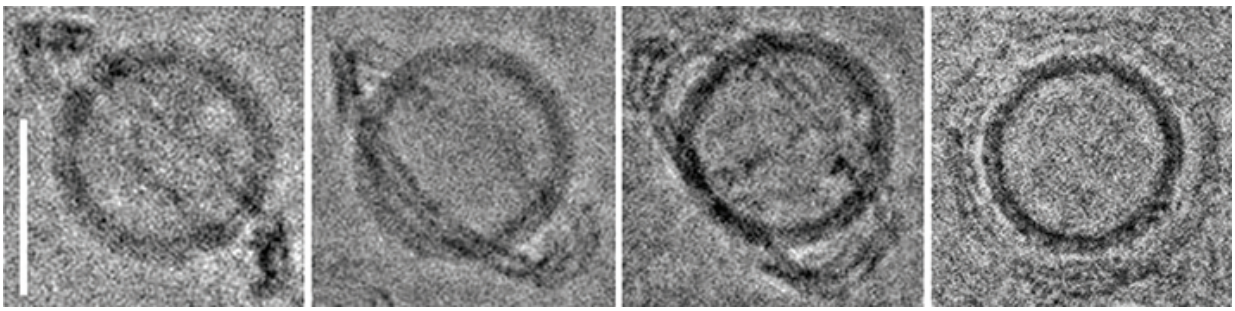

Credit: Hideki Shigematsu

Scientists have developed a novel nano-engineering technique to fabricate tiny, membrane-bound vesicles called liposomes.

Looking a bit like the planet Saturn, spherical liposomes fabricated within DNA nano-rings such as the ones captured here by electron microscopy can be made as small as 20 nanometers.

The ability to tailor liposomes to exact sizes help scientists study how cells and subcellular compartments interact and for biomedical researchers to deliver drugs to target cells with optimal efficiency, said Chenxiang Lin, assistant professor of cell biology at the Yale Nanobiology Institute at West Campus and a co-senior author of the paper published online March 21 in the journal *Nature Chemistry*.

More information: Yang Yang et al. Self-assembly of size-controlled liposomes on DNA nanotemplates, *Nature Chemistry* (2016). DOI: 10.1038/nchem.2472