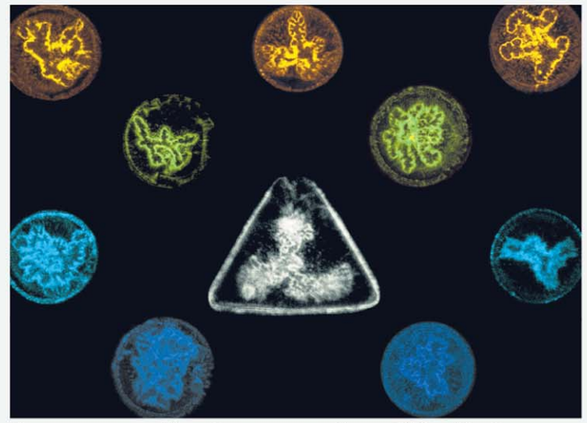
Source: *The Straits Times,* pB14
Date: 26 February 2016

S'pore team plumbs the body's plumbing

Like a city relying on pipes for clean water, the major organs of the human body depend on networks of microscopic tubes to transport substances essential to their function. When these tubes are in the wrong size and shape, they can cause problems like kidney disease.

A team of scientists from the National University of Singapore, Singapore's Agency for Science, Technology and Research and France's National Centre for Scientific Research has discovered the biological mechanism for the production of epithelial tubes. The study found that the shape and size of these tubes may be affected by mechanical forces between cells and their surroundings. The findings, published in Nature Cell Biology, offer hope for developing better therapies for diseases.

Compiled by Lin Yangchen



A composite image of epithelial tubes formed between the contacting lateral surfaces of two liver cells on artificial membranes in circular and triangular microwells. Researchers found that by coating the microwells with fibronectin in different patterns, the shape of the epithelial tubes that grow in the microwells is altered. PHOTO: MECHANOBIOLOGY INSTITUTE, NUS

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