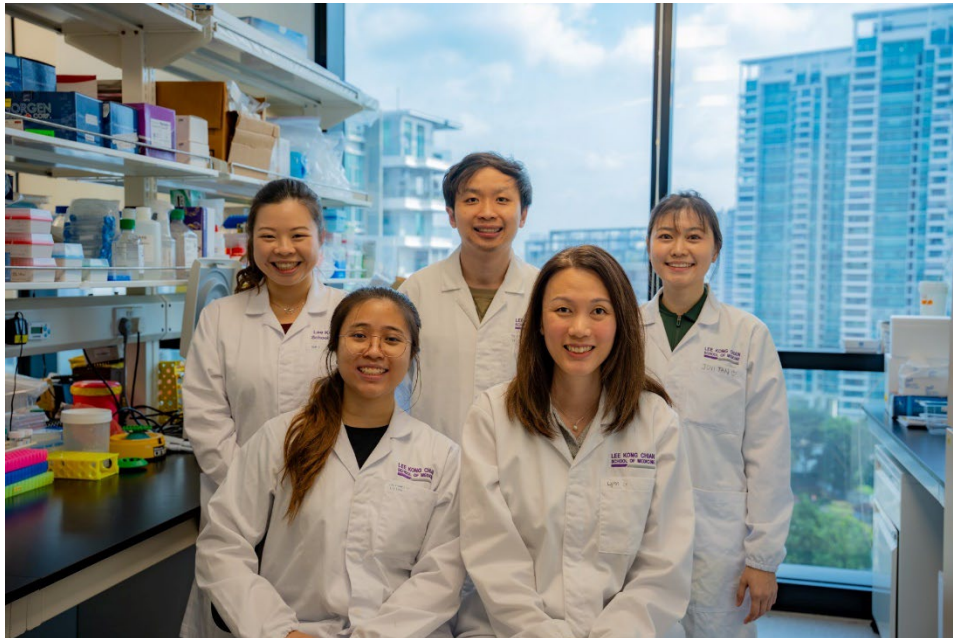




23 September 2026

Heart Regeneration Gene Map May Unlock New Treatments



Researchers at Nanyang Technological University, Singapore have uncovered fresh insights into how stem cells develop and mature into heart muscle cells. The findings could pave the way for new treatments for heart disease.

Published in *Nature Cardiovascular Research*, the study is one of the first to track the activity of genes at different points of the regeneration process.

In laboratory experiments, the researchers found that genes related to metabolism, energy generation, protein synthesis and heart muscle contraction were switched on after the cells were transplanted into damaged hearts. On the other hand, the activity of genes involved in scar tissue formation was reduced.

The scientists also found that a protein called Midkine can repair damaged blood vessels and may help improve recovery after heart attacks.

<https://www.miragenews.com/heart-regeneration-gene-map-may-unlock-new-1748406/>