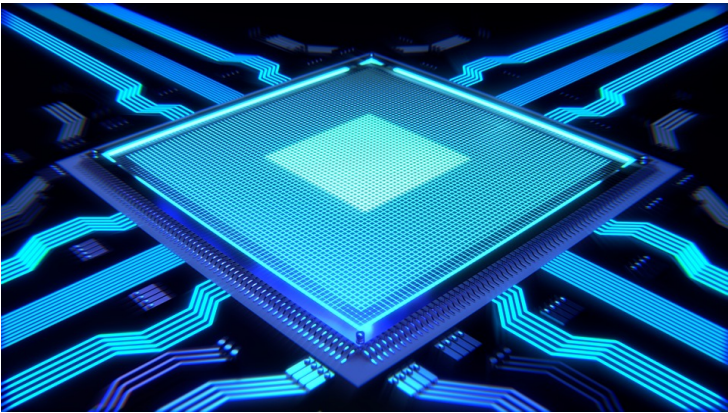


## MIMETAS partners with Roche for new chip technology

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**The new system is designed to enable evaluation in perfused three-dimensional (3D) gut tubules in high throughput under exposure to pharmacological compounds.**



Netherlands-based biotechnology firm MIMETAS has partnered with Roche to develop a new organ-on-a-chip system to support intestinal permeability assessment.

The new system is designed to enable evaluation in perfused three-dimensional (3D) gut tubules in high throughput under exposure to pharmacological compounds. As part of their research, the firms are reported to have grown more than 350 gut tubules under flow to form leak-tight structures.

The structures were designed in a way to allow real-time investigation of intestinal barrier function using automated microscopy and image analysis. The ability to culture tubules, blood vessels and tissue co-cultures in 3D without artificial membranes and with high imaging quality will enable the enhanced study of human tissue biology.

The new gut models can be used for evaluation of toxicology and transport of oncological and other compounds, disease modelling studies and basic intestinal barrier research.