

The origin of the lymphatic vasculature uncovered

March 12 2015

In a new study, published in *Cell Reports*, researchers at Uppsala University describe a novel mechanism by which lymphatic vessels form during embryonic development. The finding may open new possibilities for repairing damaged lymphatic vessels using stem cells.

Olof Rudbeck, professor of medicine at Uppsala University, discovered the lymphatic vascular system in the 17th century. A research group at the institute bearing his name, the Rudbeck Laboratory at Uppsala University, has now discovered a novel origin of the lymphatic system.

The prevailing textbook knowledge is that the lymphatic vasculature forms via sprouting from veins. Contrary to this dogma, the new study shows that in the gut, most of the lymphatic vasculature arises from a different origin, the blood forming so called 'hemogenic' endothelium.

"These new findings provide fundamental novel insight into the mechanism of [lymphatic vessel](#) formation by demonstrating the existence of a previously unknown lymphatic endothelial progenitor cell. These cells may be exploited to restore lymphatic vessel function following cancer surgery, lymphedema or tissue trauma," says Taija Mäkinen, who leads the research group.

Provided by Uppsala University

Citation: The origin of the lymphatic vasculature uncovered (2015, March 12) retrieved 3

February 2024 from <https://medicalxpress.com/news/2015-03-lymphatic-vasculature-uncovered.html>

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