

Life science company licenses method to create blood vessel cells

July 20 2016, by Steve Martin

An Indiana University technology that could accelerate work conducted by drug discovery researchers, cancer biologists and vascular biologists has been licensed to a life science company in the United Kingdom that will use it to generate blood vessel cells from stem cells, which it will sell to customers.

Indiana University Research and Technology Corp., which protects, markets and licenses intellectual property developed at Indiana University so it can be commercialized by industry, has licensed the work to Axol Bioscience Ltd. in Little Chesterford, Cambridgeshire, United Kingdom.

The method turns human induced [pluripotent stem cells](#), or iPSCs, into [endothelial cells](#), which are found on the interior of blood vessels. It was developed by Dr. Mervin C. Yoder, the Richard and Pauline Klinger Professor of Pediatrics and professor of biochemistry and molecular biology at the Indiana University School of Medicine.

"Nutan Prasain, an assistant research professor, developed the methods with me that were required to direct the differentiation of the [stem cells](#) into endothelial colony forming cells, or ECFC, the [progenitor cells](#) that give rise to endothelial cells," Yoder said. "The ECFC-derived endothelial cells display potent proliferative potential and in vivo vessel formation."

Yichen Shi, CEO and co-founder of Axol Bioscience, said endothelial

cells can help researchers better understand the conditions in which vascular pathologies occur.

"These cells offer a biologically relevant model to study these conditions, which could reduce the need for animal testing and accelerate the discovery of treatments," he said.

Shi said researchers who work with endothelial cells are limited to using cells that have drawbacks.

"The Indiana University technology enables us to provide high-quality, physiologically relevant cells from a consistent donor source, saving researchers time and enabling more reliable data generation," he said.

Industrial and academic researchers will be able to purchase the endothelial cells directly from Axol.

"We'll produce a range of iPSC-derived ECFCs from healthy and patient donors," Shi said. "In the future, we will expand our range of custom services, which currently comprises cell sourcing, reprogramming, differentiation and gene editing, to include endothelial differentiation."

Provided by Indiana University

Citation: Life science company licenses method to create blood vessel cells (2016, July 20) retrieved 20 April 2024 from

<https://medicalxpress.com/news/2016-07-life-science-company-method-blood.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.