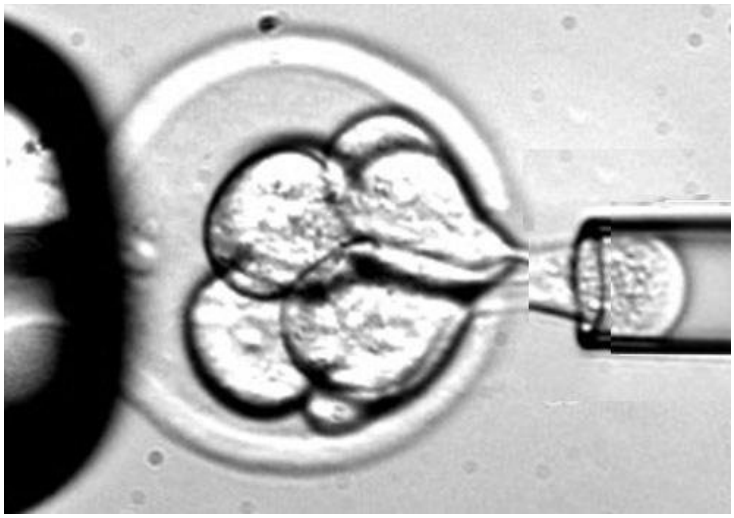
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ASIA EDITION

Merck to develop processes for stem cell cultures

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Merck to develop harvesting processes for bioreactor-based stem cell cultures



Singapore: Merck Millipore, the life science division of Merck, and the Institute of Bioprocess Engineering and Pharmaceutical Technology, Mittelhessen University of Applied Sciences have collaborated to develop optimized cell culture and harvesting processes for bioreactor-based stem cell cultures. Prof. Peter Czermak will lead the collaboration for the Institute of Bioprocess Engineering and Pharmaceutical Technology.

This project will focus on the development of a proprietary purification technology required to ensure removal of microcarriers and any particulates from stem cell products grown in the Mobius CellReady disposable bioreactor. Ultimately, the project will deliver scalable devices, validation methods and associated protocols for purification of large scale cultures of stem cells in the disposable bioreactor. Enzymes and techniques for increased efficiency and high yield recovery of stem cells will be identified, along with a set of robust process control and Quality by Design parameters.

"As stem cell products progress through clinical trials, efficient and cost-effective large scale processing will be required," notes Robert Shaw, Commercial Director of Merck Millipore's Stem Cell Initiative. "We are excited to be partnering with Professor Czermak on this project as his expertise in process characterization, control and harvesting will enable us to advance the technologies needed for commercialization of stem cell processing."

"Merck Millipore was a clear choice for this development collaboration," said Peter Czermak, Managing Director of the Institute of Bioprocess Engineering and Pharmaceutical Technology. Their in-depth knowledge of process development, single-use technologies, and the manufacture of biopharmaceuticals can be translated for use in industrializing the production of stem cells."

Merck Millipore is developing a platform of scalable, disposable production solutions based on its Mobius CellReady bioreactor to enable more effective and efficient manufacture of cell-based therapies.