



三井化学



NEWS RELEASE

2022.07.08

Jiksak Bioengineering Inc.
Mitsui Chemicals, Inc.

Mitsui Chemicals, Jiksak Pursue Joint Development in Aim of Commercializing Nerve Tissue Generated From Human iPS Cells Set to exhibit at the Regenerative Medicine Expo (July 13–15, Tokyo Big Sight)

Mitsui Chemicals, Inc. (Tokyo: 4183; President & CEO: HASHIMOTO Osamu) and Jiksak Bioengineering Inc. (Saiwai-ku, Kawasaki; CEO: KAWADA Jiro) have begun joint research aimed at commercializing Nerve Organoids™, which consist of nerve tissue derived from human iPS cells. By taking Mitsui Chemicals' technology for InnoCell™ cell culture vessels with high oxygen permeability and combining it with Jiksak's technology relating to the creation of Nerve Organoids™, the partners intend to develop practical technology for simply and efficiently culturing nerve tissue, which is set to become essential in the drug discovery and regenerative medicine sectors, among others.

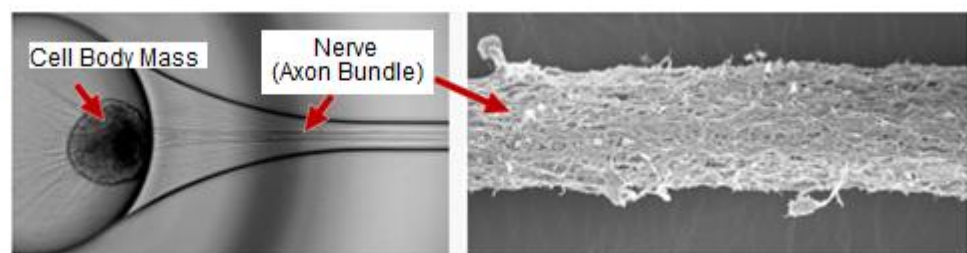
■ Overview of Jiksak Bioengineering

Born from a NEDO startup program, Jiksak is an R&D startup company that aims to develop technologies for enabling the treatment of neurological diseases that currently lack treatment methods, such as amyotrophic lateral sclerosis (ALS). By leveraging technology that can prevent cell growth and produce nerve organoids by way of culture vessel design, Jiksak is able to provide Nerve Organoids™, which it is endeavoring to sell to drug discovery research institutes while also pursuing development aimed at use in regenerative medicine.

■ Overview of the Nerve Organoid™

Generated from human iPS cells, a Nerve Organoid™ is nerve tissue that closely resembles an in vivo nerve, with a cell body and axon bundle (nerve). In the drug discovery process, Nerve Organoids™ can be used in more accurate testing to replace animal testing at the pre-clinical stage, on top of which there are hopes for regenerative medicine applications wherein the tissue is transplanted into the body to regenerate nerve tissue.

*Nerve Organoid™ is a trademark of Jiksak.



A nerve organoid cultured by Jiksak

■ Mitsui Chemicals' cell culture solutions

Mitsui Chemicals leverages catalyst technology, organic synthesis technology and processing technology to manufacture and sell all sorts of functional chemicals and functional resins. The company's VISION 2030 Long-Term Business Plan includes a focus on next-generation business, where the company is aiming to bolster solutions businesses that capitalize on its R&D capabilities and assets.

One strength of Mitsui Chemicals is the company's integrated product development starting straight from material development. Mitsui Chemicals is therefore leaning on this to spur on the rollout of solutions businesses that look to solve the issues of various customers in the cell technology field, with its solutions here including culture plates; testing and drug discovery applications such as microchannel devices; and the synthesis of high-quality stem cells utilizing nonwovens. Mitsui Chemicals is also helping to cut down on the use of animal testing and animal-derived ingredients in drug discovery and food development.

■ Overview of both companies

	Jiksak Bioengineering Inc. https://www.jiksak.co.jp/	Mitsui Chemicals, Inc. https://jp.mitsuichemicals.com/en/
Establishment	February 2017	October 1997
Location	7-7, Shin-Kawasaki, Saiwai-ku, Kawasaki, Kanagawa	1-5-2, Higashi-Shimbashi, Minato-ku, Tokyo
Capital	168 million yen	125.41 billion yen
Business	Development, production and sale of 3D cell tissue and culture devices; drug discovery support using human-derived cells	Life & Healthcare Solutions, Mobility Solutions, ICT Solutions, Basic & Green Materials, Next-Generation Business

■ Scheduled presentations at exhibitions and academic conferences

- ◇ **Regenerative Medicine Expo**
July 13–15, 2022
Tokyo Big Sight, Booth No. 33-61
<https://www.regenmed-t.jp/en-gb.html>

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