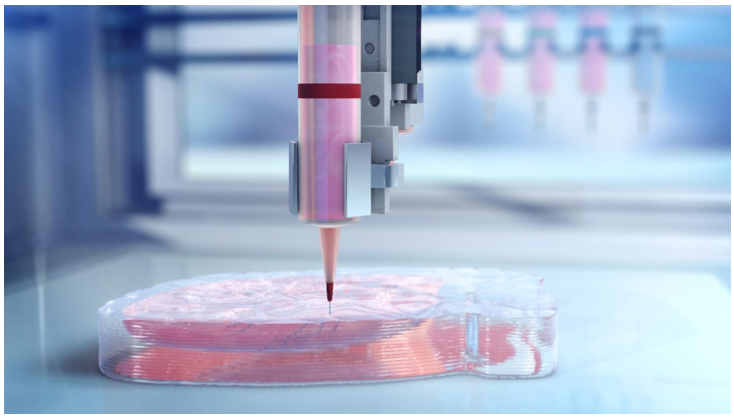
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South Korea uses 3D bioprinting to engineer organs at scale

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Advanced technology is creating live, moving organs for the human body using 3D printers



A research team at Pohang University of Science and Technology (POSTECH) in South Korea has developed a method for engineering organs at scale using bioprinting. The findings from the study were recently published in the international journal Trends in Biotechnology: Cell Press.

The limitations of previously published studies were that only a single tissue could be fabricated at a time, and the size of the tissue was very small. Moreover, additional elements were required for the 3D printed organs to function like real tissues.

To overcome these issues, the research team from South Korea summarized and presented a new bioprinting technology to engineer the tissues similar to real tissues. In particular, the assembly method allows the possibility of creating engineered organs bigger than the previous size limit.

“If we combine technologies such as bioprinting, new materials, and stem cells, we can produce more realistic engineered organs. In combination with robotics or artificial intelligence (AI), more automatized and elaborate methods for generation of organ substitutes would be possible in the future”, said the researchers.