

L'Oréal, Poietis to develop bioprinting of hair

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With this exclusive research partnership, L'Oréal and Poietis are giving themselves the means to pursue a new scientific challenge: bioprinting a hair follicle, the small organ that produces hair, using a bioprinter.

This research partnership offers exciting perspectives at a time when conventional tissue engineering technologies remain limited in terms of the complexity of cell patterns.

The laser-assisted bioprinting technology developed by Poietis to produce biological tissue can position cells in 3D with extremely high cellular resolution (on the order of ten microns) and cellular viability (over 95%). This unique bioprinting technology involves successively layering micro-drops of bioinks using a quick scan by a laser beam. The living biological tissue created must then be matured for around 3 weeks before it can be used in tests.

The combination of this exclusive technology with L'Oréal's unique expertise in hair biology could make it possible to create a functional follicle capable of producing hair - that is the ambition of L'Oréal and Poietis.

"We're very proud to be working with L'Oréal. The fact that a world-renowned company is adopting our technology is a major step for Poietis," says Fabien Guillemot, CEO and Chief Scientific Officer at Poietis. "Our partnership with L'Oréal should lead to the development of innovative applications in terms of tissue engineering," adds Bruno Brisson, General Manager and Chief Business Officer.

"For L'Oréal, the combination of our respective areas of expertise opens up the possibility of previously unheard of achievements in the field of hair. This research partnership is very stimulating for the Advanced Research teams," explains José Cotovio, Director of Predictive Methods and Models department, L'Oréal Recherche & Innovation.

Poietis and L'Oréal's multi-annual research partnership in the areas of hair biology and hair engineering should ultimately lead to new advances in hair knowledge and enable the development of exclusive efficacy testing on bioprinted hair samples.
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