

The molecular role of PCBP2 and Elabela in pregnancy: from translational inhibition to human disease



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Host: Dr Deepak Choudhury

Seminar Abstract

My PhD project was divided in two parts, the first part took place in Amsterdam and the second in Singapore. In Amsterdam I focused on the investigation of the pathophysiological role of the peptide Elabela and the RNA splicing protein PCBP2 in human pregnancies by investigating its role in the differentiation of extravillous trophoblasts cells (EVTs). EVT's are placenta cells that are responsible for the remodelling of the maternal artery during placentation, ensuring a healthy pregnancy. In Singapore I continued my work by focusing on the identification of the possible elements involved in the translational inhibition of Elabela in embryonic development of vertebrates.

About the Speaker

Danai Georgiadou was born in Athens, Greece. In 2018, she joined the Biology Bachelor's program at the Kapodistrian University of Athens. Her next step was to specialise on Molecular Biology by completing the master's degree of Biomedical Sciences in the University of Amsterdam (UvA), The Netherlands. In UvA, she trained to work with organoids and stem cells which intrigued her interest in specialising on the technology of stem cell biology.

For her PhD she joined an exciting program in human development that was divided into two parts. The first part of the project in Amsterdam was based on human model systems (cell lines, placental explants) aiming to unravel the underlying mechanisms of placentation and its key molecular players. The second part of the project that was completed in Singapore involved animal model systems (mice, zebrafish) and mouse and human Embryonic Stem Cells models that helped her investigate the translational inhibition of a crucial peptide for placentation and development, Elabela.

Danai is currently living in Singapore and working as a stem cell biologist in A*star/BTI in the growing field of cellular agriculture.