



Laurent David



Laurent is an Associate Professor in the Med School of Nantes Universités (France). As a post-doctoral fellow at the University of Toronto, Laurent performed transcriptomic profiling of somatic cell reprogramming followed by siRNA screens to determine regulators of the initiation and maturation phase of reprogramming (in J. Wrana lab, Toronto). Laurent has been recruited as associate professor and director of the iPSC core facility of Nantes (the French biggest core). Laurent's lab is focused on understanding human pre- and post-implantation development in order to improve IVF success rates. To do so, we have generated new stem cell model through reprogramming (induced naive PSC and induced TSC) and established a transcriptomic map of molecular event leading to a human mature blastocyst, ready to implant. The next steps of our research is to pursue the understanding of human implantation using blastoid models, extending the mapping of human embryo signatures and perturb human embryo culture conditions. Among our approaches, we are aiming to implement a "virtual embryo" by generating Boolean networks predicting cell fate transitions in the human embryo, in collaboration with Dr Carito Guziolowski (Ecole Centrale Nantes). Of note, we are grateful to be tightly collaborating with Nantes IVF department, the French most active IVF department.

