1-year Post-doctoral position with possibility of extension at Oniris, Nantes

**Working place:** Oniris, Chantrerie, Route de Gachet, Nantes

**Title:** Evaluation of tolerogenic EV for type 1 diabetes therapy

**Keywords:** extracellular vesicles, immune therapy, type 1 diabetes, tolerance assays, lymph node

**Start date:** Summer 2022

Type 1 diabetes is a chronic disease resulting from the autoimmune destruction of the insulin-secreting pancreatic beta cells. Extracellular vesicles endowed with immune-regulatory properties have gained attention for immune therapy of autoimmune conditions, but standardized procedures to evaluate their tolerogenic potential remain to be developed prior to clinical translation. To address this issue, the Post-doc candidate will develop ex vivo and in vivo functional assays in lymph nodes, which concentrate initiators and effectors of innate and adaptive (auto-) immune responses.

This work will be performed at the IECM (Cellular and Molecular Immunoendocrinology) laboratory at Oniris, in close collaboration with a PhD student optimizing a bioprocess for large-scale EV production from mouse and human beta cell lines.

Techniques to be employed by the Post-doc include characterization and immunophenotyping of the beta extracellular vesicles (NTA, FC and multi-omic) as well as mode of action assays in vitro and in vivo in mouse models of tolerance and humanized mice.

The IECM lab has a >30 year-experience in basic and translational research in type 1 diabetes and a 10 year-expertise in the production and characterisation of beta EV. Material dedicated to EV research, immuno-monitoring, animal facilities and imaging are available in the lab or on site platforms.

To apply, please send your CV, motivation letter, publication list and contact information of referees to steffi.bosch@oniris-nantes.fr.

**Publications in the field of Extracellular Vesicles - IECM**


