



**CASSANDRE MOREL**

*From France to Sweden*



Project: **Gut microbiota, hypothalamic oxytocin neurons and Autism Spectrum Disorders**

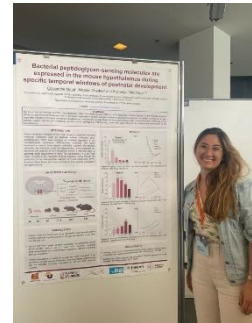
Research topic: **Biology**

Swedish Institution: **Karolinska Institutet**

French Institution: **Université de Rouen**

Dates of mobility: **05/09/2020 to 31/12/2020**

Program: **SFVE-A (ex ÖMSE)**



## PRESENTATION

[Cassandre Morel](#) is a PhD researcher in Neurobiology at [Université de Rouen](#) and [Karolinska Institutet](#).

Her PhD project, entitled “Role of the gut microbiota in development and function of hypothalamic oxytocin neurons: implications in Autism Spectrum Disorders”, aimed to study the role of the gut microbiota on the postnatal development and function of hypothalamic oxytocin neurons, and its implication for autism. The main objectives of her thesis were to (i) elucidate the impact of the gut microbiota on the developing hypothalamic oxytocin neurons; (ii) to characterize the expression, cellular localization and function of molecules of the innate immune system that specifically detect bacterial peptidoglycans (PGN) motifs, called PGN-sensing molecules, in the developing hypothalamus; finally, (iii) to understand whether PGN signalling, specifically in hypothalamic oxytocin neurons, influence behaviour.

## ACTIVITIES IN SWEDEN

Cassandre Morel did a double degree PhD between the Université de Rouen and Karolinska Institutet.

She spent half of her PhD training in [the laboratory of Rochellys Diaz Heijtz](#), Associate Professor at the [Department of Neuroscience](#), Karolinska Institutet, and the other half at the [Laboratory of Neuronal and Neuroendocrine Differentiation and Communication](#), University de Rouen.