Avis de Soutenance

Madame Arianna BENEDETTI

SCIENCES ECONOMIQUES

Soutiendra publiquement ses travaux de thèse intitulés

Les rôles multiformes de l'ocytocine dans la cognition sociale et la prise de décision sociale

dirigés par Monsieur Eric GUERCI

Soutenance prévue le ***vendredi 17 octobre 2025*** à h00
Lieu : GREDEG premises, Campus Azur du CNRS 250 rue Albert Einstein - CS 10269 - F
Salle : Picasso

Composition du jury proposé

M. Eric GUERCI	Université Côte d'Azur	Directeur de thèse
M. Alexandre CHARLET	Université de Strasbourg	Rapporteur
Mme Francoise MUSCATELLI	INSERM	Rapporteure
M. Paul PEZANIS-CHRISTOU	University of Côte d'Azur	Examinateur
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M. Gerard CLARKE	University College Cork	Examinateur

Mots-clés : Économie,neuroéconomie,Comportement social,Système immunitaire,Axe intestin-cerveau,

Résumé :

The role of oxytocin (OXT) in modulating social behavior is a well-characterized and extensively studied topic across various scientific domains, including social-cognitive neuroscience (Ebert & Brüne, 2017; Marsh et al., 2021) and behavioral economics (Lambert et al., 2017; Zak et al., 2007). This thesis adopts a multidisciplinary approach to investigate the contribution of oxytocin to social behavior, employing primarily animal-based research that incorporates multiple experimental models, both under physiological conditions and in models replicating neuropsychiatric disorders, and, to a lesser extent, human-based investigations. The introductory chapter (chapter 1) provides a comprehensive review of the current literature on oxytocin's involvement in social behavior and social cognition, under both physiological and pathological conditions. Particular attention is given to the economic dimensions of social interaction, as well as the underlying biological mechanisms, with a focus on non-neuronal cellular contributors, specifically glial cells, and among them, astrocytes, as emerging mediators of oxytocin's effects within the central nervous system. Chapter 2 presents an overview of two major copy number variants (CNV) syndromes and their respective human and animal models, which have been implicated in studies contributing to or forming the basis of this thesis. Chapter 3 focuses on a recent publication investigating the 22q11.2 deletion (one of the two CNV syndromes mentioned in chapter 2) mouse model, highlighting an oxytocin-mediated rescue of social deficits. This work supports the hypothesis of oxytocin's multi-target therapeutic potential, notably revealing an unexpected mechanism involving modulation of the blood–brain barrier. Chapter 4 explores the role of astrocytes expressing oxytocin receptors in regulating social behavior, exploiting two different animal models, characterized by altered oxytocin-related functioning. Finally, Chapter 5 introduces a novel experimental protocol designed to investigate potential crosstalk between microbiota-induced alterations and possible increases in peripheral oxytocin levels and their effects on social behavior in humans, assessed through behaviorally relevant economic tasks.