

# ARMI SPECIAL SEMINAR

# 2023



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## FISHing for solutions to human neurodevelopmental disorders

Dr. Corinne Houart  
King's College London

### Abstract

The emergence of powerful genetic and imaging technologies has transformed our understanding of genetic disorders. The presentation will focus on the power of studying genetic animal models of human neurodevelopmental disorders in providing at the same time a molecular understanding of the disease, new therapeutic avenues and a deeper knowledge of the normal function of the proteins affected. The data presented will also illustrate how comparing animal models to human biology provides insights into the evolutionary mechanisms driving brain complexity.

### Bio

Dr. Corinne Houart is a Professor of Developmental Neurobiology, MRC Centre for Neurodevelopmental Disorders and Vice Dean Research of the Faculty of Psychiatry, Psychology and Neuroscience. She is on the editorial board of leading developmental biology journals, board member of funding bodies, EMBO member and recipient of the MRC Suffrage Science Award. Prof. Houart got her PhD at the University of Brussels in 1992, working on gene regulation in cancer. She dedicated her postdoctoral training to exploring early forebrain development in zebrafish, at the University of Oregon in the USA, the then epicentre of zebrafish genetics. She started her own lab in 2002, at King's College London. Her team unveiled key mechanisms of fate specification shaping forebrain regionalisation and is currently identifying the evolutionary aspects of these early decisions. They aim to understand the signalling integration controlling telencephalic across species using animals and 3D cell culture. Her group developed more recently a second research direction, using original approaches to understand local mRNA regulation driving neuronal maturation. Both research directions led to findings opening therapeutic avenues for neurodevelopmental and neurodegenerative disorders.



### EVENT DETAILS

#### DATE:

October 25<sup>th</sup>, 2023

#### TIME:

10.00 – 11.00a.m.

#### VENUE:

G19, Opposite Cinque Lire  
15 Innovation Walk  
Monash University  
Clayton Campus

#### HOST:

Prof. Peter Currie



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The Australian Regenerative Medicine Institute (ARMI) acknowledges the generous support of Monash University and the Victorian State Government.