



CICLO

CONFERÊNCIAS 17|18

ISPA - INSTITUTO UNIVERSITÁRIO

SOCIAL AND AFFECTIVE NEUROSCIENCE: LESSONS FROM FISH



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Social and affective neuroscience are emerging branches of neuroscience focused on the understanding the neural mechanisms of social interactions and emotions, respectively. These two areas only developed more recently because, in contrast to sensory, motor and core cognitive processes (e.g. attention, learning, memory), both social interactions and emotion have been considered more difficult to tackle, either because the behaviour involved is more complex to study or because the phenomena itself is more difficult to operationalize in model organisms (e.g. emotion in animals). However, progress at the methodological and conceptual levels allowed significant progress in both areas in recent years. Our lab has been involved in both areas and in this seminar I will present the progress we have made in the study of: (1) neural and molecular mechanisms underlying social behavior and social cognition in zebrafish; and (2) appraisal of environmental stimuli (e.g. stressor) and affective states in fish. In the first case, we are using genetic tools available for zebrafish to genetically dissect the neural mechanisms involved in social behavior and cognition, in particular the regulation of a brain social behavior network by oxytocin neurons. In the second case, we have designed behavioural paradigms to probe the occurrence of cognitive appraisal (i.e. subjective appraisal of value by the individual) and emotion-like states in fish, using non-model species with economic relevance (seabream, seabass, tilapia). Our results support the view that the neural mechanisms involved in social behavior and in emotion are evolutionary conserved, and that fish can be used as models in these two neuroscience areas, which have been so far mainly using humans and non-human mammals as their model organisms.

26 FEVEREIRO 2018

12H30 | SALA DE ATOS

HOST
**BEATRIZ
FERNANDEZ**

ENTRADA LIVRE



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