Master Projects

The Eco-Ethology Research Unit from ISPA (Lisbon) (www.ispa.pt/ui/uie/ibbg) is offering a master project in the following topic:

Project 2 - **"Neuroendocrine control of reproductive behavior in the Mozambique Tilapia: mechanisms and effects of the social environment"**

This project aims to identify the neuroendocrine mechanisms underlying the expression of reproductive behavior and how these are affected by social factors in the Mozambique tilapia *Oreochromis mossambicus*. In the first part of the project, the neural and endocrine mechanisms involved in the control of reproductive behavior will be identified by a combination of behavioral, neuroendocrine and molecular methods. These include identifying the brain areas underlying the expression of reproductive behaviours using immediate early genes as markers of neuronal activation and testing the effect of hormones and neuropeptides on behavior and on neuromodulatory pathways. In the second part of the project the modulation of androgens by the social environment and its effects in the neural circuits underlying reproductive behaviors will be tested. In particular, the effects of social status and social stability on circulating androgen levels and on the expression of brain steroidogenic hormone receptors, steroidogenic enzymes, neuropeptides such as AVT and IT and monoamines will be characterized. The candidate is expected to participate in part of these tasks. The candidate will be based, and conduct the majority of the laboratory work at ISPA, in Lisbon, under the supervision of Dr. Rui Oliveira. Candidates should send a copy of their CV's and a motivation letter to ruiol@ispa.pt.

23-12-2009