Seminars in Zoophysiology at Aarhus University

Control of Breathing in Fish – a Role for Hypoxia Inducible Factor

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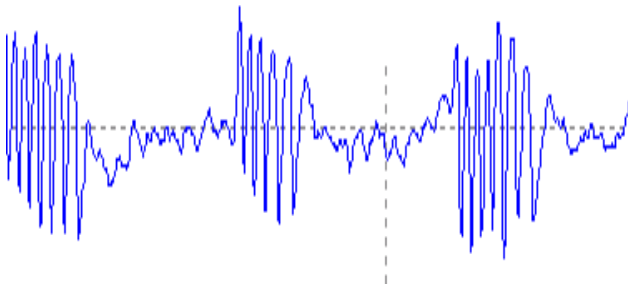
The control of breathing in fish ensures that the volume of water flowing over the gills (ventilation) is appropriately matched to metabolic rate and/or environmental conditions. Changes in ventilation, mediated either by adjustments in breathing frequency or amplitude, predictably modify the rates of respiratory gas transfer but also can profoundly alter arterial blood gas levels and acid-base status.

I will discuss several of the factors that can influence the reflex hyperventilatory response of zebrafish (*Danio rerio*) to environmental hypoxia. In particular, I will focus on the emerging role of hypoxia inducible factor in regulating hypoxic ventilatory responses and overall hypoxia tolerance in both larvae and adults.



Friday October 27th 2017 at 10.30
Seminar room at zoophysiology (building 1131)