

The serotonin transporter (SERT) and the control of circulating serotonin in teleost fish

Uncontrolled circulating serotonin (5-HT) leads to vasoconstriction of the gill and detrimental reductions in oxygen uptake, an effect that could dramatically impact tolerance to low environmental oxygen levels (hypoxia) and limit survival. A graduate student in my lab will focus on determining how circulating 5-HT is controlled in teleost fish and will examine the role of 5-HT and the serotonin transporter, SERT, in regulating branchial and systemic vascular resistance under normoxic and hypoxic conditions. The project is in the area of whole animal cardiovascular physiology and neuroendocrinology and the student will learn transport kinetics, pharmacology, immunohistochemistry and molecular biology.

