

Wednesday, April 30th, 2014

LSC 3 - Life Sciences Centre

2350 Health Sciences Mall

12-1pm



## Dr. Anthony P. Farrell

*Professor, CRC (Tier 1) Chair*

*Faculty of Land and Food Systems and Dept. of Zoology  
UBC*

### **“Cardiorespiratory physiology during extreme exercise at supra-optimal temperatures: the case of adult Fraser River sockeye salmon”**

Tony Farrell holds a CRC (Tier I) Chair in the Faculty of Land and Food Systems and the Department of Zoology. He performs basic cardiovascular research on animals ranging from primitive hagfish, crucian carp and freshwater turtles, whose hearts function without oxygen for days to months, to polar fishes in which the heart beats at 0°C. His discoveries are applied to everyday issues such as fish conservation and aquaculture.

In this seminar, he will show how cardiorespiratory physiology has been tailored for a remarkable feat of athleticism using the once-in-a-lifetime spawning migration of Fraser River sockeye salmon past UBC’s backyard. He will provide physiological support (maximum O<sub>2</sub> consumption, blood gases, cardiac output & cardiac β-adrenoceptors) for the idea that, during extreme exercise at supra-optimal temperatures, the heart becomes the weak link in the O<sub>2</sub> supply chain to tissues. Given the backdrop of rising global temperatures, you will discover why your local supply of sushi is being threatened!

<http://people.landfood.ubc.ca/anthony.farrell/>