

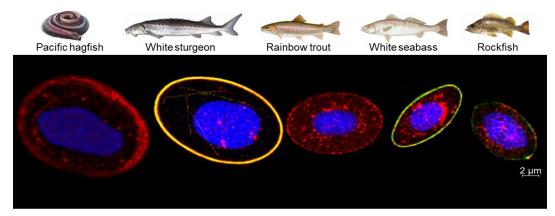
## Comparative red blood cell physiology

uncovering novel cellular mechanisms to improve human health and predict the impacts of climate change on fishes

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Red blood cells are the most abundant cell type in vertebrates (~80% of endogenous cells) and have well-established roles in transporting oxygen to all other cells. Our research seeks to disprove the common perception that red blood cells are simply bags full of haemoglobin, by studying active cellular functions that sense the conditions in the blood, regulate intracellular proteins and release signalling molecules that regulate vascular tone and mitochondrial respiration. Combined these red blood cell mechanisms are critical to maintain the fine balance between microvascular oxygen supply and demand, which may be disrupted in human pathologies and in fishes affected by climate change.



Friday, May 9<sup>th</sup> – 13.00 - 14.00, 1131-127