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**S4 Fig. Ultrastructural perfusion fixation artifacts in rainbow trout gills.**

Representative transmission electron microscopic images of secondary lamellae of a control fish
(**A**, non-perfused), and of a gill perfused with ~100 mmHg (**B**). Capillary (CAP), pillar cell (PC), epithelial cell (EC), chloride cell (CC). Note the detachment of the gill epithelium in **B** (arrows). Inset in B shows severely distended and swollen mitochondria of a chloride cell. TEM. Bars = 1 µm.