**Title:** Chu\_Gale-2016\_LnO-Data. A Canadian Healthy Oceans Network Ecosystem Function Project, EF-13.

**File:** CHONe\_EF-13\_ChuJ\_Data\_LnO2016.xlsx

**Data collection dates:** 2012-2014

**Data collection location:** Saanich Inlet, Vancouver Island, British Columbia, Canada

**Description**: Data were generated from lab-based respirometry experiments designed to measure metabolic rates (oxygen consumption) and critical oxygen tensions (O2crit, Pcrit) for slender sole, spot prawn, and squat lobster. Data was collected as part of a PhD thesis (Chu).

**Associated Publication:** Chu JWF, Gale KSP (2016) Ecophysiological limits to aerobic metabolism in hypoxia determine epibenthic distributions and energy sequestration in the northeast Pacific Ocean. Limnology and Oceanography. Doi: 10.1002/lno.10370

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**Data organization:** The file has two worksheets. Each row summarizes the results of an experiment where an individual organism (slender sole, spot prawn, or squat lobster) was placed inside a respirometry chamber.

*Closed\_Resp* summarizes the results of closed respirometry experiments designed to measure O2crit and the slopes of the oxyconformation and oxyregulation curves of individual trials. O2crit is presented in oxygen concentration (ml/L) and equivalent oxygen partial pressure (kPa). Mean and standard error (SE) are presented for each trial and were calculated using piece-wise regression analyses for each trial.

*Intermitt\_Resp* summarize the results of intermittent respirometry experiments designed to measure mass-specific and mass-corrected oxygen consumption rates. Mean and standard error (SE) are presented for each trial and were calculated using the percentile method.