Bioenergetic models need to account for metabolic costs associated with locomotion but these data are often missing. Routine metabolic rates are often scaled upward about fourfold to account for the costs associated with activity.

We have developed a method for swimming schools of herring to estimate the cost of swimming using intermittent flow respirometry.

The method includes acclimating schools of 5-6 similarly sized individuals to the respirometer for 4 h prior to swimming them at different speeds while measuring oxygen consumption.

Successful development of a method for measuring swimming costs in schooling species will lead to significant improvements in biogenergetic models. Respirometry will be used in the GOAEIRP with rockfish to assess metabolic rates.