



# GEM3

Genes by Environment  
Modeling · Mechanisms · Mapping

**Module Name:** Assessing the Influence of Temperature and Dissolved Oxygen on Ventilation of Rainbow Trout (*Oncorhynchus mykiss*)

**Institution:** University of Idaho

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**Summary:**

This module aims to teach students how to analyze rainbow trout respirometry data using R Programming software. Designed specifically for use with data collected by students on an experiment measuring rainbow trout ventilation rate in response to differences in temperature and dissolved oxygen, the script herein provides methods which will allow students to both visualize and interpret these data.

*This module was developed and tested in University of Idaho's Special Topics course (ENVS 404/504).*

**Contents:**

- Ichthyology Respirometry Lab Module (pdf)
- Respirometry data file (csv)

**Notes:**

- This module was developed for the University of Idaho's Ichthyology course (FISH 481)

**Questions?** Contact the PI or the GEM3 PUI Liaison, Stephanie Sevigny, [stephanieseigny@boisestate.edu](mailto:stephanieseigny@boisestate.edu)

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