

Jan 20, 2020

Zebrafish (Danio rerio) Environmental Summary, Aquatic Resources Program, Boston Children's Hospital 2019 V.4 🖘

Christian Lawrence¹, Jason Best¹, Althea James¹, Shane Hurley¹, Mitchel Shia¹, Michelle Urh¹, Brady Hirshfeld¹, Nina Bakker¹, Hugo Perdomo¹

¹Boston Children's Hospital



dx.doi.org/10.17504/protocols.io.bbjhikj6



Christian Lawrence Boston Children's Hospital

ABSTRACT

Environmental and housing conditions experienced by laboratory animals exert profound effects on their biology, physiology, and behavior. These parameters are important and often overlooked sources of potential variation in experiments, and should be reported in peer-reviewed publications in order to promote scientific reproducibility. To that end, here we provide a summary of the environmental conditions in zebrafish (Danio rerio) aquaculture facilities at Boston Children's Hospital (BCH). We include data on the physico-chemical, health, and nutrition of zebrafish in three separate facilities at BCH: Karp, Enders SSB, and Enders Lobby. In this year's version, we also include new information on our sanitization protocol validation, and dietary inputs. We also provide some additional characterization of our sampling methods for water parameters and health in an updated legend. This information will be applicable to any study involving zebrafish conducted in one of these three facilities during the year of 2019.

EXTERNAL LINK

https://doi.org/10.1371/journal.pone.0199712

THIS PROTOCOL ACCOMPANIES THE FOLLOWING PUBLICATION

Widrick JJ, Gibbs DE, Sanchez B, Gupta VA, Pakula A, Lawrence C, Beggs AH, Kunkel LM (2018) An open source microcontroller based flume for evaluating swimming performance of larval, juvenile, and adult zebrafish. PLoS ONE 13(6): e0199712. doi: 10.1371/journal.pone.0199712

ATTACHMENTS

BCH Danio rerio Environmental Summary 2017 .pdf

BCH Danio rerio Environmental Summary 2018.pdf

BCH Danio rerio Environmental Summary 2018a.pdf

BCH Danio rerio Environmental Summary 2019.pdf

This is an open access protocol distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited