



Our OER odyssey: Creating a case-study based OER lab manual for undergraduate anatomy and physiology

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Abstract

What if you could increase student engagement in the laboratory setting and reduce the cost to students? We will recount our odyssey to create and use case study-based learning in the Life Sciences laboratory. This lab manual consists of 12 Open Educational Resource (OER) anatomy and physiology labs for the undergraduate, upper-level high school, or allied-health student. Each lab centers around a relevant Case Study that is resolved by the end of lab. This poster will highlight the lab contents and the lab format and will highlight the pros and cons of using OER in the laboratory. Some of the labs (cells, microscopes, a review of the metric system) are usable in an introductory Biology lab course, as well. We will also share different methods used to create high quality images. Students and instructors are pleased with its readability and relevance. In conclusion, this pedagogically rigorous OER manual is free and accessible to all lab instructors nationwide via the web, pdf, or CANVAS (our learning management system). Using this manual has strengthened our lab curriculum, encouraged critical thinking and independent work in our students, and, most importantly, significantly reduced the course cost for each student.

Keywords: Open Educational Resource, case study, lab manual

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