

Abstract Submitted  
for the APR15 Meeting of  
The American Physical Society

**Analyzing NEXUS/Physics Laboratory Curriculum in a Large-enrollment Environment**<sup>1</sup> KIMBERLY MOORE, University of Maryland, Physics Education Research Group, WOLFGANG LOSERT, University of Maryland, Department of Physics — UMD-PERG's NEXUS/Physics for Life Sciences laboratory curriculum, piloted in 2012-2013 in small test classes, has been implemented in large-enrollment environments at UMD from 2013-present. These labs address physical issues at biological scales using microscopy, image and video analysis, electrophoresis, and spectroscopy in an open, non-protocol-driven environment. We have collected a wealth of data (surveys, video analysis, etc.) that enables us to get a sense of the students' responses to this curriculum in a large-enrollment environment and with teaching assistants "new" to the labs. In this talk, we will provide a brief overview of what we have learned and comparisons of our large-enrollment results to the results from our pilot study. Additionally, we will share data examining the changes in self-reported student goals, which we believe is an indication of our lab curriculum's impact on student thinking.

<sup>1</sup>This work is supported by funding from HHMI and the NSF.

Kimberly Moore  
University of Maryland, Physics Education Research Group

Date submitted: 09 Jan 2015

Electronic form version 1.4