

1145-G5-1393 **Filippo Posta*** (filippo.posta@estrellamountain.edu), Phoenix, AZ , and **Galyna Kufryk**.
Integrating mathematics and microbiology: a case study to improve learning outcomes and foster faculty collaboration.

Math remediation in STEM courses has profound effects on learning outcomes and student retention in STEM secondary education. These effects are amplified in institutions with a diverse student population and serving metropolitan areas. We created and integrated an asynchronous, just-in-time-remediation model that relies on cross-disciplinary institutional collaborations grounded in the principles of Scholarship of Teaching and Learning (SOTL). In this presentation, we will discuss the specific aim of integrating remediation of exponential and logarithm concepts in a microbiology course. Discuss our results that show a statistically meaningful improvement of learning outcomes when compared to learners who did not use the remediation module. We will also discuss student's attitudes toward this effort and highlight some recurring themes. Our findings suggest that instructor driven asynchronous remediation can be effective, scalable and inexpensive. We will discuss best practices for implementation, collaboration and fostering of a SOTL culture through the creation of just-in time remediation modules. (Received September 21, 2018)