

Supplemental Material

CBE—Life Sciences Education

Ballen *et al.*

Name	Institution	Summary of undergraduate lab experience
Cissy J. Ballen	University of Minnesota	Students use an original dataset obtained from the Program in Human Sexuality to consider predictors of committing sexual offenses among adolescents.
Jessamina E. Blum	University of Minnesota	Oral Microbiome - Students generate and test hypotheses about antibacterial properties of different substances against two cavities-risk indicator bacterial species.
		Snapshot Serengeti - Students generate and test hypotheses about ecological data gathered through the Snapshot Serengeti citizen science project.
		Pennycress Project - Students screen and perform tests on Pennycress mutants with the goal of creating an optimized strain of the plant for winter crop cover biofuel production in Minnesota.
Sara Brownell	Arizona State University	Conducts educational research on the effectiveness of CUREs using multiple approaches.
Sadie Hebert	University of Minnesota	Students test hypotheses about sexual selection in bean beetles.
James Hewlett	Finger Lakes Community College	Students design and run experiments as a way to optimize protein expression in a recombinant DNA / protein production system.
		Students use genomic tools to test hypotheses related to the adaptive radiation of caribbean anoles.
Joanna R. Klein	University of Northwestern - St. Paul	Students use an array of bioinformatic tools to annotate hypothetical genes in the marine bacterium <i>Cellulophage lytica</i> and clone one of their hypothetical genes in an expression vector.
		Small World Initiative - students isolate and identify antibiotic producing microbes from the soil.
Erik A. McDonald	University of Washington, Tacoma	Students quantify and compare micro-, macro-, and megaplastics at two different beaches in Tacoma, Washington.
Denise L. Monti	University of Alabama	Tick Surveillance - Students analyze local, field-collected ticks for the presence of <i>Rickettsia spp.</i> as part of a proposed long-term tick monitoring program.
Stephen C. Nold	University of Wisconsin-Stout	Honey Bee Colony Collapse Disorder: students use molecular biology tools to discover honey bee pathogens in infected and healthy hives.
Krista E. Slemmons	University of Wisconsin-Stevens Point	Baseline Ecological Data Pre-CAFO: students generate biological baseline data of a local watershed prior to the potential construction of a concentrated animal feeding operation.
Paula A.G. Soneral	Bethel University	Buckthorn to Biofuel - Students convert the invasive species Buckthorn (<i>Rhamnus cathartica</i>) into combustible biofuel
		Breast Cancer Diagnostics - Students use RNAseq and DNA microarrays to classify and subtype human breast tumors.
		Small World Initiative - Students explore soil environments for antibiotic-producing soil bacteria.
Sehoya Cotner	University of Minnesota	Students test hypotheses about sexual selection in bean beetles.