A. Briefly describe overall research program at your laboratory. One focus of my laboratory is the documentation of fauna at our field site (Winthrop Farm). One aspect of the latter is using metabarcoding to identify organisms in the soil fauna at our successional plots. Research website: http://www.birdnest.org/smithj/

B. Briefly describe specific project(s) for your teacher: Context: My invertebrate biology class has begun a species inventory of soil arthropods collected from our successional plots adjacent to the Winthrop Woods. The proposed project would comprise collecting these arthropods, identifying them, photographic them using the scanning electron microscope, sequencing the 18S gene of one or more species, and relating that (those) species to the molecular barcodes that we’ve obtained from whole-community DNA samples.

C. Will any other people (post docs, grad students, undergraduate students, colleagues, etc.) be involved directly with your teacher? No, although I will have at least two other students working in my lab this summer.

D. Will you require any advanced reading/preparation for the teacher? If yes, please briefly describe. Yes. If the teacher is not already familiar with the use of a Berlese funnel to collect soil arthropods, that is readily researched on-line.