**Genomic DNA Extraction using MO-BIO PowerBiofilm® DNA Isolation Kit**

Purpose: Swabbing for environmental samples using flocked nylon swabs allows for the maximum amount of microbes to be gathered. Since the end goal of these experiments is to identify *Delftia* in these communities, and it is known that *Delftia* produce biofilms, we will use a biofilm DNA isolation kit instead of a normal DNA isolation kit to increase our chance of collecting *Delftia* DNA. We will also isolate DNA straight from the swab to accurately represent the original amount of *Delftia* in the community.

Materials

* MO-BIO PowerBiofilm® DNA Isolation Kit
* Copan 552C Flocked Nylon Swabs

Protocol

1. Swab a surface using a Copan swab. “Rotate the swab during sample collection to maximize collected sample volume.”
2. Store swabs at 4°C until use.
3. Skip Step 1 of the MO-BIO PowerBiofilm® DNA Isolation Kit protocol.
4. Thoroughly clean a pair of scissors using ethanol. Place the head of the swab into the provided PowerBead tube and use the scissors to cut off the excess neck of the swab.
5. Complete the remainder of the PowerBiofilm® DNA Isolation Kit protocol.
6. After finishing the elution step of the PowerBiofilm® DNA Isolation Kit protocol, quantify the amount of DNA collected by using a Nanodrop.

Use filter tips for all following steps. Clean the pedestal with a KimWipe between steps.

* 1. Clean the pedestal of the Nanodrop using 2 µL of diH2O.
  2. Initialize the instrument using 2 µL of diH2O.
  3. Load 2 µL of elution buffer to blank.
  4. Load sample and quantify. Record the ng/µL and 260/280 values.