**Design Document**

**Problem Statement**

The ddPCR pipeline is hard coded for specific kits and organisms. PHL would like to expand the ddPCR pipeline to be more flexible and inclusive of any organism/kit needed for the the lab.

**Objectives**

Reworking the ddPCR pipeline to be a general modular workflow template for any organism tested with the ddPCR.

**Proposed Solution**

Update the ddPCR pipeline to be flexible and modular for any new tested kits and organisms.

**Implementation Plan**

1. Create a dev environment and a Git branch to ensure development does not interfere with production software
2. Separate analyzed data or automated clustering into separate scripts that get called depending on what is detected
3. Ideas to be implemented
   * Use the ddPCR import sheet to track organism and kit used (through title of input sheet and columns filled out by Techs)
   * Generate separate processes when using amplitude for automated clustering or already analyzed data
   * Graphs and tables labels filled by information within the ddPCR import sheet
   * Create independent table files with kit information to be merged based on specific id column
4. Create a PR and merge these changes to main
5. Issue a static version release with semantic versioning (minor release)