BioAgilytix is a leading global contract research organization focused on supporting pharmaceutical and biotech partners in all phases of drug development. BioAgilytix provides PK, immunogenicity, biomarkers, and CMC bioanalytical services supporting the development and release testing of therapeutics across a number of industries and disease states.

**Project Description:**

Empty capsids are viral capsids that do not contain vector genome, formed when adeno-associated viruses (AAV) are packaged for use as viral vectors in gene therapy. It is believed that empty capsids may increase the innate or adaptive immune response in patients, so they are considered product-related impurities which should be characterized and monitored. ELISA combined with qPCR/ddPCR can determine the capsid titer and vector genome titer. These results can be used to calculate the empty/full ratio of AAV. The intern will evaluate the commercial ELISA kits and establish off-shelf ELISA methods for identification and titer determination of several most-commonly-used AAV gene therapy serotypes. The intern will also develop the qPCR/ddPCR method for vector genome titer testing for these serotypes.

**Applicant Skills:**

* Hands-on experience on ELISA
* Hands-on experience on qPCR or ddPCR
* Good laboratory documentation skills
* Creative thinker with positive attitude and problem-solving skills
* Excellent communication skills

**Location:**

Durham and Morrisville, NC