Research Progress Report: NNPDF Fellowship

PI: Stephanie M. Cologna Sponsor: Forbes D. Porter

Research Summary:

Aim I of my proposal was to "Develop and characterize an iterative isotopic tagging and analysis method ((e.g., iTRAQ) to identify and perform relative quantification of differentially expressed proteins in cerebrospinal fluid (CSF) of NPC1 patients compared to age appropriate controls."

Lay Summary:

During the initial stages of the fellowship period, the majority of work has been focused on establishing a suitable sample preparation protocol to perform protein biomarker studies in cerebrospinal fluid. An appropriate method has been developed and the first cohort of NPC1 patient samples has been analyzed. Several proteins have been identified to be altered in the NPC1 patient samples compared to controls. Additional experiments are being designed to analyze more patient samples and to confirm the results obtained thus far