## For the purpose of this application:

Dr. Brannigan developed the general research design, and helped guide me to clearly understand the nature of this research. She has suggested literature and figures, which would best describe our proposed research. I have preformed literature searches for membrane elasticity, membrane organization, and lipid and nAChR based diseases, as well as collected our initial data to produce our figures. Dr. Brannigan has reviewed and suggested edits to this proposal and I have incorporated and expanded them to better portray our goals.

## For the purpose of PhD research:

I designed and ran simulations to test our hypotheses, constructed analytical tools, and prepare figures and sections of manuscripts. Dr. Brannigan provides guidance and offers insight on simulation design, tool and analysis, coordinates with collaborators; through which opens communication between her students and other experts in the field. We have weekly meetings to discuss progress and issues.