This research experience explored an innovative way to inspect and uncover protein structure via molecular dynamics simulations. These simulations are run on a computer, allowing components of the protein structure to interact with each other, as well as with the surrounding environment. This method allows researchers to see how a protein moves and interacts with the environment, without needing to have the actual protein present. Our final task of the project examined a hypothetical protein that we could visualize forming a knot with itself. Knotted proteins are very rare, and these simulations provide insight into how proteins may be structured in order to create these knots.