The 5-HT1A receptor is a serotonin receptor that takes part in many biological processes such as learning, memory, thermoregulation, and sleep. This receptor is also a common target for anxiolytic, antidepressant, and antipsychotic medications. This receptor is a G-protein coupled receptor (GPCR). Buspirone is an anxiolytic that impacts the serotonin system by acting as a partial agonist of the 5-HT1A receptor. When this receptor is bound by buspirone it goes through several conformational changes that lead to the release of the G-protein Gi-alpha. We modeled this interaction between receptor and ligand to better understand the complex mechanisms surrounding receptor-ligand binding. First we used pipe cleaners to create a prototype, which allowed us to see the structure of the receptor. Next, we drew a more complex receptor that could more accurately represent conformational changes and the release of the g protein. Lastly, we modeled this GPCR using TinkerCad and printed our model using an Ultimaker Cura 3D printer. This 3D model displays a simplified version of the binding of buspirone to the 5-HT1A receptor that allows for a greater understanding of ligand receptor interactions for students taking introductory neuroscience classes. Through watching the model developed, our group hopes to bridge the gap between the simple “lock and key,” model and a more advanced and complex understanding of receptor-ligand binding.