**Problem Statement**
Double the amount of contacts in a microconnector from 16 to 32 while decreasing the size in order to improve patient comfort as well as transplantation

**Motivation**
- Improve stimulation for treatment of neurological diseases
- Provide a more feasible way to interchange neurostimulation devices
- Improve stimulation for prosthetic limbs

**Objective**
- Design a microconnector that allows for the separation of the wire from the neurostimulator to the leads
- Prove concept for manufacturing a detachable microconnector
- Manufacture a final connector that is hermetic and biocompatible

**Initial Design**

**Proposed Design**
- Microconnector size to be 2mm wide by 7mm wide in size.
- Microconnector will consist of 32 pins and holes which allows the two halves to mate
- Composed of biocompatible material such as alumina, platinum and titanium.
- Preliminary manufacturing will be a proof of concept for proposed design using low temperature co-fired ceramic (LTCC) and silver
- The final product should be hermetic

**Prototype Comparison**

**Timeline**