1. Update
   1. Progress on the circuit
      1. Got it working to 2 mA
      2. We are getting closer to getting control with a microcontroller
         1. Ramp is somewhat working, we need more resolution and we have ideas that we can use with microcontroller settings we can modify
      3. We are working on a safety mechanism by measuring output voltage
         1. We can use this to know when the hat is on the head by setting the hat to a low current setting using the micro controller and then watching for a voltage drop when the head’s impedance is detected.
   2. Progress on the hat
      1. We have been testing the hat on each other with a multimeter
         1. We noticed that more pressure was needed to achieve a more reasonable resistance
         2. To accomplish this we think that carefully placed straps could be used for pressure
2. Questions
   1. We know that we need higher voltage to achieve above 21 kOhms currently 50 volts fives 22kOhms range, which could work