Final Work Flow:

**Whole Process for Pinky 100:**

1. Meshes need to be generated -- (CHRISTOS STEP)
2. CGAL step: Initial Segmentation of Whole Neuron
   1. Code: Creating\_and\_Writing\_Datajoint\_Tables\_Whole\_Neuron-With\_Check.ipynb
   2. Tables:
      1. Pull from: CleansedMesh (NEED NEW WHERE MESH GOING TO BE)
      2. Push to: ComponentAutoSegmentWhole100
   3. **Issues**: Some neurons didn’t get segmented by library
3. Whole Neuron Automatic Labeling:
   1. Code: w5\_final\_dj\_whole\_labeler.py
   2. Pull from:
      1. CleansedMesh (NEED NEW WHERE MESH GOING TO BE)
      2. ComponentAutoSegmentWhole100: get the cgal data
   3. Push to:
      1. Annotation100: both verts/triangle data and the label data
   4. **Issues**: Some neurons didn’t get automatically labeled
4. Proofreading Step (for Automatic Labeler):
   1. Code: 5\_Auto\_Proofreader\_Tab\_without\_fast\_label.py
   2. Pull from:
      1. CleansedMesh: for the triangle/vert physical locations
      2. Annotation100: verts/triangle label data
   3. Push to:
      1. CleansedMesh100: final labels
   4. **Issues**: sometimes doesn’t have enough colors for automatic labeling
5. Convert the Neurons into Compartment.Component100 Table (has indices and compartment of that part) – (CHRISTOS STEP)
6. Spine CGAL step:
   1. Code: Creating\_and\_Writing\_New\_Datajoint\_Tables\_USED\_Try\_3
   2. Pull from:
      1. CleansedMesh: for the triangle/vert physical locations
      2. Compartment.Component100: indices of the part
   3. Write to:
      1. ComponentAutoSegmentSpine100: generic CGAL segmentation labels
   4. **Issues**: One component wasn’t able to be computed when testing
7. Spine Automatic Labeling:
   1. Code:
   2. Pull from:
      1. CleansedMesh: for vert/faces spatial mesh data
      2. Compartment.Component100: indices to use
      3. ComponentAutoSegmentSpine100: spine segmentation
   3. Write to:
      1. ComponentLabel100: will hold an array that has labels for all spines/spine\_heads/spine\_necks
   4. **Issues**: Wasn’t able to classify one because didn’t have cgal\_segmentation data
8. Condense Spine Label and Whole neuron labels all into one --(CHRISTOS STEP)