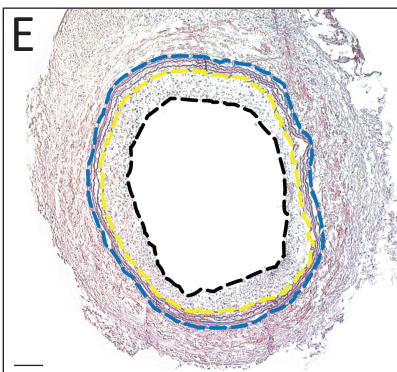


1. Hematoxylin & Eosin (H&E) stain every 10 slides along entire artery to find area of injury (e.g. slides 1, 10, 20, 30, through slide 70).
2. Stain additional slides around the injury to find the peak occlusion (e.g. slides 20, 30, and 40 had hyperplasia, thus stain slides 15, 25, 35, and 45).
3. Stain and quantify the slide with peak occlusion and equidistant slides before and after the peak injury slide for a total of 3-10 slides per rat.
4. Average the obtained values from the 3-10 slides to get the average injury (% occlusion, intima:media ratio, neointimal hyperplasia) per rat carotid artery.



$$\% \text{ Vessel Occlusion} = \left( \frac{\text{Area}_{\text{internal}} - \text{Area}_{\text{lumen}}}{\text{Area}_{\text{internal}}} \right) \times 100$$

$$\text{Intima:Media} = \frac{\text{Area}_{\text{intima}}}{\text{Area}_{\text{media}}} = \frac{\text{Area}_{\text{internal}} - \text{Area}_{\text{lumen}}}{\text{Area}_{\text{external}} - \text{Area}_{\text{internal}}}$$