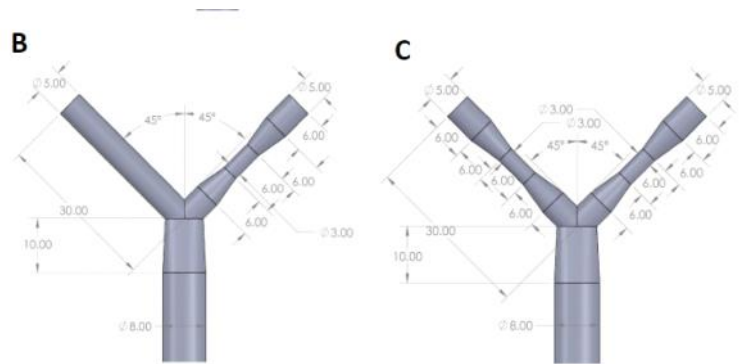


Constricted Arteries

Tuesday, September 6, 2022 9:28 PM

Objective: I plan to have the blockages modeled as shown to the right and get started on simulation.

I learned how to edit my previous designs using the timeline.



Simulation

Tuesday, September 13, 2022 10:18 AM

Objective: I plan to be able to simulate the blood flow in at least one model.

Table 1: Carotid artery flow properties

Common carotid artery diameter	8 mm [1]
Internal carotid artery diameter	5 mm [1]
External carotid artery diameter	5 mm [1]
Flow rate into common carotid artery	320 ml/min [2]
Pressure at outlet of external and internal carotid arteries	70 mmHg
Carotid artery luminal surface roughness	10 μm [3]
Yield stress of whole blood	14.4 mPa [4]
Body temperature	37° C