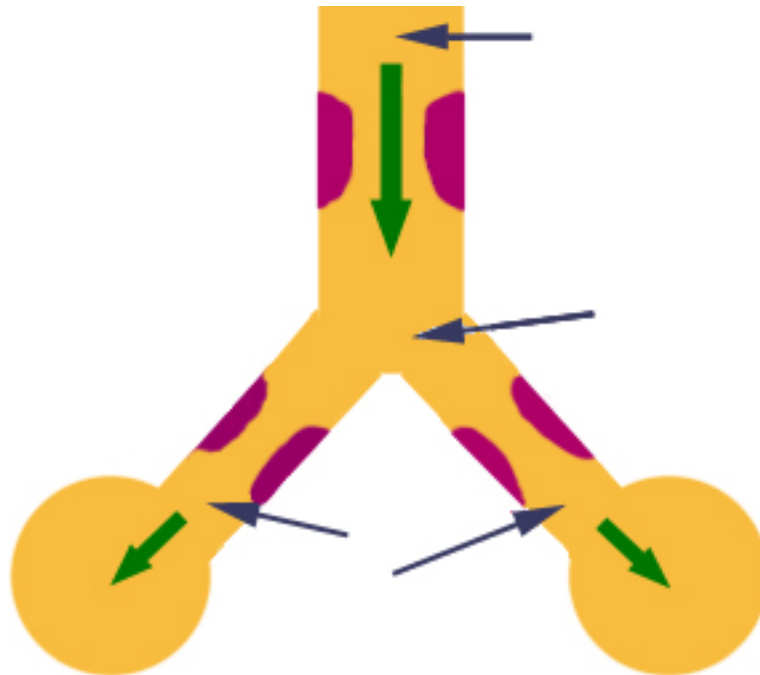


Vascular Steal Protocol

Instructions: Complete the five protocols. Follow each of the steps (check results in model below). Record the results in the answer sheet at the bottom of the page. Be sure that you can answer all of the questions associated with each protocol.

Protocol I. Effects of arterial pressure and large vessel resistance on flow.

1. Reset the model.
2. Reduce $P(\text{art})$ from 100 to 50. Type in box and press Return/Enter. What happens to flow in A and B branches? Why do the flows change by the same proportion in each branch?
3. Reset the model.
4. Increase $R(\text{sten})$ in upstream, parent vessel from 0.01 to 0.5. Type in box and press Return/Enter. Why do the flows decrease by the same proportion in each branch? Resistance was increased 50-fold, yet total flow decreased by less than 50%. Why?



Answer Sheet

	Total Flow	Flow A	Flow B
Control	100	50	50
I. Decreased aortic pressure Increased resistance (parent vessel)			