Name: . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

**Physiology Seminar: Introduction – Renal Blood Flow + Pressure Diuresis**

**Student Protocol**

**Task 1: Long-term Regulation of Blood Pressure (pressure diuresis and natriuresis)**

Draw a graph of the renal function curve

(dependency of the volume of urine output – vertically – on mean arterial pressure – horizontally)

**Task 3: Renal Blood Flow at Different Blood Pressures**

Draw a graph of the dependence of renal blood flow - vertically - on mean arterial pressure - horizontally)

**Task 2: Starling Forces Across Capillaries**

Write the Starling's equation:

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Calculate the filtration pressure at the beginning of the glomerular capillary.

Is it filtration?

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Calculate the filtration pressure at the end of the glomerular capillary.

Is it filtration?

**Task 4: Changes in Renal Blood Flow with Increased Resistance (vasoconstriction) of the Vas Afferens or Vas Efferens.**

Draw graphs:

Renal Blood Flow

Vas afferens vasoconstriction Vas Efferens vasoconstriction

**Task 5: Changes in GFR with Increased Resistance v.a., v.e.**

Draw graphs:

Glomerulal Filtration Rate

Vas afferens vasoconstriction Vas Efferens vasoconstriction

Teacher's signature