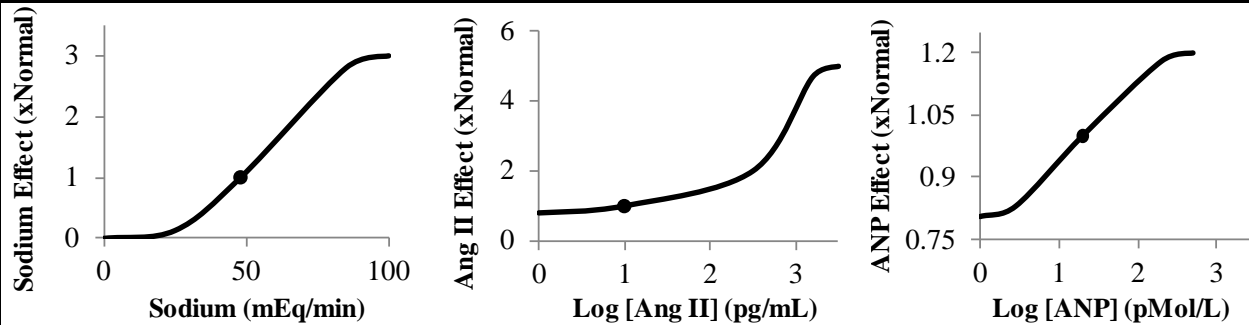


## Macula Densa Renin Signal

$$\text{Signal} = \text{Sodium Effect} \times \text{Ang II Effect} \times \text{ANP Effect}$$



## Renin Secretion

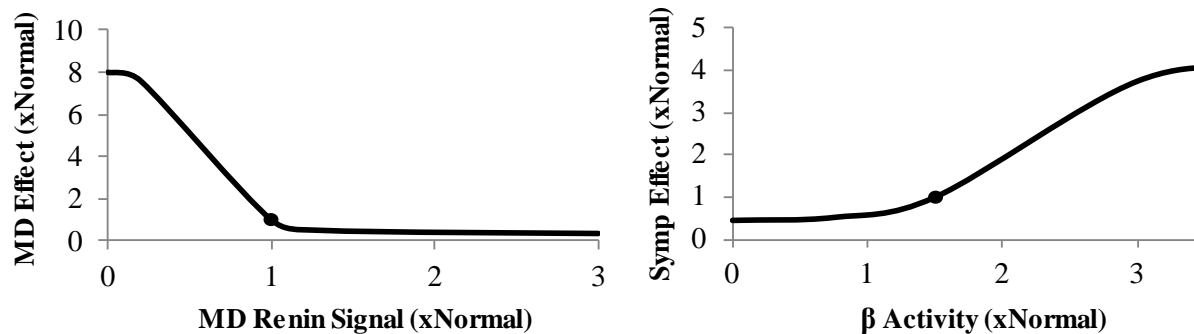
$$\text{Renin Synthesis} = \text{MD Effect} \times \text{Sympathetic Effect} \times \text{Renal Mass \%} \times \text{Base}$$

$$\text{Renin Mass} = \text{Renin Synthesis} - \text{Renin Secretion}$$

$$\text{Renin Secretion} = \text{MD Effect} \times \text{Sympathetic Effect} \times \text{Renin Mass} \times K$$

$$\text{Base synthesis} = 160 \text{ GU/min}$$

$$K = 0.00165$$



Angiotensin II, Ang II; atrial natriuretic peptide, ANP; Macula densa, MD; sympathetic, symp