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**Key questions defining research program:**
1) Molecular basis of function of acid sensing ion channels/epithelial sodium channel proteins
2) Role of acid-sensing ion channel 3 in mechanoreception and nociception
3) Role of claudin-2 in interstitial cystitis/pain bladder syndrome
4) Sensory renal innervation and blood pressure regulation

**Key words describing research program:**
1) Acid-sensing ion channels (ASICs)
2) Urothelial barrier
3) Interstitial cystitis/bladder pain syndrome
4) Mechanoreception and nociception
5) Sensory neurons

**Titles for shovel-ready research projects:**
1) Contribution of urinary K to the generation of interstitial cystitis symptoms (study in animal model of interstitial cystitis)
2) Contribution of claudin-2 to interstitial cystitis/bladder pain syndrome (analysis of human samples)
3) Characterization of a novel mouse model of interstitial cystitis (transgenic animal generated in our lab)
4) Role of ASIC3 in the modulation of pain in a cyclophosphamide model of cystitis (study with ASIC3 knockout mice)
5) Expression of ASIC3 in urinary bladder afferents

**Data sources for shovel-ready research projects:**