

SOCIETY OF PHYSICS STUDENTS (SPS) EVENT

# Mechanosensation and the Primary Cilium

(report on summer undergraduate research in Dr. Resnick's lab)

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Abstract:

The primary cilium has come under increased scrutiny as a site for mechano- and chemosensation by cells. We have undertaken a program of study using mouse renal cell lines from the cortical collecting duct to quantify how mechanical forces arising from fluid shear are transduced into cellular responses. Fluid flow through a model nephron has been analyzed to determine the in vivo forces. A novel two-sided flow chamber has been calibrated to simulate physiologically relevant renal flow conditions.

WHERE

**SI – 117**

WHEN

**Noon- 1pm**

**Thursday, September 30, 2010**