Science Seminar

Friday, October 10
Knott Hall B01
3pm

A potential role of testosterone action in DNA replication in prostate cancer cells.

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Somewhere during G1 of the mammalian cell cycle, proliferating cells prepare their DNA for replication, a step that is necessary for passing on equal copies of genes to each daughter cell. Specific proteins bind to DNA at those sites where replication begins, while additional proteins trigger DNA unwinding and replication during S-phase. For both normal and cancerous prostate cells, androgen (testosterone) stimulates cell proliferation by interacting with the androgen receptor (AR). However, the mechanism of AR activation on cell proliferation is different in normal vs. malignant prostate cells. I will discuss some major differences between normal vs. cancer cell growth, in prostate cells, in light of our hypothesis that AR might be participating directly in DNA replication in prostate cancer cells, but not in normal cells.

Refreshments will be served