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BIOGRAPHY: My research investigates how protein kinase C (PKC) affects the cell cycle during cancer growth and development. Information on the role of PKC isozymes in cell cycle regulation is important since PKC over-production has been linked with the rapid growth rate of cancer cells. Our studies use human cancer cells in-vitro to determine how PKC inhibitors affect PKC and cell proliferation and survival. The goals are to 1) identify PKC isozymes or PKC substrates which regulate the cell cycle in order to target and interfere with their activity, thereby providing selective therapeutic agents for controlling cancer cell proliferation, and 2) to find PKC inhibitors which will arrest cells at a particular cell cycle phase so that one may position cells to increase tumor chemosensitivity. Our research methods employ physical and biochemical isolation procedures, PKC overexpressors, flow cytometry, scanning and transmission electron microscopy, and Western blotting.

PRESENTATION TITLE: *PKC-ι and PKC-ζ are heavily responsible of upregulating epithelial-mesenchymal transition (EMT) and activating Vimentin to facilitate cellular motility in prostate cancer cell lines*