Name: Roxanne Alvarez

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Major Professor: Ian Bird

Degree Objective: Ph.D. Endocrinology and Reproductive Physiology

Background: BS Chemistry (Minor Human bio), UW Green Bay.

Current Research Project:

During pregnancy, specific adaptations occur such that vasodilation of the uterine arteries is strongly enhanced to support increased blood perfusion. During preeclampsia there is a failure of adaptation in endothelial nitric oxide synthase (eNOS) activity resulting in decreased nitric oxide production, and thus diminished vasodilation. The activity of eNOS is dependent upon Ca2+ levels within the cell, and this signaling response is enhanced at the level of capacitative entry. My current research is investigating cell membrane properties using electrophysiology and the relationsip of altered hyperpolarizing currents to activation of capacitative entry within Pregnant Uterine Artery Endothelial Cells.

Honors:

Grants Received:

Publications:

National Presentations:

Other Presentations:

Alvarez, R, Bird, I, and Pattnaik, B. Characterizing Membrane Properties in Ovine Pregnant Uterine Artery Endothelial Cells (P-UAEC). ERP Annual Symposium 2010..

ERP Service:

Seminar Committee