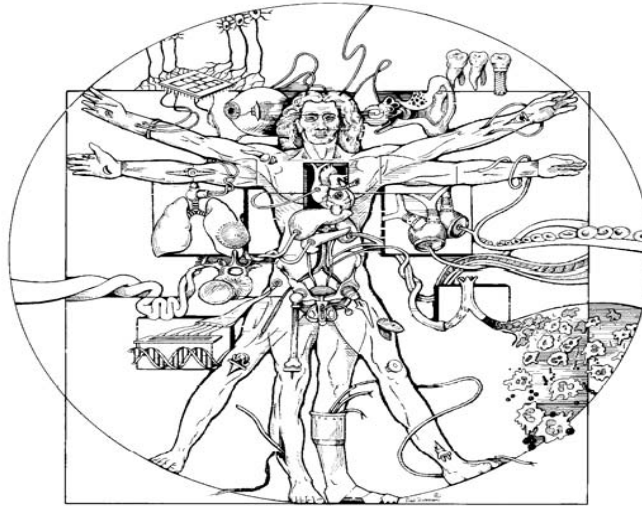


Biomedical Engineering Seminar



Heddwen Brooks, Ph.D.

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University of Arizona

“Diabetes, Menopause and Kidney Disease: Identification of novel molecular targets using systems biology”

Abstract: Perimenopause, the 5-10 years preceding menopause in women, is increasingly recognized as a critical period in the development and treatment of many diseases such as Cardiovascular Disease and Kidney Disease. However the extent to which ovarian hormones (estrogen) impact the development and progression of Diabetes is unclear. We are using the 4-vinylcyclohexene diepoxide (VCD) mouse model of menopause, which mimics the perimenopause period and retains postmenopausal ovarian androgen production, in combination with type I and type II models of Diabetes. A third of all Diabetics die of kidney disease, and even small changes in kidney function significantly effects Cardiovascular Health. Using both microarray analyses and physiological measurements of Diabetes we are identifying novel molecular targets that are involved in disease progression. Our data suggest that changes in ovarian hormone production across the menopausal transition promote the development of Diabetes and subsequent kidney disease.

Monday, October 29, 2007

2:00 pm

MRB 102

Host: Urs Utzinger, Ph.D. (626-9281)

Persons with a disability may request a reasonable accommodation by contacting the Disability Resource Center at 621-3268 (V/TTY). Requests should be made as early as possible to allow time to arrange the accommodation