



CENTER FOR
INTEGRATED
BIOSYSTEMS

Nutrition & Food Sciences

Presents a joint seminar by

Dr. John W. Newman

**USDA, ARS, Western Human Nutrition
Research Center and UC Davis
Department of Nutrition**

Location: Merrill-Cazier Library room 154
November 7, 2007 from 3:30 – 4:30 PM

Metabolomics in the Context of Human Nutrition and Health

Abstract:

Nutritional status has both subtle and overt effects on the physiological state of an individual. Moreover, inter-individual variability can dramatically influence the response of individuals to dietary components and nutritional supplements. The USDA Western Human Nutrition Research Center is integrating metabolomics into the basic experimental design of a variety of investigations on the biological impact of nutrients. Selected results will be shown from studies of marginal vitamin B12 deficiency, plasma biomarker discovery in whole vs. refined grain consumption and the influence obesity on circulating inflammatory mediators. We have found that by using clinical chemistry measurements to select subjects for metabolomic screening, meaningful metabolomic responses can be produced in small human cohorts. It is apparent from these and other studies that the application of metabolomics to the investigation of variability in human metabolism offers a novel means to enhance our understanding of the impact of nutrition on health and health risks.

Hosted by: Dr. Robert Ward 797-2153

Refreshments will follow in the Biotechnology Building Lobby

Seminar