

The UCI Chao Family Comprehensive Cancer Center  
Biostatistics Shared Resource Seminar Series  
Statistical Issues in Clinical and Basic Science Research

***Diffuse Optical Spectroscopic  
Imaging (DOSI) for the management of  
breast cancer***

Presented by

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10 – 11 AM  
Sprague Hall Room 205

Diffuse optical spectroscopic imaging (DOSI) is a non-invasive bedside scanner that provides quantitative metrics to measure and track changes in breast tissue composition and metabolism. Over the past 20 years, our group has collected hundreds of DOSI data on breast cancer patients, which was used to optically characterize tumors. We have also investigated the benefit of DOSI in several breast cancer applications. Notably, DOSI has been shown to distinguish benign from malignant breast lesions, and to predict the response to pre-surgical chemotherapy. The next DOSI study will encompass these different aspects of DOSI within the breast cancer management. The goal is to provide a comprehensive range of information to the physicians from a single DOSI measurement.