

Frontiers in Biological Sciences
Seminar Series Presents

A Systems Approach to Breast Cancer – Carcinogenesis to Therapy

Speaker: **Dr. Joe Gray**

Director, Life Sciences Division
Lawrence Berkeley National
Laboratory
Adjunct Professor, Laboratory
Medicine
UCSF Helen Diller Family
Comprehensive Cancer Center
University of California San
Francisco



Date: **Monday, November 29, 2010**

Time: **1:00 to 2:00 p.m.**

Place: **EMSL Auditorium**

Contact: Theresa Rathbone, 509-371-6954
theresa.rathbone@pnl.gov

Dr. Gray's laboratory explores mechanisms by which genomic, transcriptional, and proteomic abnormalities occur in selected cancers; elucidates how these abnormalities contribute to cancer pathophysiology; and assesses the ways in which these abnormalities influence responses to gene-targeted therapies. Current studies focus on developing (a) genome-wide analyses of the spectrum of recurrent abnormalities that influence cancer behavior, (b) systems biology approaches to elucidate mechanisms by which cancer-associated molecular abnormalities influence individual responses to therapeutic inhibitors, (c) siRNA approaches to treat breast or ovarian cancer subpopulations that do not respond well to current chemotherapy, and (d) strategies for early detection of metastasis-prone breast cancer.



Pacific Northwest
NATIONAL LABORATORY