

## Visionary Seminar Series at USC Wednesday, November 18, 2015 at 12 Noon Ray R Irani Hall Conference Room 101



## Amy S. Lee

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"Glucose Regulated Proteins in Health and Disease: Molecular Mechanisms and Therapeutic Potential"

The glucose regulated proteins (GRPs) are stress inducible chaperones majorly residing in the endoplasmic reticulum (ER) and the mitochondria. Recent advances reveal that the GRPs serve distinct functions from the related heat shock proteins (HSPs), and they can be actively translocated to other cellular locations and assume novel functions controlling signaling, proliferation, invasion, apoptosis, inflammation and immunity. Mouse models further identified their specific roles in development, tumorigenesis, metastasis and angiogenesis. In this talk, I will discuss their discovery, regulation and their biological functions in various organs and during cancer progression. Promising agents using or targeting the GRPs are being developed, and their efficacy as anti-cancer therapeutics will be discussed.

Host: Provost Professor Scott Fraser http://bioimaging.usc.edu/ Tel: 213-740-2233