Weekly Colloquium
Tuesday, 04/26/2016, 12:30pm, Billings Building – Rosedale Conference Room

"The role of mitochondria in oxidative stress: new developments"

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Recent Publications:


Research abstract:
The role of mitochondria in oxidative stress is well recognized, but many questions are still to be answered. Mitochondrial reactive oxygen species (ROS) metabolism is unique in that mitochondria both generate and scavenge ROS. We and others have demonstrated that mitochondria are neither a sink nor a source of ROS, but can function as both at the same time, efficiently controlling exogenous ROS concentration so that it depends on the overall energy metabolism. In this presentation we will review the recently identified or re-appraised sources of ROS generation in mitochondria and recently discovered properties of the mitochondrial antioxidant system. We will also reflect upon some controversies, disputes, and misconceptions that confound the field.