Stable Isotope Tracing Reveals Aggressive Features in Non-Small Cell Lung Cancer

Tuesday, February 27, 2024
11:00 a.m.- 12:00 p.m. CT

Baldwin Auditorium, 1st Floor
Robert H. Lurie Medical Research Center
303 E. Superior St., Chicago, IL

Host: Marcelo Bonini PhD

The primary research interest of the Faubert laboratory is investigating how metabolic reprogramming – alterations of metabolic flux in malignant cells – supports cancer cell survival and growth. We have extensive experience in measuring metabolism in vitro and in vivo, including measuring tumor metabolism intra-operatively in patients. The laboratory utilizes a series of mass spectrometry platforms to provide comprehensive views of metabolic pathways in biological systems. We use a variety of methods to assess metabolism, including isotope tracing (13C, 2H, etc.), metabolomics and metabolic flux to dissect the metabolic programs that underlie these malignant phenotypes. We complement these approaches with molecular imaging techniques to monitor metabolic states of tumor metabolism in vivo, in order to understand the breadth of metabolic diversity in cancer. Emerging work from the lab explores the metabolic alterations that occur during the metastatic cascade, and the tumor metabolism that results unique microenvironments.

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