**TITLE:** What's under the hood: Understanding the correlates and applications of MRI in Glioblastoma

**SUMMARY:** Glioblastoma Multiforme (GBM) represents one of the most genetically heterogeneous, resistant, and lethal of all human cancers. Over recent decades, advances in diagnostics and therapeutics have integrated MRI with essentially all aspects of patient care – ranging from surgical neuronavigation to radiation treatment planning to drug response assessment. In this talk, we will discuss the current state of MRI-guided applications, including their physiologic basis, clinical utility, and potential short-comings. We will also discuss how future advances in MRI might help bridge important clinical gaps with the goal of improving outcomes in patients with this devastating disease.