Michelle S. Bradbury

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Prof. Dr. Bradbury will present a wide range of applications of molecular imaging tools in both preclinical and clinical settings. At Memorial Sloan-Kettering, she directs a laboratory that focuses on the development, characterization, and evaluation of translational silica nanomaterials for cancer applications. She uses these materials in conjunction with imaging tools (including PET and optical devices) to individualize patient care. In addition, she explores the biological and chemical interactions of these materials at multiple spatial scales — from the cellular/molecular level to that of organs and tissues. She links these findings to sites of disease using whole-body imaging studies of small animal models and humans.

Bradbury holds a MD from the George Washington University School of Medicine and a PhD from the Massachusetts Institute of Technology. She is a member of the Memorial Sloan-Kettering's Department of Radiology and the Neuroradiology Service and holds a joint appointment in the Molecular Pharmacology and Chemistry Program in the Sloan-Kettering Institute. Her special expertise is the imaging of the nervous system (neuroradiology), anatomic and functional CT and MRI of the brain, neck, and spine. In addition to her work with patients, Bradbury pursues laboratory research in an effort to refine imaging methods and develop new approaches that can be taken to the clinic and used to gather more information about tumors, and also to deliver novel therapies. Bradbury's research was singled out in 2011 as a winner of the BioAccelerate NYC Prize, which provides critical funding for healthcare and biomedical projects that are expected to reach the market ultimately.