

"Better to illuminate than merely to shine, to deliver to others contemplated truths than merely to contemplate."

– Saint Thomas Aquinas

In vivo visualization and quantification of plaque burden and plaque macrophages are major goals in the field of atherosclerosis imaging, particularly in highly utilized mouse models of atherosclerosis. Thus far, vascular MRI has demonstrated the ability to quantify and track murine atherosclerosis at moderate resolution. In addition, molecular imaging approaches have illuminated plaque macrophages in vivo. However, only a few approaches, such as intravital fluorescence microscopy, have provided high-resolution (<100 micrometer) imaging of plaque macrophages in murine atherosclerosis. Intravital fluorescence microscopy imaging, however, is limited by light penetration and is also impractical to use for comprehensive aortic imaging, a major zone of atherosclerosis in genetically altered mice.

Shining Light and Illuminating Murine Atherosclerosis via Optical Coherence Tomography

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