

MRI & Stem Cell Trafficking

Karen Birley-Saebo
Department of Radiology
Mount Sinai School Medicine

Aim: To provide a basic understanding of current cell tracking strategies and methodologies.

Focus will be placed upon the advantages and disadvantages associated with current paramagnetic and superparamagnetic materials for cell labeling. Effect of cell labeling on cell viability, function and phenotype will also be addressed. Issues that are specific to *in vivo* imaging of cells in murine models will be highlighted.

Summary:

- Use of mice for cell tracking.
- Current MR cell labels: Advantages and Disadvantages.
- Effect of cell labeling on the cell.
- Strategies for in vivo cell tracking in mice.