

## **A Microperfusion and In-Bore Oxygenator System Designed for Magnetic Resonance Microscopy Studies on Living Tissue Explants.**

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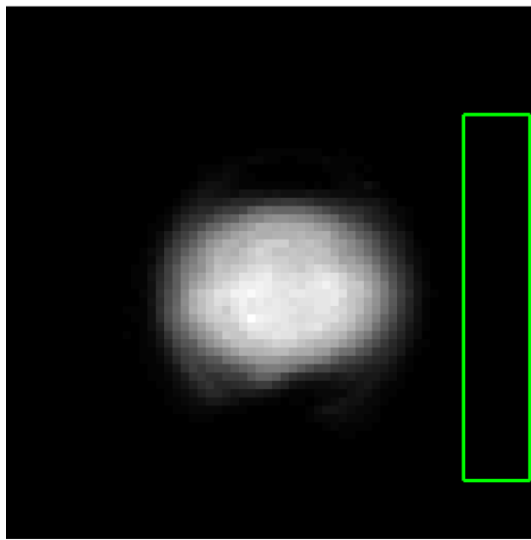
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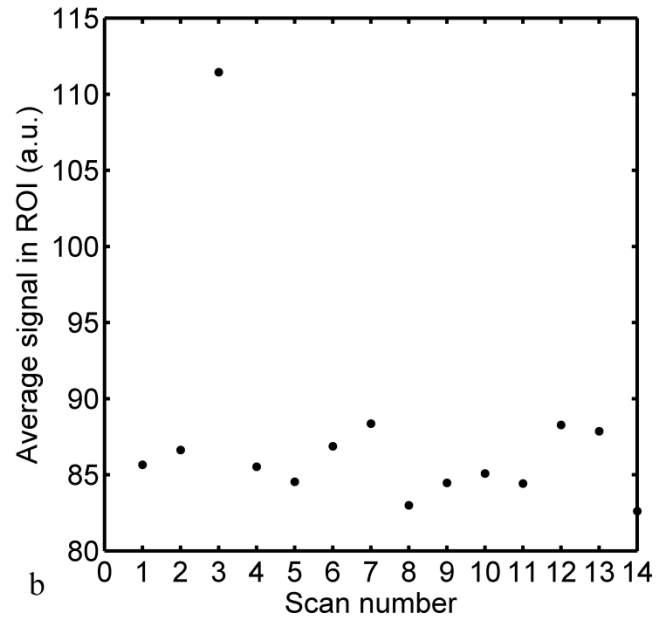
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Background ROI placement in images

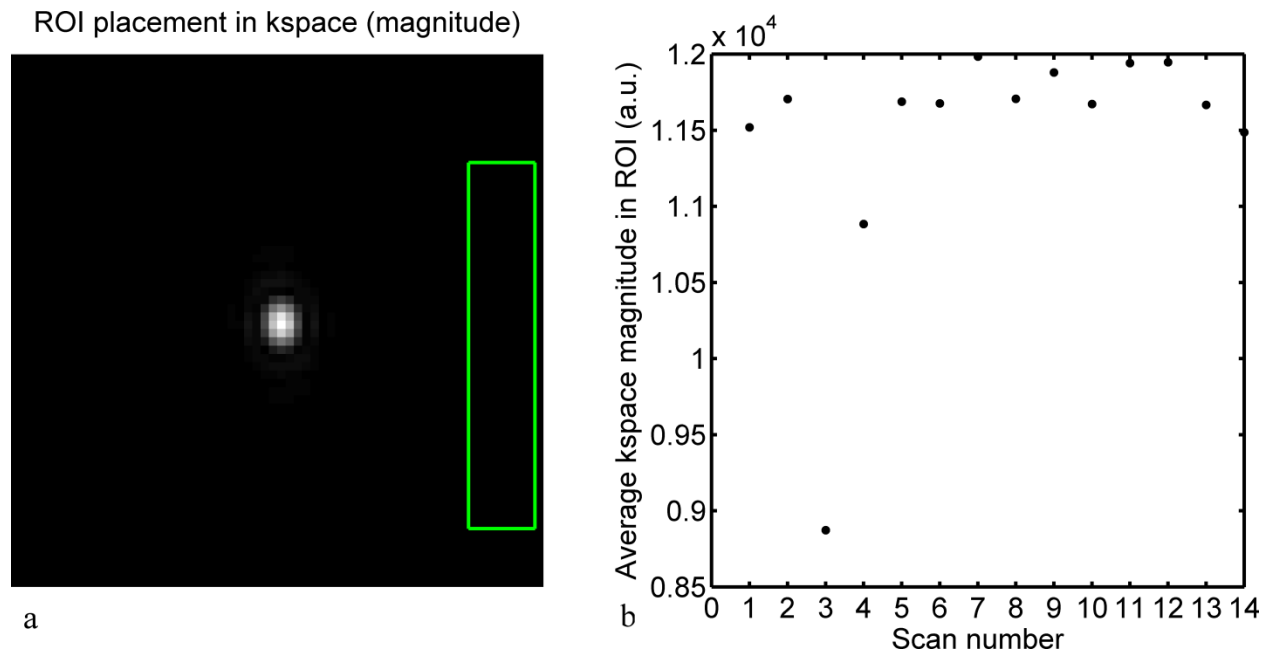



a



b

**Figure S1. Increased noise readings in the 4.5 h time point (scan 3) of fixed slice stability experiment (1 of 3 trials).** (a) Representative diffusion image showing the noise ROI (  ) calculated for each of 14 scans in the 21 h series. (b) Signal intensity graph of the noise region measured at each time point. Note the sharp increase in noise observed during the third scan.



**Figure S2. Decreased k-space intensity in the 4.5 h and 6.0 h time points (scans 3 and 4) of fixed slice stability experiment (1 of 3 trials).** (a) Representative k-space image showing the ROI (  ) calculated for each of 14 scans in the 21 h series. (b) Signal intensity graph of the ROI measured at each time point. Note the sharp decrease in magnitude observed during the third and persisting into the fourth scans.