

# Cardiac Imaging for Precision Medicine

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**Conflicts:** *Dr. McVeigh is an inventor on licensed US patents for real-time MRI and interventional devices. Dr. McVeigh is a co-founder and shareholder of MR Interventions Inc. Dr. McVeigh's funding, career advancement and livelihood depends on publishing positive results*

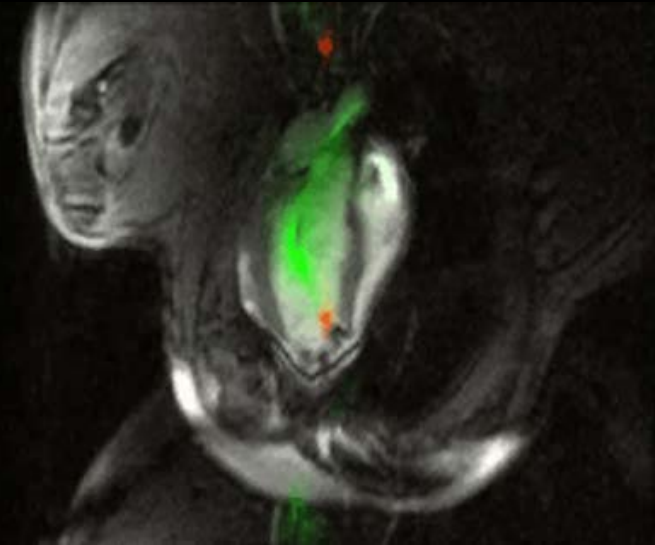
**LV function with tagging**



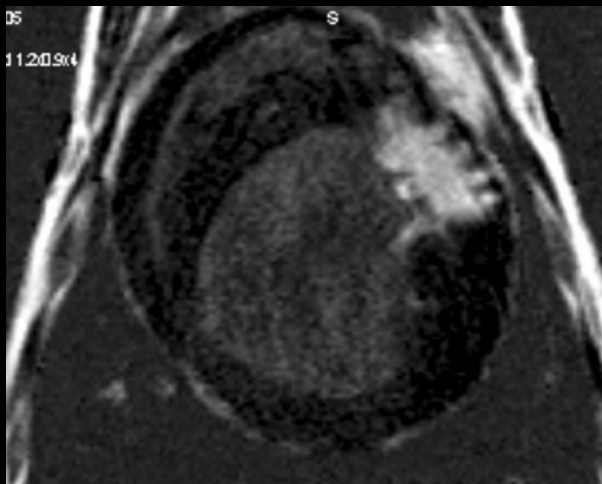
**MR Guided Ablation**



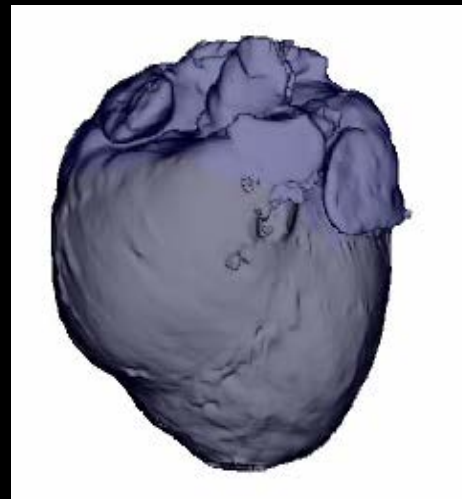
**MR Guided Catheter Injection**



**High Resolution Infarct Imaging**

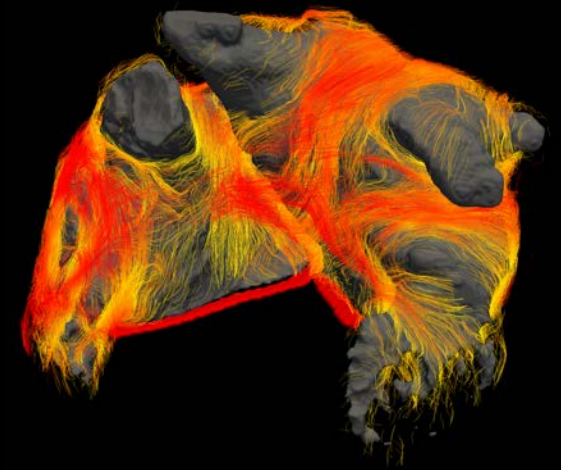


**Arrhythmia Prediction**



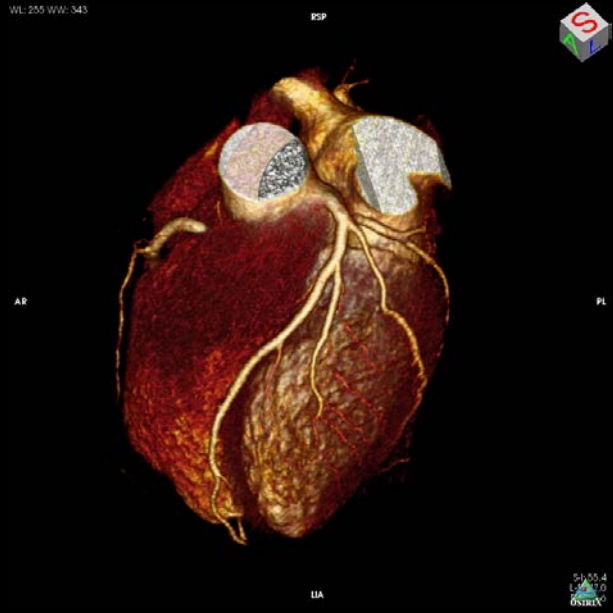
**Trayanova et al**

**DTI for Atrial Fiber Maps**



**Elliot McVeigh, 2016**

# Coronary CT Angiography



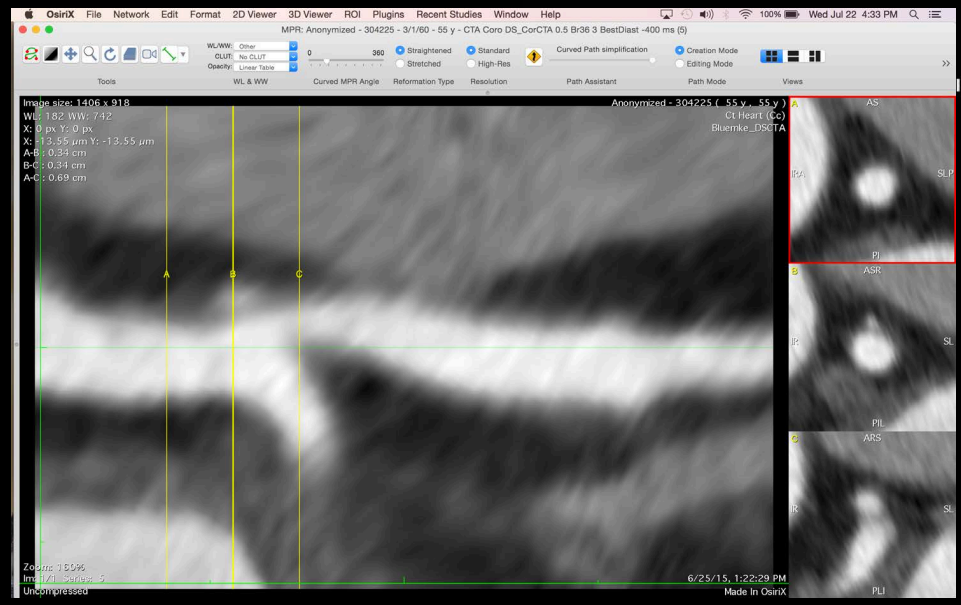
WL: 500 WW: 500

S

# Coronary CT LV function + LA function



# Coronary Lesion Characterization (the *ultimate* phenotyping)

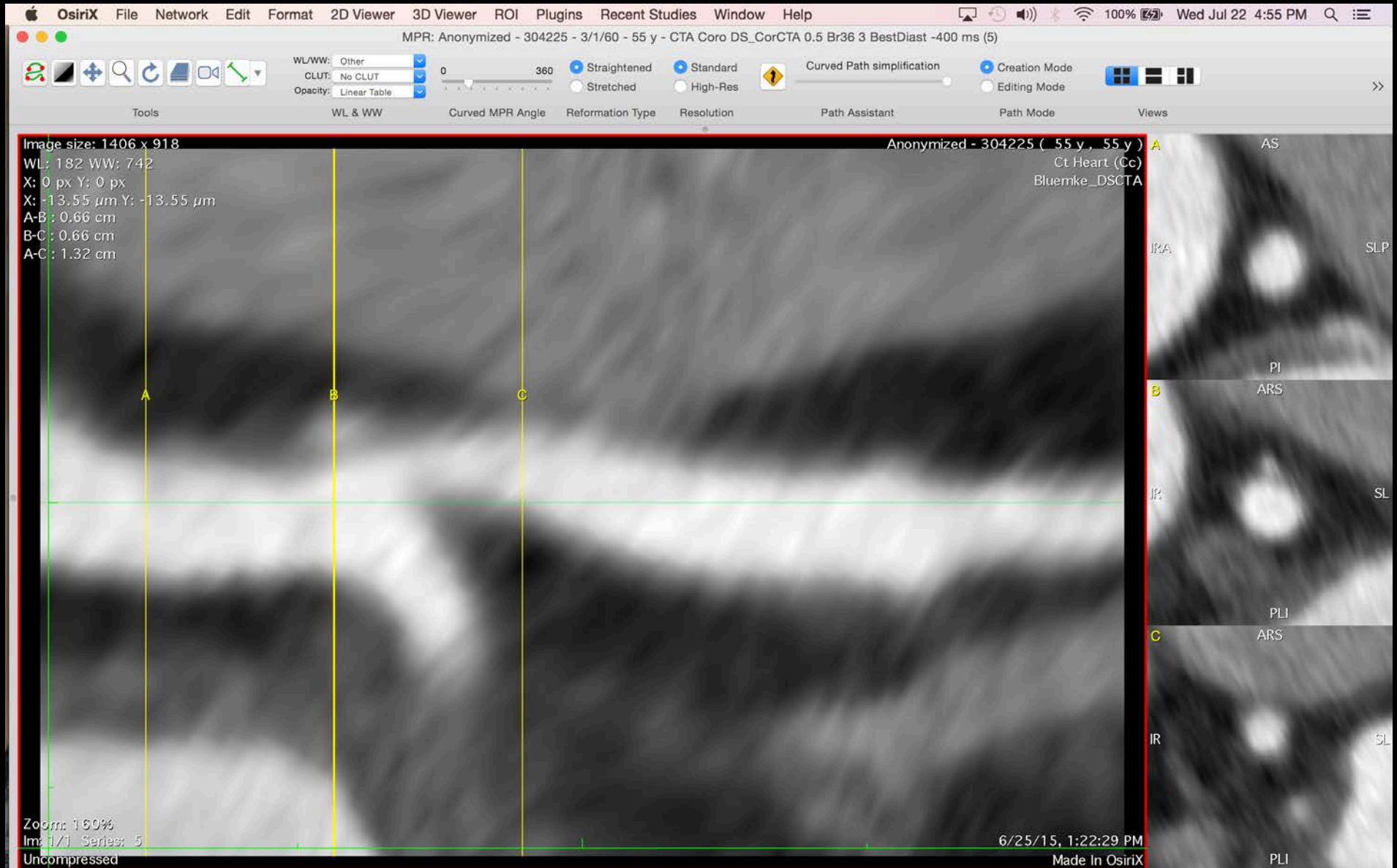


## Coronary CT LV function + LA function





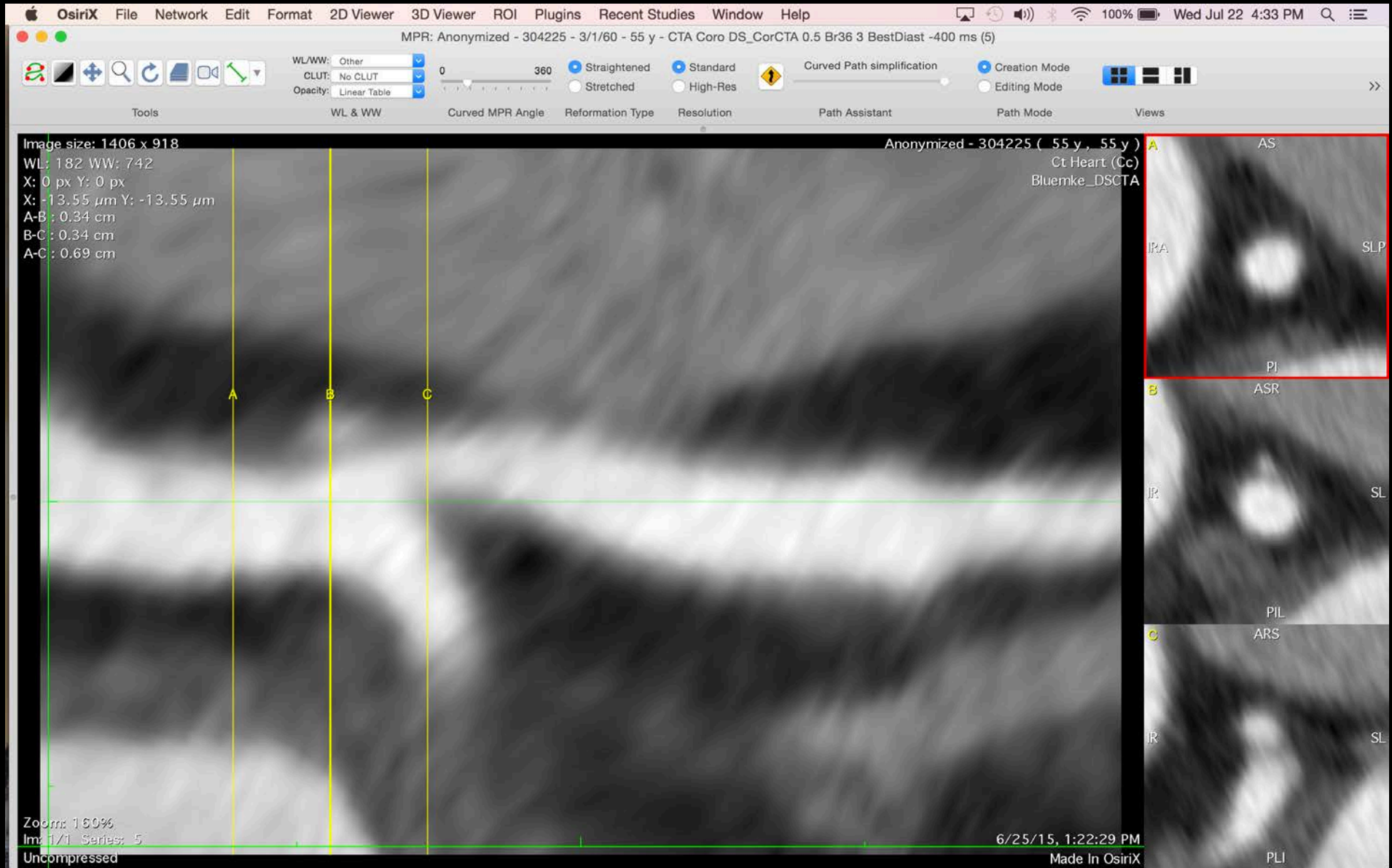
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McVeigh, Sanford, Bluemke et. al. NIH – JHU

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