Cardiac Imaging, Mechanics, and and Modeling Symposium - 2018

Stanford University: Clark Center, Room \$362, 318 Campus Drive

9:00 AM Arrival + Continental Breakfast

9:50 AM Welcome - Daniel Ennis, Stanford (310-941-1677, Call/Text for Any Reason)

10:00 AM Opening Remarks - Alan Garfinkel, UCLA

10:15 AM Session 1: Imaging Myocardial Structure and Function

Moderator - Daniel Ennis, Stanford University

New Techniques for Imaging Cardiac Motion with MRI. Mike Loecher, Stanford University

Evaluation of Cardiac Strains from DENSE MRI Using a Computational Deforming Phantom. Ilya Verzhbinsky, Stanford University

Helix Angle Mobility During Systole Using High Resolution Cardiac Diffusion Tensor Imaging. Kévin Moulin, Stanford University

Estimating Patient-specific Myofiber Strain from In Vivo MRI Data by Solving a Computational Model. Luigi Perotti, UCLA

Improved MRI-based Measurement of the End-Systolic Pressure-Volume Relationship in Normal Sheep. Mark Ratcliffe, SFVAMC

12:30 PM Hosted Lunch

1:30 PM Session 2: Mechanics of Growth and Remodeling in Heart Disease

Moderator - Luigi Perotti, UCLA

A Longitudinal Study of Heart Failure - What Have We Learnt? Ellen Kuhl, Stanford University

Building Cardiac Chemical Exchange Saturation Transfer MRI into a Comprehensive Tool to Quantify Multi-scale Changes in Heart Failure. Moriel Vandsburger, UC Berkeley

Mechano-Diffusion Based Growth Modeling. Mehrzad Tartibi, UCSF

A Novel MRI-based Finite Element Modeling Framework for Studying Ischemic Mitral Regurgitation. Yue Zhang, SFVAMC

Investigating the Effect of Ischemia on LV Remodeling. Vicky Wang, SFVAMC

3:30 PM Coffee Break

4:00 PM Session 3: Modeling of the Whole Heart

Moderator - Vicky Wang, SFVAMC

Understanding Drug-induced Arrhythmias with Multi-scale Modeling and Machine Learning. Francisco Sahli, Stanford University

Cardiac Modeling Used to Optimize Calibration of Myocardium Mechanical Properties and Edge-to-Edge Interventions in Heart Valve Insufficiency. Yaghoub Dabiri, UCSF

A high-resolution Whole Heart Computational Model: The Mechanical Importance of the Atria and Pericardium. Julius Guccione, UCSF

5:30 PM Group Discussion

6:00 PM Closing Remarks - Daniel Ennis, Stanford University

7:00 PM Dinner (Self Sponsored). Bucca de Beppo (643 Emerson St, Palo Alto)

