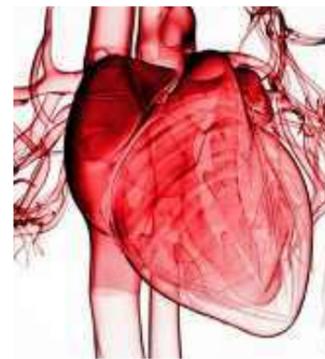


# Cardiac Imaging, Mechanics, and Modeling Symposium - 2019



Stanford University: Peter Wallenberg Learning Theater, Room 124

**8:00 AM Arrival + Continental Breakfast**

8:55 AM Welcome – Daniel Ennis, Stanford University (310-941-1677, Call/Text for Any Reason)

9:00 AM Opening Remarks – Martyn Nash, Auckland Bioengineering Institute, New Zealand

**9:30 AM Session 1: Cardiac Flow**

Moderator – Daniel Ennis, Stanford University

*Towards multi-physics models of cardiac flow and function.* Alison Marsden, Stanford University

*Exploring hemodynamics in the large vessels using compliant 3D printed phantoms.* Judith Zimmermann, Stanford University

*Modeling thrombus formation in coronary aneurysms caused by Kawasaki disease.* Noelia Gutierrez, Stanford University

**10:30 AM Coffee Break**

**11:00 AM Session 2: Valve Function and Modeling**

Moderator – Alison Marsden, Stanford University

*Mechanical effects of mitralclip on leaflet stress and myocardial strain in functional mitral regurgitation.* Mark Ratcliffe, San Francisco Veterans Affairs Medical Center

*Ex vivo biomechanical study of neochord anchoring for mitral regurgitation.* Annabel Imbrie-Moore, Stanford University

*A design-based model of the mitral valve & simulations of patient-specific left-ventricular flow.* Alexander Kaiser, Stanford University

*Assessment of Bioprosthetic Valve Behavior in Clinical Models of Right Ventricular Outflow Tracts Using Magnetic Resonance Velocimetry.* Nicole Schiavone, Stanford University

*Realistic simulation of mitralclip treatment for tricuspid regurgitation.* Julius Guccione, University of California, San Francisco

**12:30 PM Hosted Lunch**

**2:00 PM Session 3: Cardiac Mechanics and Function**

Moderator – Julius Guccione, University of California, San Francisco

*Biomechanics in Heart Disease.* Thiranjya Prasad Babarenda Gamage, Auckland Bioengineering Institute, New Zealand

*A novel MRI-based finite element modeling method for the prediction of the effect of ischemia on myocardium.* Yue Zhang, San Francisco Veterans Affairs Medical Center

*Investigating Viscous Effects in a Pumping heart.* Oguz Ziya Tikenogullari, Stanford University

**3:00 PM Coffee Break**

**3:30 PM Session 4: Cardiac Structure and Motion**

Moderator – Martyn Nash, Auckland Bioengineering Institute, New Zealand

*Estimating aggregate cardiomyocyte strains by combining DENSE and cDTI.* Luigi Perotti, University of Central Florida

*Simulating MRI Acquisitions from Synthetic Data for Accuracy Characterization and Training.* Michael Loecher, Stanford University

*Ex vivo Ventricular Geometry Restoration via 3D Printing.* Tyler Cork, Stanford University

*Comparison of in vivo and ex vivo Cardiac Microstructural Measurements.* Kevin Moulin, Stanford University

*Left Ventricular Strain Ischemic Mitral Regurgitation: A Study Using DENSE.* Vicky Wang, San Francisco Veterans Affairs Medical Center

**5:00 PM Group Discussion & Closing Remarks**

Moderators – Alan Garfinkel, UCLA -and- Luigi Perotti, University of Central Florida

**6:00 PM Light Dinner & Open Discussion**



**RSL** | RADIOLOGICAL  
SCIENCES  
LABORATORY  
STANFORD MEDICINE