Curriculum Vitae Francisco Jose Contijoch, PhD

Contact Information:

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Education:

2015 PhD Bioengineering, University of Pennsylvania, Philadelphia, PA

2010 MSE Biomedical Engineering, Johns Hopkins University, Baltimore, MD

2008 BS Biomedical Engineering, Johns Hopkins University, Baltimore, MD

Postgraduate Training:

University of California San Diego

2016 – 2017 UC President's Postdoctoral Fellow

2016 – 2017 Institutional Research & Academic Career Development (IRACDA) Fellow

2015 – 2017 Postdoctoral Fellow, Division of Cardiology, Department of Medicine

Professional Appointments:

University of California San Diego

2017 – Present Assistant Professor, Department of Bioengineering

2017 – Present Assistant Professor, Department of Radiology

Funding:

Active:

2022 NIH F31 Predoctoral Fellowship <u>HL158218</u>

Advanced Right Ventricular Functional Analysis for Right Ventricular Failure Risk in Pre-Implant Left Ventricular Assist Device Patients

Role: Mentor

Start Date: 8/10/2022, End Date: 7/31/2024

2022 NIH K01 Mentored Career Development Award Supplement <u>HL143113</u> Role: PI

Administrative Supplement to Recognize Excellence in Diversity, Equity, Inclusion, and Accessibility (DEIA) Mentorship

Start Date: 8/5/2022, End Date: 7/31/2023

2022 NIH R01 Research Project Grant HL162671

Role: PI

Improved MRI guidance of pediatric catheterization via autonomous multi-beat data synthesis

Start Date: 6/15/2022, End Date: 5/31/2027

2022 NIH F30 Predoctoral Fellowship HL158220

Role: Mentor

Quantitative framework to predict CTEPH surgical outcome from imaging

Start Date: 2/1/2022, End Date: 1/31/2024

2019 Bayer Pulmonary Hypertension Accelerated Bayer (PHAB) Award

Role: PI

Image-based prediction of intraoperative chronic thromboembolic disease level in CTEPH patients undergoing PTE

Start Date: 8/18/2020, End Date: 8/17/2023

2019 NIH R01 Research Project Grant HL144678

Role: Co-Inv

True 4D CT for Quantifying LV Dyssynchrony and Function for Targeting LV Lead Location in CRT

Start Date: 1/15/2019, End Date: 12/31/2022

2018 NIH K01 Mentored Career Development Award <u>HL143113</u>

Role: PI

Comprehensive Assessment of Right Ventricular and Pulmonary Vascular Function via CT Imaging in Heart Failure Patients

Start Date: 8/1/2018, End Date: 7/31/2023

Completed:

2021 Galvanizing Engineering in Medicine (GEM) Award

Role: PI

Densitometric Blood Flow Quantification from Invasive Angiography

Start Date: 9/1/2021, End Date: 8/31/2022

2019 NIH R25 HL145817

Role: Faculty Mentee

UCSD PRIDE Faculty Development Program in Cardiovascular Sciences (FOCUS)

Start Date: 7/8/2019, End Date: 7/31/2020

2019 GE Healthcare Research Grant

Role: Co-Inv

Pre-operative Evaluation of Chronic Thromboembolic Pulmonary Hypertension

(CTEPH) with Dual-Energy Perfusion and Coronary CTA

Start Date: 9/1/2018, End Date: 8/31/2020

2016 University of California President's Post-Doctoral Fellowship

Role: PI

Advanced imaging of pulmonary vascular obstruction and right ventricular function in patients with chronic thromboembolic pulmonary hypertension

Start Date: 5/1/2016, End Date: 6/30/2017

2016 UCSD Frontiers of Innovation Scholars Post-Doctoral Fellowship

Role: PI

Assessment of chronic thromboembolic pulmonary hypertension patients using advanced imaging for improved evaluation of disease burden, pre-operative estimation of

interventional success, and improved design of interventional strategies

Start Date: 1/1/2016, End Date: 12/1/2016

2014 NIH F31 <u>HL120580</u> Kirschtein NRSA Pre-Doctoral Fellowship Role: PI

Use of real-time MRI for evaluation of regional myocardial function

Start Date: 7/1/2014, End Date: 6/31/2015

2013 NIH T32 <u>HL007954</u> Interdisciplinary Cardiovascular Training Grant Role: Trainee

Start Date: 7/1/2013, End Date: 6/31/2014

2010 NIH T32 EB009384 Training Grant in Biomedical Imaging Role: Trainee

HHMI-NIBIB Interfaces Scholar: comprehensive coursework with two years of preclinical medical courses as well as engineering curriculum in medical imaging physics, mathematics, and analysis

Start Date: 8/1/2010, End Date: 7/31/2012

Honors and Awards:

- 2022 Fellow, Class of March 2022, Society for Cardiovascular Magnetic Resonance (SCMR)
- 2021 Editor's Recognition <u>Award</u> to Reviewers with Distinction, Radiology: Cardiothoracic Imaging
- 2021 Triple Gold Star Reviewer Award, JCMR
- 2021 Finalist, UCSD Chancellor's Award for Excellence in Postdoctoral Scholar Mentoring
- 2020 Gold Star Reviewer Award, JCMR
- 2020 Editor's Recognition <u>Award</u> to Reviewers with Special Distinction, Radiology: Cardiothoracic Imaging
- 2019 NIH National Heart Lung and Blood Institute (NHLBI) Program to Increase Diversity Among Individuals Engaged in Health-Related Research (PRIDE) Future Faculty of Cardiovascular Sciences (FOCUS) Awardee
- 2019 Undergraduate Teacher of the Year, Department of Bioengineering UCSD
- 2019 Gold Star Reviewer Award, JCMR
- 2018 ISHLT Annual Scientific Meeting Travel Grant
- 2018 Gold Star Reviewer Award, JCMR
- 2017 International Society for Magnetic Resonance in Medicine (ISMRM) Workshop on Magnetic Resonance of Cardiac Function Travel Award
- 2016 Radiological Society of North America (RSNA) Annual Meeting Fellowship
- 2016 University of California President's Post-Doctoral Fellowship
- 2016 UC San Diego Frontiers of Innovation Scholarship
- 2015 Society for Cardiovascular Magnetic Resonance Annual Meeting Scholarship
- 2014 NIH/NHLBI Kirschtein Pre-Doctoral National Research Service Award
- 2014 ISMRM Annual Meeting Merit Award, Summa Cum Laude,
- 2014 ISMRM Annual Meeting Travel Award
- 2013 ISMRM Annual Meeting Merit Award, Magna Cum Laude,
- 2013 ISMRM Annual Meeting Travel Award
- 2012 ISMRM Annual Meeting Merit Award, Magna Cum Laude,
- 2012 ISMRM Annual Meeting Travel Award
- 2010 Outstanding Special Publication, Johns Hopkins Applied Physics Laboratory

Professional Society Memberships:

- 2020 Society for Hispanic Professional Engineers (SHPE)
- 2018 International Society for Heart and Lung Transplantation (ISHLT)
- 2016 Institute of Electrical and Electronics Engineers (IEEE)
- 2016 Radiological Society of North America (RSNA)
- 2015 Society of Cardiovascular Computed Tomography (SCCT)
- 2012 Society for Cardiovascular Magnetic Resonance (SCMR)
- 2011 International Society for Magnetic Resonance in Medicine (ISMRM)

Academic Service:

- 2022 Ad hoc NIH Study Section Reviewer, CTIS
- 2021 Ad hoc NIH Study Section Reviewer, SBIB Fellowships
- 2021 Reviewer, NSF Review Panel
- 2020 Ad hoc NIH Study Section Reviewer, ITD
- 2023 SCMR/ISMRM Workshop Co-Organizer
- 2022-2025 Guidelines Committee Member, Society for Cardiovascular Computed Tomography
- 2020-2025 Science Committee Member, Society for Cardiovascular Magnetic Resonance
- 2018- Associate Editor, BMC Medical Imaging
- 2021- Reviewer, Frontiers in Cardiovascular Medicine
- 2021- Reviewer, Pulmonary Circulation
- 2021- Reviewer, International Journal of Cardiovascular Imaging
- 2020- Reviewer, International Journal of Cardiology
- 2020- Reviewer, Journal of the American Heart Association
- 2020- Reviewer, Journal of Medical Imaging
- 2019- Reviewer, Journal of Magnetic Resonance Imaging
- 2019- Reviewer, International Journal of Cardiovascular Imaging
- 2019- Reviewer, Cardiovascular Engineering and Technology
- 2019- Reviewer, Radiology: Cardiothoracic Imaging
- 2019- Reviewer, Magnetic Resonance in Medicine
- 2018- Reviewer, Life Sciences
- 2017- Reviewer, Journal for Cardiovascular Magnetic Resonance
- 2017- Reviewer, IEEE Transactions on Biomedical Engineering
- 2017- Reviewer, IEEE Transactions on Medical Imaging
- 2017- Reviewer, Medical Physics
- 2017- Reviewer, Computers in Biology and Medicine
- 2016- Reviewer, BMC Medical Imaging
- 2016- Reviewer, PLOS ONE
- *A full record of manuscript reviews can be seen on Publons

- 2021 Abstract Reviewer, Annual Meeting of the International Society for Heart and Lung Transplantation
- 2021- Poster Session Moderator, Annual Meeting of the International Society for Magnetic Resonance in Medicine
- 2017- Abstract Reviewer, Annual Meeting of the International Society for Magnetic Resonance in Medicine

Teaching Experience:

BENG 125 Modeling and Computation in Bioengineering

Co-Instructor: Spring 2019 Instructor: Spring 2020, 2021

BENG 189 Physiologic Systems Engineering

Instructor: Spring 2019, 2020, 2021

Co-Instructor: Spring 2022

BENG 278 Magnetic Resonance Laboratory

Co-Instructor: Winter 2022 Instructor: Winter 2023

BENG 280B Comparative Biomedical Imaging

Co-Instructor: Winter 2018, 2019

Instructor: Winter 2020, 2021, 2023

Invited Talks:

- 2021 "Advanced Cardiopulmonary Evaluations with CT". Bioengineering Departmental Seminar. University of California, Los Angeles. February 25th.
- 2020 "Novel CT and MR imaging for cardiovascular disease assessments" 2020 Jornadas Biomedicas. Sociedad de Ingeniería Biomédica Anáhuac. School of Engineering, Universidad Anahuac, Mexico City, Mexico. November 19th.
- 2020 "Fast CMR Imaging". Annual Meeting of the Society for Cardiovascular Magnetic Resonance. Orland, FL. February 13th.
- 2018 "Novel CT and MR imaging enables accurate assessment of coronary artery disease, regional cardiac function, myocardial contractility." Translational and Molecular Imaging Institute (TMII) Seminar Series. Icahn School of Medicine at Mount Sinai. New York City, NY. October 11th.
- 2018 "RV Imaging: New Approaches and Measures of Function". 29th Annual Western Society of Pediatric Cardiology Conference. San Diego, CA June 1st.
- 2017 "Seeing More: New CT and MRI Techniques to Image the Heart". Pediatric Grand Rounds. Rady Children's Hospital San Diego, San Diego, CA. September 29th.
- 2017 "Advanced CT and MRI Imaging of the Heart". Cardiology Departmental Seminar. Rady Children's Hospital San Diego. San Diego, CA. September 8th.

- 2017 "Advanced CT and MRI Imaging of the Heart". Bioengineering Departmental Special Seminar. University of California, Riverside. Riverside, CA. March 22nd.
- 2017 "Developing New Views of the Heart". Department of Biomedical Engineering Seminar. Georgia Institute of Technology, Atlanta, GA. February 8th.
- 2016 "Assessment of Chronic Thromboembolic Pulmonary Hypertension Patients". Frontiers of Innovation Scholars Program Second Annual Symposium. University of California, San Diego. San Diego, CA. October 18th.
- 2013 "MRI measurement of decreased regional work density in peri-infarct borderzone". 38th Annual Eugene P. Pendergrass Symposium. Department of Radiology. University of Pennsylvania. Philadelphia PA. June 14th.

Campus/Departmental Seminars:

- 2022 "Imaging the Heart in New and DiFir-ent Ways". Electrical and Computer Engineering Department. University of California, San Diego. San Diego, CA. October 14th.
- 2018 "Translational Imaging of the Heart". Pulmonology, Critical Care, and Sleep Medicine Grand Rounds. University of California, San Diego, San Diego, CA. February 2nd.
- 2017 "Advanced MR and CT Imaging of the Heart". Cardiology Science Conference Series. University of California, San Diego. San Diego, CA. October 13th.
- 2017 "Seeing More: New CT and MRI Techniques to Image the Heart". Cardiology Grand Rounds. University of California, San Diego. San Diego, CA. October 13th.
- 2017 "Developing New Views of the Heart". Bioengineering Department Special Seminar. University of California, San Diego. San Diego, CA. February 22nd.
- 2016 "Advanced Evaluation of Cardiac Contractility and Function". Biomechanics and Mechanobiology Seminar. Mechanical and Aerospace Engineering. University of California, San Diego. San Diego, CA. April 21st.
- 2015 "Real-time Magnetic Resonance Imaging (MRI) for Imaging Dynamic Cardiac Function". Physiology Seminar. Department of Pulmonary and Critical Care Medicine. University of California, San Diego. San Diego, CA. October 21st.

Patents and Pending Applications:

- 1. US Provisional 63/299,344 Neural Computed Tomography Reconstruction
- 2. PCT/US21/42438 Deep Learning Cardiac Segmentation and Motion Visualization
- 3. <u>US 17/375,895</u> Dose Reduction for Cardiac Computed Tomography
- 4. <u>US 17/332,981A1</u> Method and Device for Magnetic Resonance Imaging Data Acquisition
- 5. US 10,638,940 Assessment of Hemodynamic Function in Arrhythmia Patients
- 6. <u>US 10,588,511</u> Non-Cartesian Retrospective Reconstruction of Cardiac Motion in Patients with Severe Arrhythmia

7. <u>US 8444642B2</u> Laparoscopic Nephrectomy Device

Publications:

First and/or corresponding authorship are **bolded and underlined**. A complete listing of publications and citations can be found on Google Scholar:

Articles in Press

- 42. Gupta K, Colvert B, Chen Z, <u>Contijoch F</u>. DiFiR-CT: Distance field representation to resolve motion artifacts in computed tomography. Medical Physics. In Press; <u>PMID</u>: 36515381.
- 41. Scott A, Zhennong C, Hernandez Hernandez D, Kligerman S, Kim P, Tran H, Adler E, <u>Contijoch F</u>. Pressure Volume Loop Analysis of the Right Ventricle in Heart Failure with Computed Tomography. ASAIO. In Press. <u>PMID: 36521051</u>

Published

- 40. Scott A, Kligerman S, Hernandez Hernandez D, Kim P, Tran H, Pretorius V, Adler E, <u>Contijoch F</u>. Preoperative Computed Tomography Assessment of Risk of Right Ventricle Failure After Left Ventricular Assist Device Placement. ASAIO. 69(1):69-75. Jan 2023. PMID: 36583772
 - *Accompanied by an Invited Commentary by Sayer et al "On the Right Path: Predicting Right Ventricular Failure After Left Ventricular Assist Device" PMID: 36583774
- 39. Spang MT, Middleton R, Diaz M, Hunter J, Mesfin J, Banka A, Sullivan H, Wang R, Lazerson TS, Bhatia S, Corbitt J, D'Elia G, Sandoval-Gomez G, Kandell R, Vratsanos MA, Gnanasekharan K, Kato T, Igata S, Luo C, Osborn KG, Gianneschi NC, Eniola-Adefaso O, Cabrales P, Kwon EJ, Contijoch F, Reeves RR, Demaria AN, Christman KL. Intravascularly infused extracellular matrix as a biomaterial for targeting and treating inflamed tissues. Nature Biomedical Engineering. 2022 Dec 29; PMID: 36581694

 *Accompanied by a Commentary by Huang and Cheng "Sealing the heart from the inside out" PMID: 36581693
- 38. Li H, Zhennong C, Kahn AM, Kligerman S, Narayan HK, <u>Contijoch F</u>. Deep learning automates detection of wall motion abnormalities via measurement of longitudinal strain from ECG-gated CT images. Frontiers in Cardiovascular Medicine, Cardiovascular Imaging. 2022 Dec 15; 9: 1009445. <u>PMID: 36588550</u>
- 37. Chen Z, Contijoch F, Colvert G, Manohar A, Kahn AM, Narayan HK, McVeigh ER. Detection of Left Ventricular Wall Motion Abnormalities from Volume Rendering of 4DCT Cardiac Angiograms Using Deep Learning. Frontiers in Cardiovascular Medicine, Cardiovascular Imaging. 2022 Jul 28; 9: 919751. PMID:35966529
- 36. Pack J, Manohar A, Ramani S, Claus B, Yin Z, Contijoch F, Schluchter A, McVeigh ER. Four-Dimensional Computed Tomography of the Left Ventricle, Part I: Motion Artifact Reduction. Medical Physics. 2022; 49: 4404-4418. PMID:35588288

- 35. Rigolli M, Reeves R, Smitson C, Yang J, Alotaibi M, Mahmud E, Malhotra A, Contijoch F. Right Ventricular and Pulmonary CT Assessments in Paradoxical Low-flow Low-gradient Aortic Stenosis Undergoing TAVR. Structural Heart. 2022; 6; 2: 100014. PMID: 36212028
- 34. Rodriguez-Soto AE, Pham D, Tran T, Meads M, Stanley V, Melber D, Lamale-Smith L, Zhang-Rutledge K, Rakow-Penner R, Alshawabkeh L, Parast MM, <u>Contijoch F</u>. Evidence of maternal vascular malperfusion in placentas of women with congenital heart disease. Placenta. 2022; Jan; 117: 209-212. PMID: 34953287
- 33. Gupta K, Sekhar N, Vigneault D, Scott AR, Colvert B, Craine A, Raghavan A, <u>Contijoch F</u>. Octree Representation Improves Data Fidelity of Cardiac CT Images and Convolutional Neural Network Semantic Segmentation of Left Atrial and Ventricular Chambers. Radiology: Artificial Intelligence. 2021; 3(6): e210036 <u>PMID</u>: 34870221
- 32. Colvert B, Rigolli M, Craine A, Criqui M, Contijoch F. Heart-centered positioning and tailored beam-shaping filtration for reduced radiation dose in coronary artery calcium imaging: a MESA study. Medical Physics. 2021; 48: 4966–4977. PMID: 34287949
- 31. Colvert GM, Manohar A, Contijoch F, Yang J, Glynn J, Blanke P, Leipsic JA, McVeigh ER. Novel 4DCT Method to Measure Regional Left Ventricular Endocardial Shortening Before and After Transcatheter Mitral Valve Implantation. Structural Heart. 2021. 5:4, 410-419, PMID: 34541443
- 30. Chen Z, Rigolli M, Vigneault DM, Kligerman S, Hahn L, Narezkina A, Craine A, Lowe K, Contijoch F. Automated Cardiac Volume Assessment and Cardiac Long- and Short-Axis Imaging Plane Prediction from ECG-gated CT Volumes Enabled By Deep Learning. European Heart Journal: Digital Health. 2:2, June 2021, 311–32 PMID: 34223176
- 29. Severance LM, Carter H, Contijoch F, McVeigh ER. *Targeted Coronary Artery Calcium Screening in High-Risk Younger Individuals Using Consumer Genetic Screening Results*. JACC: Cardiovascular Imaging. Jul, 14 (7) 1398–1406. PMID: 33454274
 *Accompanied by an Editorial by Blaha "Predicting Age of Conversion to CAC > 0: A Role for Polygenic Risk Scores?" PMID: 33454261
- 28. <u>Contijoch F</u>, Wong D, Igata S, McDivit Mizzell A, Auger W, DeMaria AN, Blanchard D, Waheed A, Bachman TA, Simon MA, Pinsky MR, Madani M. *Association between Preoperative Dynamic Measures of Vascular Load and Post-operative Hemodynamics in Patients with Chronic Thromboembolic Pulmonary Hypertension after Pulmonary Thromboendarterectomy*. Annals of the American Thoracic Society. 2021 18(3), p. 551. PMID 33141597.
- Rigolli M, Kahn AM, Brambatti M, Contijoch FJ, Adler ED. Cardiac Magnetic Resonance Imaging in Danon Disease Cardiomyopathy. JACC: Cardiovascular Imaging 2021 Feb, 14 (2) 514–516. PMID 33011116

- 26. <u>Contijoch F</u>, Han Y, Kamesh Iyer S, Kellman P, Gualtieri G, Elliott MA, Berisha S, Gorman JH III, Gorman R, Pilla KK, Witschey WRT. *Closed-loop control of k-space sampling via physiologic feedback for cine MRI*. PLOS ONE. 2020 Dec 29 15(12): e0244286. <u>PMID</u> 33373391.
- 25. Contijoch F, Horowitz M, Masutani E, Kligerman S, Hsiao AH. 4D Flow Vorticity Visualization Predicts Regions of Quantitative Flow Inconsistency for Optimal Blood Flow Measurement. Radiology: Cardiothoracic Imaging 2020 2:1 PMID 32715299

 *Accompanied by an Editorial by Markl "How Well Does an Automated Approach Calculate and Visualize Blood Flow Vorticity at 4D Flow MRI?" PMID: 33778539
- 24. Schlucter A, Jan C, Lowe K, Vigneault DM, **Contijoch F**, McVeigh ER. *Vascular Landmark-Based Method for Highly Reproducible Measurement of Left Atrial Appendage Volume in Computed Tomography*. Circulation: Cardiovascular Imaging (2019) Dec 12 (12); e009075. PMID 31842587
 - *Accompanied by an Editorial by Faddis "Quantification of the Left Atrial Appendage" PMID: 31838883
- 23. Manohar A, Colvert G, Schlucter A, Contijoch F, McVeigh ER. Anthropomorphic left ventricular mesh phantom: a framework to investigate the accuracy of SQUEEZ using Coherent Point Drift for the detection of regional wall motion abnormalities. Journal of Medical Imaging (2019). 6(4):045001. PMID 31824981
- 22. Manohar A, Rossini L, Colvert G, Vigneault DM, **Contijoch F**, Chen MY, Del Alamo JC, McVeigh ER. *Regional Dynamics of Fractal Dimension of the Left Ventricular Endocardium From Cine Computed Tomography Images*. Journal of Medical Imaging (2019). 6(4):046002. <u>PMID 31737745</u>
- 21. <u>Contijoch F</u>, Li B, Yang W, Silva-Sepulveda JA, Vodkin I, Printz P, Vavinskaya V, Hegde S, Marsden A, El-Sabrout H, Alshawabkeh L, Moore JW, El-Said H. *Exercise MRI highlights heterogeneity in cardiovascular mechanics among patients with Fontan circulation: proposed protocol for routine evaluation.* Journal of Thoracic Disease 2020 Mar;12(3):1204-1212. PMID 32274201
- 20. Chen Z, Contijoch F, Schluchter A, Grady L, Schaap M, Stayman W, Pack J, McVeigh E. Precise Measurement of Coronary Stenosis Diameter with CCTA Using CT Number Calibration. Medical Physics. (2019) 46(12):5514-5527. PMID 31603567
- 19. Severance LM, **Contijoch F**, Carter H, Fan CC, Seibert TM, Dale AM, McVeigh ER. *Using a genetic risk score to calculate the optimal age for an individual to undergo coronary artery calcium screening*. Journal of Cardiovascular Computed Tomography. (2019) 13(4):203-210. PMID 31104941.
 - *Accompanied by an Editorial by Cainzos-Achirica et al "Exploring the intersection between genetic risk scores and coronary artery calcium—mutually exclusive or complementary?" PMID: 31151821

- 18. McVeigh E, Pourmorteza A, Guttman M, Sandfort V, Contijoch F, Budhiraja S, Chen Z, Bluemke DA, Chen MY. *Regional myocardial strain measurements from 4DCT in patients with normal LV function*. Journal of Cardiovascular Computed Tomography. (2018); 12 (5):372-378. PMID 29784623.
- 17. Masutani E, **Contijoch F**, Kyubwa, E, Cheng J, Alley M, Vasanawala, S, Hsiao A. *Volumetric Segmentation-Free Method for Rapid Visualization of Vascular Wall Shear Stress Using 4D Flow MRI*. Magn. Reson. Med. (2018) 80;2 748 755. PMID 29516632
- 16. <u>Contijoch F</u>, Groves D, Chen MA, McVeigh ER. A novel method for evaluating regional RV function in the adult congenital heart with low-dose CT and SQUEEZ processing. International Journal of Cardiology. (2017) 249, 461-466. <u>PMID 28970037</u>
 *Accompanied by an Editorial by Andreini et al "Cardiac-CT in 2017: Over the coronary artery assessment" <u>PMID: 28970038</u>
- 15. <u>Contijoch F</u>, Stayman JW, McVeigh ER. *The impact of small motion on the visualization of coronary vessels and lesions in cardiac CT: a simulation study*. Medical Physics. (2017) 44 (7) 3512-3524. <u>PMID 28432820</u>
- 14. Stoffers RH, Madden M, Shahid M, Contijoch F, Solomon J, Pilla JJ, Gorman JH III, Gorman RC, Witschey WRT. *Assessment of Myocardial Injury After Reperfused Infarction by T1ρ Cardiovascular Magnetic Resonance*. J Cardiovasc Magn Reson. (2017) 19 (1) 17. PMID 28196494
- 13. <u>Contijoch F</u>, Kamesh Iyer S, Pilla JJ, Yushkevich PY, Gorman JH III, Gorman RC, Han Y, Witschey WRT. *Self-gated MRI of multiple beat morphologies in the presence of arrhythmias*. Magn. Reson. Med. (2016) 78 (2), 678-688. <u>PMID 27579717</u>
- 12. <u>Contijoch F</u>, Witschey WRT, McGarvey J, Lee ME, Gorman JH III, Gorman RC, Pilla JJ. Slice-by-Slice Pressure-Volume Loop Analysis Demonstrates Native Differences in Regional Cardiac Contractility and Response to Inotropic Agents. Ann Thorac Surg. (2016) 102 (3) 796-802. <u>PMID 27112654</u>
- 11. Han QJ, **Contijoch F**, Forfia PR, Han Y. Four-dimensional flow magnetic resonance imaging visualizes drastic changes in the blood flow in a patient with chronic thromboembolic pulmonary hypertension after pulmonary thromboendarterectomy. Eur Heart J. (2016) 37 (36):2802. PMID 26922813
- 10. <u>Contijoch F</u>, Rogers K, Rears H, Kellman P, Gorman JH III, Gorman RC, Yushkevich PA, Zado ES, Supple GE, Marchlinski FE, Witschey WRT, Han Y. *Quantification of LV function pre, during, and post premature ventricular complexes reveals variable hemodynamics*. Circ.: Arrhythmia Electrophysiol. 9: e003520 (2016) <u>PMID 27009416</u>
- 9. <u>Contijoch F</u>, Witschey W, Rogers K, Gorman JH III, Gorman RC, Han Y. *Impact of end-diastolic and end-systolic phase selection in the volumetric evaluation of cardiac MRI*. J. Magn. Reson. Imaging, (2016) 43(3):585-93 <u>PMID 26331591</u>

- 8. <u>Contijoch F</u>, Witschey W, Rogers K, Rears H, Hansen MS, Yushkevich PA, Gorman JH III, Gorman RC, Han Y. *User-Initialized Active Contour Segmentation and Golden-angle Real-Time Cardiac MRI Enable Accurate Assessment of LV Function in Patients with Sinus Rhythm and Arrhythmias*. J Cardiovasc Magn Reson. (2015) 17(1):37. <u>PMID 25994390</u>
- 7. Witschey WR, Zhang D, Contijoch F, McGarvey JR, Lee M, Takebayashi S, Aoki C, Han Y, Han J, Barker AJ, Pilla JJ, Gorman RC, Gorman JH III. *The Influence of Mitral Valve Annuloplasty on Left Ventricular Flow Dynamics*. Ann Thorac Surg. 2015 July; 100(1): 114-121. PMID 25975941
- 6. Witschey WF, Pouch AM, McGarvey JR, Ikeuchi K, Contijoch F, Levack MM, Yushkevich PA, Sehgal CM, Jackson BM, Gorman RC, Gorman JH III. *Three-Dimensional Ultrasound-Derived Physical Mitral Valve Modeling*. Ann Thorc Surg. 2014 Aug; 98(2):691-694. PMID 25087790
- 5. Witschey WR, Contijoch F, McGarvey JR, Ferrari VA, Hansen MS, Lee ME, Takebayashi S, Aoki C, Chirinos JA, Yushkevich PA, Gorman JH III, Pilla JJ, Gorman RC. *A Real-Time Magnetic Resonance Imaging Technique for Determining Left Ventricle Pressure-Volume Loops*. Ann Thorac Surg. 2014 May;97(5):1597-603. PMID 24629301
- 4. Witschey WR, Zsido GA, Koomalsingh K, Kondo N, Minakawa M, Shuto T, McGarvey JR, Levack MM, Contijoch F, Pilla JJ, Gorman JH III, Gorman RC. *In vivo chronic myocardial infarction characterization by spin locked cardiovascular magnetic resonance*. J Cardiovasc Magn Reson. 2012 Jun 15;14(1):37. PMID 22704222
- 3. <u>Contijoch F</u>, Lynch JM, Pokrajac DD, Maidment AD, Bakic PR. *Shape Analysis of Simulated Breast Anatomical Structures*. Medical Imaging 2012: Physics of Medical Imaging. Vol. 8313, p. 83134J-12. <u>DOI: 10.1117/12.912275</u>
- 2. <u>Contijoch F</u>, Fernandez-de-Manuel L, Ngo T, Stearns J, Grogan KL, Brady M, Burlina PM, Santos A, Yuh DD, Herzka DA, Ledesma-Carbayo MJ, and McVeigh ER. *Increasing Temporal Resolution of 3D Transesophageal Ultrasound By Rigid Body Registration Of Sequential, Temporally Offset Sequences.* 2010 IEEE International Symposium Biomedical Imaging: From Nano to Macro, pp. 328 331. DOI: 10.1109/ISBI.2010.5490342
- Burlina P, Sprouse C, DeMenthon D, Jorstad A, Juang R, Contijoch F, Abraham T, Yuh D, McVeigh E. *Patient-Specific Modeling and Analysis of the Mitral Valve Using 3D-TEE*. In: Navab N, Jannin P, editors. Information Processing in Computer-Assisted Interventions SE 13. Springer Berlin Heidelberg; 2010. p. 135–146. DOI: 10.1007/978-3-642-13711-2_13

National and International Conference Proceedings:

66. Crabb B, Govil S, Hegde S, Perry JC, Young AA, Omens JH, Kim NH, Valdez-Jasso D, Contijoch F. Biventricular Statistical Shape Atlas of Unloaded Reference Geometries: A Novel Method to Control for Hemodynamic Variations in End-diastolic Pressure.

- International Mechanical Engineering Congress and Exposition (IMECE) 2022. Oct 30-Nov 3, 2022.
- 65. Li H, Chen Z, Kahn AM, Contijoch F. Deep Learning Enables Automated Evaluation Of Global Longitudinal Shortening From Cine CT. 17th Annual Scientific Meeting of the Society of Cardiovascular Computed Tomography (SCCT). Las Vegas, NV July 15 17th, 2022.
- 64. Craine A, Scott A, Desai D, Alshawabkeh L, Adler E, Kim N, Contijoch F. Myocardial Work Estimation With Ct Aids Evaluation Of Regional Right Ventricular Function. 17th Annual Scientific Meeting of the Society of Cardiovascular Computed Tomography (SCCT). Las Vegas, NV July 15 17th, 2022.
- 63. Scott A, Kim P, Tran H, Kligerman S, Adler E, <u>Contijoch F</u>. Free Wall And Septal Wall Right Ventricular Strain With Ct For Postoperative Right Ventricular Failure Risk. 17th Annual Scientific Meeting of the Society of Cardiovascular Computed Tomography (SCCT). Las Vegas, NV July 15 17th, 2022.
- 62. Bird E, Hasenstab K, Kim NH, Madani M, Malhotra A, Hahn L, Kligerman S, Hsiao A, <u>Contijoch F</u>. Automated Hypoperfused Lung Volume In Proximal And Distal Chronic Thromboembolic Pulmonary Hypertension Undergoing Pulmonary Thromboendarterectomy. 15th Annual World Congress on PVD, Athens, Greece. June 22-26th, 2022. *E Bird awarded travel grant based on abstract score
- 61. Chen Z, Gupta K, <u>Contijoch F</u>. Motion Correction Image Reconstruction using NeuralCT Improves with Spatially Aware Object Segmentation. CT Meeting, 2022, Baltimore MD USA. June 12-16th, 2022.
- 60. Craine A, Alshawabkeh L, <u>Contijoch F</u>. *CT-based myocardial work estimation can highlight regional right ventricular performance in adult patients with repaired tetralogy of Fallot*. 32nd Annual International Symposium on ACHD, Cincinnati, OH. June 8-11th, 2022.
- 59. Chen Z, Contijoch F, McVeigh ER. Development of deep learning pipeline for direct observation of wall motion abnormality from 4DCT. SPIE Medical Imaging, 2022, San Diego CA, USA.
 - *Z Chen was a finalist for the Wagner All-Conference Best Student Paper Award
- 58. Chen Z, **Contijoch F**, McVeigh ER. *Regional Shortening from 4DCT Demonstrates High Sensitivity and Specificity for Detecting LV Wall Motion Abnormalities from Clinical Scans*. 16th Annual Scientific Meeting of the Society of Cardiovascular Computed Tomography (SCCT). Virtual due to COVID-19. July 16 17th, 2021.
- 57. Scott A, Hernandez Hernandez D, Adler E, Kim P, Kligerman S, <u>Contijoch F</u>. Synthesis of Contemporaneous CT Imaging and Right Heart Catheterization Improves Single-Beat RV-PA Coupling Estimations in Heart Failure Patients. 41st Annual Meeting of the International Society for Heart and Lung Transplantation. Virtual due to COVID-19. April 24-28th, 2021.

- 56. Yu E, Bird E, Gupta K, Colvert B, <u>Contijoch F</u>. Exclusivity Significantly Improves Deep Learning Classification of Multi-image Patient Studies. Annual Meeting of the Biomedical Engineering Society (BMES). Virtual due to COVID-19. October 14-17th, 2020.
- 55. Chen Z, Rigolli M, Vigneault D, Craine A, <u>Contijoch F</u>. Automated Multi-Chamber Segmentation and Imaging Plane Re-Slicing of Cardiac CT Images via Deep Learning. 15th Annual Scientific Meeting of the Society of Cardiovascular Computed Tomography (SCCT). Virtual due to COVID-19. July 17 19th, 2020.
- 54. Craine A, Colvert B, Contijoch F. Short-scan CT paired with beam tailoring minimizes patient dose in radiosensitive tissues. 15th Annual Scientific Meeting of the Society of Cardiovascular Computed Tomography (SCCT). Virtual due to COVID-19. July 17 19th, 2020.
- 53. Colvert B, Craine A, Contijoch F. CardiAcquire Beam-Shaping Filter Enables Significant Radiation Dose Reduction: Patient- and Organ-Specific Results. 15th Annual Scientific Meeting of the Society of Cardiovascular Computed Tomography (SCCT). Virtual due to COVID-19. July 17 19th, 2020.
- 52. Bird E, Hsiao AH, Kerr K, Kim N, Madani M, Kligerman S, Contijoch F. Quantification of CTEPH Disease Burden on CT Angiogram Correlates with patient Presurgical Hemodynamic Severity and Hemodynamic Improvement after PTE Surgery. 40thAnnual Meeting of the International Society for Heart and Lung Transplantation. Virtual due to COVID-19. April 23-26, 2020.
- 51. Scott A, Kim P, Tran H, Kligerman S, Pretorius V, Adler E, <u>Contijoch F</u>. *Pre-LVAD CT-Derived Measures of RV Size and Function May Be Strong Identifiers of Right Ventricular Failure*. 40thAnnual Meeting of the International Society for Heart and Lung Transplantation. Virtual due to COVID-19. April 23-26, 2020.
- 50. Rigolli M, Kahn A, Brambatti M, Contijoch F, Adler E. *Cardiomyopathy characterization* and risk stratification by cardiac magnetic resonance in Danon Disease. American College of Cardiology's 69th Annual Scientific Session and Expo. Virtual due to COVID-19. March 28-30th, 2020.
- 49. Colvert B, Yu E, **Contijoch F**, McVeigh R. *Towards Blood Flow Velocimetry with X-Ray CT*. 72nd Annual Meeting of the APS Division of Fluid Dynamics. Seattle, WA. November 23-26, 2019.
- 48. Bird EM, Hsiao AH, Kerr. K, Kim N, Madani M, Kligerman S, Contijoch F. Pre-operative mPAP, PVR, and TPR as well as change in PVR and TPR after PTE Correlate with Quantification of CTEPH Disease Burden on CT Angiogram. CTEPH Meeting. La Jolla, CA. November 15-16, 2019.

- 47. Colvert BT, McVeigh ER, Contijoch F. Local Field-of-View Tomography Enables Dose Reduction in Cardiac CT. 14th Annual Scientific Meeting of the Society of Cardiovascular Computed Tomography (SCCT). Baltimore, MD. July 11 14th, 2019. (Oral Presentation) * B. Colvert received the SCCT 2019 Cannon Young Investigator Award
- 46. Scott A, Kim PJ, Raghavan A, <u>Contijoch F</u>. Computed Tomography-derived Measurement of Stroke Work Index for Patients with Left Ventricular Assist Devices. 14th Annual Scientific Meeting of the Society of Cardiovascular Computed Tomography (SCCT). Baltimore, MD. July 11 14th, 2019.
- 45. Manohar A, Colvert GM, Contijoch F, McVeigh ER. *Quantitative Assessment of Very Small and Localized Regional Wall Motion Abnormalities From 4DCT: Recursive Estimation of SQUEEZ (reSQUEEZ)*. 14th Annual Scientific Meeting of the Society of Cardiovascular Computed Tomography (SCCT). Baltimore, MD. July 11 14th, 2019.
- 44. Colvert GM, Manohar A, Colvert BT, **Contijoch F**, McVeigh ER. *Analysis of longitudinal and circumferential strain on the endocardial surface using 4DCT data*. 14th Annual Scientific Meeting of the Society of Cardiovascular Computed Tomography (SCCT). Baltimore, MD. July 11 14th, 2019.
- 43. Severance L, Contijoch F, McVeigh ER. *A Genetic Risk Score Derived from 23 and Me Raw Data Identifies Asymptomatic Individuals at Increased Risk of Non-zero CAC*. 14th Annual Scientific Meeting of the Society of Cardiovascular Computed Tomography (SCCT). Baltimore, MD. July 11 14th, 2019.
- 42. Scott A, Kim PJ, Tran H, Brambatti M, Ignatyeva Y, Rosenberg S, Kligerman S, Hsiao A, Pretorius V, Adler E, <u>Contijoch F</u>. Cardiac CT Provides Complementary Parameters of Right Ventricle Function in LVAD Patients. 39th Annual Meeting of the International Society for Heart and Lung Transplantation. Orlando, FL. April 3-6, 2019
- 41. Colvert G, Manohar A, Schluchter A, **Contijoch F**, McVeigh ER. *Novel measurement of LV twist using cine CT: quantifying accuracy as a function of image noise*. SPIE Medical Imaging. San Diego, CA February 16 19, 2019. (**Oral Presentation**)
- 40. Manohar A, Colvert G, Schluchter A, **Contijoch F**, McVeigh ER. *LV systolic point-cloud model to quantify accuracy of CT derived regional strain*. SPIE Medical Imaging. San Diego, CA February 16 19, 2019. (**Oral Presentation**)
- 39. **Contijoch F**, Horowitz M, Masutani E, Hsiao A. *Flow vorticity may impair flow quantification in patients with aortic aneurysm*. 22nd Annual Meeting of the Society of Cardiovascular Magnetic Resonance. Bellevue, WA February 6 9, 2018.
- 38. Spang M, Sandoval G, Lazerson TS, Luo C, Osborn K, Cabrales P, **Contijoch F**, Reeves RR, DeMaria AN, and Christman KL. *Intracoronary Delivery of a Soluble Extracellular Matrix Therapy for Treating Acute Myocardial Infarction*. Annual Meeting of the American Heart Association. Chicago, IL. November 10-12 2018.

- 37. Colvert G, **Contijoch F**, McVeigh EM. *Measurement of LV Twist with cine CT*. 13th Annual Scientific Meeting of the Society of Cardiovascular Computed Tomography (SCCT). Grapevine, TX. July 12 15th, 2018.
- 36. Severance L, Contijoch F, Fan C, Carter H, Dale A, McVeigh EM. *Genetic risk score identifies asymptomatic younger individuals at increased risk of non-zero CAC*. 13th Annual Scientific Meeting of the Society of Cardiovascular Computed Tomography (SCCT). Grapevine, TX. July 12 15th, 2018. (Oral Presentation)
- 35. Contijoch F, Wong D, Igata S, McDivit Mizzell A, Auger W, DeMaria A, Blanchard D, Waheed A, Bachman T, Simon M, Pinsky M. *Pre-PTE Pulmonary Artery Elastance, Right Ventricular Elastance, and RV-PA Coupling Predict Post-Operative Length of Stay and Hemodynamics*. 38th Annual Meeting of the International Society for Heart and Lung Transplantation. Nice, France. April 11-14, 2018 (Oral Presentation)
- 34. Dass S, **Contijoch F**, Rodgers Z, Iyer SK, Witschey WR, Han Y. *Evaluation of Estimation Methods for Missing Premature Ventricular Contractile Beats During Real-Time CMR Slice Acquisition*. CMR 2018 A Joint EuroCMR/SCMR Meeting. Barcelona Spain. January 31 February 3, 2018.
- 33. **Contijoch F**, Groves DW, Chen MY, McVeigh ER. *Precise regional RV function measurement in the adult congenital heart with low radiation dose CT and SQUEEZ processing*. 103rd Scientific Assembly and Annual Meeting of the Radiological Society of North America. Chicago, IL. November 26 December 2, 2017
- 32. Wong D, Contijoch F, Auger WR, Madani MM, Koh S, Connelly A, Daniels L, Raisinghani A, DeMaria A, Blanchard D. 3-D Echocardiographic Right Ventricular Volumes and Function Before and After Pulmonary Thromboendarterectomy in Chronic Thromboembolic Pulmonary Hypertension. Annual Meeting of the American Heart Association. Anaheim, California. November 11-15 2017. (Oral Presentation)
- 31. Contijoch F, Wong D, Igata S, McDivit Mizzell A, Auger W, DeMaria A, Blanchard D, Waheed A, Bachman T, Simon M, Pinksy MR. *Pre-operative Pulmonary Artery Compliance, Elastance, and Right Ventricular End-Systolic Elastance Provide Predictive Information for Post-Operative Hemodynamic and Clinical Outcomes following Pulmonary Thromboendarterectomy*. CTEPH Meeting. La Jolla, CA. November 8-9, 2017.
- 30. Tran J, Yu W, Rowe E, Wang H, Lumens J, Auger W, Contijoch F. Patient-Specific Simulations Predict Adverse Postoperative Outcomes in CTEPH Patients Undergoing PTE. CTEPH Meeting. La Jolla, CA. November 8-9, 2017.
- 29. **Contijoch F**, Gualtieri G, Elliott MA, Berisha S, Gorman JH III, Gorman RC, Pilla JJ, Witschey WRT. *Real-time MRI of the heart using smart and autonomous radial sampling*. ISMRM Workshop on Magnetic Resonance Imaging of Cardiac Function. New York, NY. August 17-20 2017. **(Oral Presentation)**

- 28. **Contijoch F**, Stayman JW, McVeigh ER. *Scanner Geometry and Coronary Drift Impact Vessel and Lesion Quantification*. Annual Meeting of the Society of Cardiovascular Computed Tomography. Washington DC, July 6-9 2017.
- 27. Kim PJ, Contijoch F, Wong D, Ingle R, Hsiao A, Santos J, Kahn A, Pham M, McVeigh E, Adler E, Nguyen P. *Stress Cardiac MRI for Evaluation of Nonspecific Allograft Dysfunction in the Transplanted Heart*. International Society for Heart and Lung Transplantation 37th Annual Meeting and Scientific Sessions. April 5-8 2017.
- 26. Kim PJ, Contijoch F, Ingle R, Hsiao A, Santos J, Wong D, Kahn A, Pham M, Nguyen P. Stress Cardiac MRI for Evaluation of Nonspecific Allograft Dysfunction in Heart-Transplant. SCMR Annual Meeting. Washington, DC. February 1-4 2017.
- 25. McVeigh ER, Pourmorteza A, Guttman MA, Sandfort V, **Contijoch F**, Budhiraja S, Chen Z, Bluemke DA, Chen MY. *Local Myocardial Function Measured in Normal Human Hearts with CT SQUEEZ*. 102nd Scientific Assembly and Annual Meeting of the Radiological Society of North America. Chicago, IL. November 27 December 3, 2016 **(Oral Presentation)**
- 24. Zhang X, Sisniega A, Zbijewski W, Contijoch F, McVeigh ER, Stayman JW, *Image-based Motion Estimation for Plaque Visualization in Coronary Computed Tomography Angiography*, 58th AAPM Annual Meeting & Exhibition, Washington D.C., July 31 Aug. 4, 2016, #34068. (Oral Presentation)
- 23. Contijoch F, Rears H, Rogers K, Kellman P, Gorman JH, Gorman RC, Witschey W, Han Y. *Impact of Respiration on LV Volume and Function Using rt-MRI*. SCMR Annual Meeting. Los Angeles, CA. January 27-30 2016.
- 22. Shahid M, Solomon J, **Contijoch F**, Avants BA, Yushkevich P, Pilla JJ, Han Y, Witschey WRT. *Alterations in ectopic myocardial contraction assessed using real-time MRI*. SCMR Annual Meeting. Los Angeles, CA. January 27-30 2016.
- 21. Madden M, Shahid M, **Contijoch F**, Pilla JJ, Gorman JH III, Gorman RC, Witschey WRT. *Assessment of T1rho relaxation times after reperfused myocardial infarction*. SCMR Annual Meeting. Los Angeles, CA. January 27-30 2016.
- 20. Contijoch F, Rears H, Rogers K, Kellman P, Gorman JH, Gorman RC, Witschey W, Han Y. Beat to beat volumetric analysis in arrhythmia using real time CMR. SCMR/EuroCMR Joint Scientific Sessions. Nice, France, February 4-7 2015. (Oral Presentation)
- 19. **Contijoch F,** Han Y, Hansen MS, Kellman P, Gulatieri G, Elliot M, Berisha S, Pilla JJ, Gorman RC, Witschey WRT. *Continuous adaptive radial sampling of k-space from real-time physiologic feedback in MRI*. SCMR/EuroCMR Joint Scientific Sessions. Nice, France, February 4-7 2015.
- 18. **Contijoch F,** Witschey WR, McGarvey JR, Lee MA, Kondo N, Shimaoka T, Aoki C, Takebayashi S, Zsido GA, Dillard C, Gorman JH III, Gorman RC, Pilla. *Regional Frank*-

- Starling relations in infarcted swine via dynamic real-time MRI. ISMRM Annual Meeting. Milan, Italy, May 10-16 2014. (Oral Presentation)
- 17. **Contijoch F,** Han Y, Hansen MS, Pilla JJ, Gorman J III, Gorman RC, Witschey WR. *Non-Cartesian Retrospective Reconstruction of Cardiac Motion in Patients with Severe Arrhythmia*. ISMRM Annual Meeting. Milan, Italy, May 10-16 2014. **(Oral Presentation)**
- 16. **Contijoch F,** Rogers K, Witschey WR, Gorman RC, Han Y. *The spatial and temporal fidelity in real-time MRI in patients with sinus rhythm and arrhythmias*. SCMR Annual Meeting. New Orleans, LA. January 16-19, 2014. **(Oral Presentation)**
- 15. Contijoch F, Rogers K, Witschey WR, Gorman RC, Han Y. *Aortic valve timing is critical for accurate estimation of MRI-derived ejection fraction*. SCMR Annual Meeting. New Orleans, LA. January 16-19, 2014.
- 14. **Contijoch F,** Rogers K, Witschey WR, Gorman RC, Han Y. *Left ventricular dyssynchrony can be observed via cine CMR with use of aortic valve timing.* SCMR Annual Meeting. New Orleans, LA. January 16-19, 2014.
- 13. **Contijoch F**, Rogers K, Avants B, Yushkevich P, Hoshmand V, Gorman RC, Han Y, Witschey WR. *Quantification of left ventricular deformation fields from undersampled radial, real-time cardiac MRI*. SCMR Annual Meeting. New Orleans, LA. January 16-19, 2014.
- 12. Witschey WR, Contijoch F, McGarvey JR, Ferrari VA, Hansen M, Chirinos J, Yushkevich P, Gorman JC, Gorman RC, Pilla JJ. *The Frank-Starling relationship of the heart revealed in a large animal study utilizing real-time undersampled radial MRi at variable inotropic state and heart rate.* SCMR Annual Meeting. New Orleans, LA. January 16-19, 2014.
- 11. **Contijoch F**, Witschey WR, McGarvey JR, Levack MA, Ferrari V, Chirinos J, Kondo N, Takebayashi S, Shimaoka T, Aoki C, Zsido GA, Gorman JH, Gorman RC, Pilla JJ. *Validation of Real Time MR Imaging Using Pressure-Volume Loops*. International Society for Magnetic Resonance in Medicine Annual Meeting. Salt Lake City, UT. April 22-26 2013.
- 10. Singh A, Haris M, Cai K, Kogan F, Witschey W, Zsido G, McGarvey J, Nanga R, **Contijoch** F, Pilla J, Gorman J, Ferrari V, Hariharan H, Gorman R, Reddy R. *Z-Spectrum Fitting for CEST Contrast Computation in In Vivo Myocardium Tissue*. International Society for Magnetic Resonance in Medicine Annual Meeting. Salt Lake City, UT. April 22 26 2013.
- 9. **Contijoch F**, Witschey WR, McGarvey JR, Levack MA, Ferrari V, Kondo N, Takebayashi S, Shimaoka T, Aoki C, Zsido GA, Gorman JH, Gorman RC, Pilla JJ. *Real Time MRI of Border Zone End-Systolic Regional Work*. SCMR Annual Meeting. San Francisco, CA. January 31 February 3, 2013.
- 8. **Contijoch F**, Witschey WR, Levack MA, McGarvey JR, Ferrari V, Kondo N, Takebe M, Zsido GA, Dillard C, Lau K, Gorman JH, Gorman RC, Pilla JJ. *Measurement of Load Independent Indices of Cardiac Function Using Real Time MRI During Inflow Occlusion*. BMES Annual Meeting, Atlanta, GA. October 24-27, 2012

- 7. **Contijoch F**, Witschey WR, Levack MA, McGarvey JR, Ferrari V, Kondo N, Takebe M, Zsido GA, Dillard C, Lau K, Gorman JH, Gorman RC, Pilla JJ. *Regional Cardiac Strain Estimates via CMR During Transient Preload Reduction*. BMES Annual Meeting, Atlanta, GA. October 24-27, 2012
- 6. Contijoch F, Witschey WR, Levack MA, McGarvey JR, Ferrari V, Zsido GA, Takebe M, Kondo N, Dillard C, Lau K, Song HK, Dougherty L, Gorman JH, Gorman RC, Pilla JJ. Estimation of Cardiac Elastance and Compliance from Pressure-Volume Tracing During Inflow Occlusion Using Real Time Cardiac Imaging. International Society for Magnetic Resonance in Medicine Annual Meeting. Melbourne, Australia. May 5-11 2012.
- 5. McGarvey JR, Witschey WR, Koomalsingh K, Kondo N, Takebe M, Zsido GA, Levack MA, Dillard C, Lau K, Xu C, Contijoch F, Barker A, Markl M, Gorman JH, Gorman RC, Pilla JJ. In Vivo Four-Dimensional Flow Analysis of Mechanically Assisted Ischemic Cadiomyopathy. International Society for Magnetic Resonance in Medicine Annual Meeting. Melbourne, Australia. May 5-11 2012. (Oral Presentation)
- 4. Li C, **Contijoch F**, Wehrli FW, Song HK. *View Angle Titling for Distortion Compensated EPI: Effects of RF Pulse Width on Image Blurring and Slice Profile*. International Society for Magnetic Resonance in Medicine Annual Meeting. Melbourne, Australia. May 5-11 2012.
- 3. Levack MA, Witschey WR, McGarvey JR, Koomalsingh K, Zsido GA, Kondo N, Takebe M, Xu C, Contijoch F, Barker A, Markl M, Gorman JH, Pilla JJ, Gorman RC. *Ischemic Mitral Regurgitation Contributes to Alterations in Left Ventricular Three-Dimensional Intracardiac Flow Patterns*. International Society for Magnetic Resonance in Medicine Annual Meeting. Melbourne, Australia. May 5-11 2012.
- 2. Witschey, **Contijoch**, Pilla, Dougherty, Song, Levack, McGarvey, Kondo, Zsido, Gorman, Gorman. *Real time measurement of cardiac pressure-volume relationships*. SCMR/ISMRM Workshop. Exploring New Dimensions in Cardiovascular Flow and Motion. Orlando, FL. February 1-2, 2012
- 1. Burlina, Sprouse, Jorstad, DeMenthon, Contijoch, McVeigh, Juang, Abraham, and Yuh. *Individualized Cardiothoracic Surgical Planning using Computer Aided 3D Modeling and Image Analysis*. AMA-IEEE Medical Technology Conference on Individualized Healthcare. Washington, DC. March 21-23, 2010.