

Publications and Abstracts by MHI Cardiology Fellows 2012 – 2018

2012 Abstracts	<p>Louis Kohl, Ross Garberich, Hannah Yang, David Hildebrandt, Timothy Henry. Contemporary Outcomes of ST-elevation Myocardial in Patients with Prior Bypass Graft. Abstract presented at Transcatheter Cardiovascular Therapeutics conference held October 22-26, 2012, in Miami, FL.</p> <p>Michael Tradewell, Louis Kohl, Ross F Garberich, Anil K Poulouse, Randall K Johnson, Jay H Traverse, M Nicholas Burke, Theresa L Arndt, Timothy D Henry. Subsequent Revascularization in "No Option" Patients with Refractory Angina: Etiology and Outcome. Abstract presented at the American Heart Association Scientific Sessions 2012 held November 3-7 in Los Angeles, CA.</p>
2012 Publications	Desai N, Kalra A . Short fourth and fifth metacarpals. JAMA. 2012 Sep 12;308(10):1034-5. doi: 10.1001/2012.jama.11065. No abstract available. PMID: 22968892.
2013 Publications	Palaniswamy C, Mishkin A, Aronow WS, Kalra A , Frishman WH. Remote patient monitoring in chronic heart failure. Cardiol Rev. 2013 May-Jun;21(3):141-50. doi: 10.1097/CRD.0b013e318276198b. Review. PubMed PMID: 23018667.
2014 Abstracts	Ankur Kalra , Farnaaz Kia (2012 intern), Benjamin Johnson , Marc Newell, Ross Garberich, John Lesser, Raed Abdelhadi, Timothy Henry, Jay Sengupta. Post-Myocardial Infarction Risk Stratification of Patients at Risk for Sudden Cardiac Arrest by Contrast-Enhanced Magnetic Resonance Imaging Scar Quantification. Oral contribution presented at the American College of Cardiology's 2014 Scientific Session and Expo held March 29-31 in Washington, DC. Note: This study was selected as a finalist in the ACC's Young Investigator Award competition.
2014 Publications	Kohl LP , Garberich RF, Yang H, Sharkey SW, Burke MN, Lips DL, Hildebrandt DA, Larson DM, Henry TD. Outcomes of primary percutaneous coronary intervention in ST-segment elevation myocardial infarction patients with previous coronary bypass surgery. JACC Cardiovasc Interv. 2014 Sep;7(9):981-7. doi: 10.1016/j.jcin.2014.04.010. PubMed PMID: 25234670.

Publications and Abstracts by MHI Cardiology Fellows 2012 – 2018

Garg A, Brodie BR, Stuckey TD, Garberich RF, Tobbia P, Hansen C, Kissling G, **Kadokia H**, Lips D, Henry TD. New generation drug-eluting stents for ST-elevation myocardial infarction: a new paradigm for safety. *Catheter Cardiovasc Interv*. 2014 Nov 15;84(6):955-62. doi: 10.1002/ccd.25280. Epub 2014 Aug 11. PubMed PMID: 24174334.

Brodie BR, Hansen C, Garberich RF, Browning JA, Tobbia P, Handran CB, Burke MN, **Kadokia H**, Stuckey TD, Henry TD. ST-segment elevation myocardial infarction resulting from stent thrombosis: an enlarging subgroup of high-risk patients. *J Am Coll Cardiol*. 2012 Nov 6;60(19):1989-91. doi: 10.1016/j.jacc.2012.07.043. Epub 2012 Oct 10. No abstract available. PMID: 23062533

Tsigrelis C, **Kalra A**. Lung Abscess. First Consult, MD Consult Web Site. Available at: http://www.mdconsult.com/das/pdxmd/body/394417939-1131/0?type=med&eid=9-u1.0-1_mt_5111610.

Book Chapter: **Kalra A**, Aggarwal A, Kneeland R, Traverse JH. Percutaneous Coronary Intervention in Spontaneous Coronary Artery Dissection: Role of Intravascular Ultrasound. *Cardiol Ther*. 2014 Dec;3(1-2):61-6. doi: 10.1007/s40119-014-0029-4. Epub 2014 Aug 20. PubMed PMID: 25139465; PubMed Central PMCID: PMC4265227.

Kalra A, Kneeland R, Samara MA, Cooper LT Jr. The Changing Role for Endomyocardial Biopsy in the Diagnosis of Giant-Cell Myocarditis. *Cardiol Ther*. 2014 Dec;3(1-2):53-9. doi: 10.1007/s40119-014-0028-5. Epub 2014 May 9. PubMed PMID: 25135591; PubMed Central PMCID: PMC4265228

Kalra A, Maharaj V, Goldsmith SR. Vasopressin receptor antagonists: from pivotal trials to current practice. *Curr Heart Fail Rep*. 2014 Mar;11(1):10-8. doi: 10.1007/s11897-013-0175-3. Review. PubMed PMID: 24197791.

Kalra A, Maharaj V, Johannsen RA, Hollenberg SM. Catheterization laboratory activation during mechanical cardiopulmonary resuscitation: when should we say "No?". *Catheter Cardiovasc Interv*. 2014 Jan 1;83(1):58-64. doi: 10.1002/ccd.25167. Epub 2013 Sep 23. Review. PubMed PMID: 24038710.

Kalra A, Shroff GR, Erlien D, Gilbertson DT, Herzog CA. Perflutren-based echocardiographic contrast in patients with right-to-left intracardiac shunts. *JACC Cardiovasc Imaging*. 2014 Feb;7(2):206-7. doi: 10.1016/j.jcmg.2013.11.003. PubMed PMID: 24524748.

Maron BJ, **Kalra A**. Hypertrophic cardiomyopathy in the developing world: focus on India. *Eur Heart J*. 2014 Sep 21;35(36):2492-5. doi: 10.1093/eurheartj/ehu280. Epub 2014 Jul 19. PubMed PMID: 25038775.

Publications and Abstracts by MHI Cardiology Fellows 2012 – 2018

	<p>Daley B, Miranda D, Kalra A, Pease D. Profound thrombocytopenia caused by abciximab infusion following. Minn Med. 2014 Oct;97(10):48-9. PubMed PMID:25651641</p> <p>Kalra A. Organizing an International Elective: A Unique Opportunity for Cardiovascular Fellows. J Am Coll Cardiol. 2014;64(22):2429-2431. doi:10.1016/j.jacc.2014.10.014</p> <p>Kalra A, Shroff GR, Herzog CA. Safety of ultrasound contrast agents in patients with intracardiac shunts. J Am Soc Echocardiogr. 2014 Dec;27(12):1359.doi: 10.1016/j.echo.2014.08.021. Epub 2014 Oct 28. PubMed PMID: 25440508.</p> <p>Sandoval Y, Apple FS. The global need to define normality: the 99th percentile value of cardiac troponin. Clin Chem. 2014 Mar;60(3):455-62. doi: 10.1373/clinchem.2013.211706. Epub 2013 Oct 10. Review. PubMed PMID: 24115136.</p> <p>Sandoval Y, Smith SW, Thordsen SE, Apple FS. Supply/demand type 2 myocardial infarction: should we be paying more attention? J Am Coll Cardiol. 2014 May 27;63(20):2079-87. doi: 10.1016/j.jacc.2014.02.541. Epub 2014 Mar 13. PubMed PMID: 24632278.</p> <p>Stendahl JC, Hasan AS, Simegn MA. Massive interventricular septal aneurysm and stroke in a healthy young patient: guilt by association? J Stroke Cerebrovasc Dis. 2014 Mar;23(3):590-1. doi:10.1016/j.jstrokecerebrovasdis.2013.05.010. Epub 2013 Jun 6.</p> <p>Kalra A. Organizing an international elective: a unique opportunity for cardiovascular fellows. J Am Coll Cardiol. 2014 Dec 9;64(22):2429-31; discussion 2431. doi: 10.1016/j.jacc.2014.10.014. Epub 2014 Dec 1. PubMed PMID: 25465426.</p>
<p>2015 Abstracts</p>	<p>Ankur Kalra, Pranay Rao, Amit Sharma, Ross Garberich, Deepa McGriff, Susan Casey, Raed Abdelhadi, JoEllyn Abraham, Jay Sengupta, Barry Maron. Silent Atrial Fibrillation Burden in Patients with Hypertrophic Cardiomyopathy. Poster presentation at the American College of Cardiology's 2015 Scientific Sessions held March 14-16 in San Diego, CA.</p> <p>Yader Sandoval, Kyle Anderson (2013-14 intern), Ivan Chavez, Ross Garberich, David Hildebrandt, Katarzyna Hryniewicz. Percutaneous Veno-Arterial Extracorporeal Membrane Oxygenation for Patients Presenting with Refractory Cardiogenic Shock Due to ST-Segment Elevation Myocardial Infarction. Poster presentation at the American College of Cardiology's 2015 Scientific Sessions held March 14-16 in San Diego, CA.</p>

Publications and Abstracts by MHI Cardiology Fellows 2012 – 2018

2015 Publications

Kalra A, Maron MS, Rowin EJ, Colgan TK, Lesser JR, Maron BJ. Coronary embolization in hypertrophic cardiomyopathy with left ventricular apical aneurysm. *Am J Cardiol.* 2015 May 1;115(9):1318-9. doi: 10.1016/j.amjcard.2015.02.016. Epub 2015 Feb 12. PubMed PMID: 25759101.

Maron BJ, Rowin EJ, **Kalra A**, Lesser JR, Maron MS. Reply: To PMID 25759101. *Am J Cardiol.* 2015 Aug 1;116(3):492-3. doi: 10.1016/j.amjcard.2015.05.001. Epub 2015 May 21. PubMed PMID: 26059868

Kalra A, Pokharel Y, Hira RS, Risch S, Vicera V, Li Q, Kalra RN, Kerkar PG, Kumar G, Maddox TM, Oetgen WJ, Glusenkamp N, Turakhia MP, Virani SS. Cardiovascular Disease Performance Measures in the Outpatient Setting in India: Insights From the American College of Cardiology's PINNACLE India Quality Improvement Program (PIQIP). *J Am Heart Assoc.* 2015 May 20;4(5). pii: e001910. doi: 10.1161/JAHA.115.001910. PubMed PMID: 25994444; PubMed Central PMCID: PMC4599418.

Lipman HI, **Kalra A**, Kirkpatrick JN. Foundations of medical decision-making for older adults with cardiovascular disease. *J Geriatr Cardiol.* 2015 Jul;12(4):335-9. doi: 10.11909/j.issn.1671-5411.2015.04.004. PubMed PMID: 26347213; PubMed Central PMCID: PMC4554783.

Kalra A, Simegn MA, Bart BA. Inpatient Cardiology Consultation Service: Transitioning Fellows-in-Training to Independent Cardiovascular Consultants. *J Am Coll Cardiol.* 2015 Aug 18;66(7):867-70. doi: 10.1016/j.jacc.2015.06.1320. PubMed PMID: 26271071.

Kalra A, Harris KM, Kische S, Alden P, Schumacher C, Nienaber CA. Endovascular Repair of Descending Thoracic Aorta in Loeys-Dietz II Syndrome. *Ann Vasc Surg.* 2015 Oct;29(7):1452.e17-21. doi: 10.1016/j.avsg.2015.04.071. Epub 2015 Jun 26. PubMed PMID: 26122412.

Maron BJ, Rowin EJ, **Kalra A**, Lesser JR, Maron MS. Reply: To PMID 25759101. *Am J Cardiol.* 2015 Aug 1;116(3):492-3. doi: 10.1016/j.amjcard.2015.05.001. PubMed PMID: 26059868

Johnson BK, Garberich RF, Henry TD, Katsiyannis WT, Sengupta J, Kalra A, Hauser RG, Lardy ME, Newell MC. Eligibility and utilization of implantable cardioverter-defibrillators in a regional STEMI system. *Heart Rhythm.* 2016 Feb;13(2):538-46. doi: 10.1016/j.hrthm.2015.10.019. Epub 2015 Oct 13. PubMed PMID: 26576706.

Publications and Abstracts by MHI Cardiology Fellows 2012 – 2018

<p>2016 Abstracts</p>	<p>Sorajja P, Nelson P, Bae R, Sandoval Y, Lesser J, Pedersen W, Tindell L, Harris K, Farivar RS. Adverse Impact of Aortic Regurgitation on the Long-Term Survival of Patients with Native Aortic Valve Stenosis. Presented at ACC 2016, Chicago IL.</p> <p>Johnson B, Garberich R, Johnson D, Larson D, Hildebrandt D, Henry T, Sharkey S. Ventricular Fibrillation Among Patients with ST-Elevation Myocardial Infarction in the PCI Era. Presented at ACC 2016.</p> <p>Garberich R, Sharkey S, Johnson D, Johnson B, Traverse J, Poulouse A, Lips D, Larson D, Henry T. Clinical Characteristics and Outcomes of Cardiac Arrest Patients in the Setting of ST-Elevation Myocardial Infarction. Presented at ACC 2016.</p> <p>Johnson B, Garberich R, Johnson D, Henry T, Sharkey S. Influence of Age and Gender on Outcomes in Patients with ST-Elevation Myocardial Infarction Complicated by Ventricular fibrillation or Tachycardia at a Regional PCI Center. Presented at ACC 2016.</p>
<p>2016 Publications</p>	<p>Johnson BK, Garberich RF, Henry TD, Katsiyannis WT, Sengupta J, Kalra A, Hauser RG, Lardy ME, Newell MC. Eligibility and utilization of implantable cardioverter-defibrillators in a regional STEMI system. <i>Heart Rhythm</i>. 2016 Feb;13(2):538-46. doi: 10.1016/j.hrthm.2015.10.019. Epub 2015 Oct 13. PubMed PMID: 26576706.</p> <p>Kalra A, Harris KM, Maron BA, Maron MS, Garberich RF, Haas TS, Lesser JR, Maron BJ. Relation of Doppler Tissue Imaging Parameters With Heart Failure Progression in Hypertrophic Cardiomyopathy. <i>Am J Cardiol</i>. 2016 Jun 1;117(11):1808-14. doi: 10.1016/j.amjcard.2016.03.018. Epub 2016 Mar 19. PMID: 27089980</p> <p>Virani SS, Pokharel Y, Steinberg L, Chan W, Akeroyd JM, Gowani SA, Kalra A, Polsani V, Miedema MD, Jones PH, Nambi V, Petersen LA, Ballantyne CM. Provider understanding of the 2013 ACC/AHA cholesterol guideline. <i>J Clin Lipidol</i>. 2016 May-Jun;10(3):497-504.e4. doi: 10.1016/j.jacl.2015.11.002. Epub 2015 Nov 17. PMID: 27206936</p> <p>Kalra A, Pedersen WR, Mackey-Bojack SM, Duncanson ER, Harris KM. Patho-Histological Findings of Annular Rupture Related to Left Ventricular Outflow Tract (LVOT) Calcification Following Transcatheter Aortic Valve Replacement (TAVR). <i>J Heart Valve Dis</i>. 2016 May;25(3):296-300. PubMed PMID: 27989039</p> <p>Garcia S, Rector TS, Zakharova M, Herrmann RR, Adabag S, Bertog S, Sandoval Y, Santilli S, Brilakis ES, McFalls EO. Cardiac Remote Ischemic Preconditioning Prior to Elective Vascular Surgery (CRIPES): A</p>

Publications and Abstracts by MHI Cardiology Fellows 2012 – 2018

	<p>Prospective, Randomized, Sham-Controlled Phase II Clinical Trial. J Am Heart Assoc. 2016 Sep 29;5(10). pii: e003916. PubMed PMID: 27688236.</p> <p>Sandoval Y. Passions and Realities of Training in Cardiology: Challenges for Fellows-in-Training. J Am Coll Cardiol. 2016 Jan 5;67(1):112-4; discussion 115. doi: 10.1016/j.jacc.2015.11.018. PubMed PMID: 26764073.</p> <p>Sandoval Y, Zakharova M, Rector TS, Brilakis ES, Drexel T, McFalls EO, Garcia S. Frequency of Increase in Cardiac Troponin Levels After Peripheral Arterial Operations (Carotid Endarterectomy, Abdominal Aorta Procedure, Distal Bypass) and Their Effect on Medical Management. Am J Cardiol. 2016 Dec 15;118(12):1929-1934. doi: 10.1016/j.amjcard.2016.08.087. PubMed PMID: 27726853.</p> <p>Hryniewicz K, Sandoval Y, Samara M, Bennett M, Cabuay B, Chavez IJ, Seatter S, Eckman P, Zimbwa P, Dunn A, Sun B. Percutaneous Venoarterial Extracorporeal Membrane Oxygenation for Refractory Cardiogenic Shock Is Associated with Improved Short- and Long-Term Survival. ASAIO J. 2016 Jul-Aug;62(4):397-402. doi: 10.1097/MAT.0000000000000378. PMID: 27045967</p> <p>Johnson BK, Tierney DM, Rosborough TK, Harris KM, Newell MC. Internal medicine point-of-care ultrasound assessment of left ventricular function correlates with formal echocardiography. J Clin Ultrasound. 2016 Feb;44(2):92-9. doi: 10.1002/jcu.22272. Epub 2015 Jul 14. PubMed PMID: 26179460.</p>
<p>2017 Abstracts</p>	<p>Huynh N, Thordsen S, Thomas T, Nwaudu D, Garberich R, Harris K. Clinical and Pathologic Findings of Aortic Dissection at Autopsy: Review of 338 Cases over 6 Decades. Presented March 18, 2017 at ACC Conference, Washington, DC.</p> <p>Miranda D, Magod B, Wilson K, Garberich R, Williams D, Hryniewicz K. Outcomes of Extra Corporeal Membrane Oxygenation by Etiology: A Single Center Experience Presented at: ISHLT (International Society for Heart and Lung Transplantation) Conference in San Diego, April 5-8, 2017</p> <p>Miranda D, Magod B, Wilson K, Garberich R, Hryniewicz K. Veno-Arterial Extracorporeal Membrane Oxygenation as Bridge to LVAD is Associated with Good Long-term Outcomes and Quality of Life Presented at: ISHLT (International Society for Heart and Lung Transplantation) Conference in San Diego, April 5-8, 2017</p>

Publications and Abstracts by MHI Cardiology Fellows 2012 – 2018

	<p>Danek BA, Tajti P, Karpaliotis D, Alaswad K, Jaffer F, Yeh R, Garcia S, Kandzari D, Lembo N, Patel M, Mahmud E, Choi J, Doing A, Lombardi W, Wyman RM, Toma C, Krestyaninov O, Moses J, Kirtane A, Hatem R, Parikh M, Karacsonyi J, Sandoval Y, Rangan B, Khalili H, Banerjee S, Brilakis E. The impact of complete versus incomplete revascularization on the outcomes of patients with single vessel and multivessel disease undergoing chronic total occlusion percutaneous coronary intervention. Presented at AHA Scientific Sessions, Anaheim CA, November 12, 2017.</p> <p>Sandoval Y, Christenson R, Wu A, Sexter A, Love S, Schulz K, Apple FS. High sensitivity cardiac troponin sex specific 99th percentiles derived from universal sample bank. Presented at AHA Scientific Sessions, Anaheim, CA. November 14, 2017.</p> <p>Donovan C, Johnson B, Garberich R, Hibbs J, Larson D, Henry T, Sharkey S. Influence of Cardiac Arrest and Cardiogenic Shock on Outcomes Among 4500 Consecutive ST Elevation Myocardial Infarction Patients. Presented March 18 at ACC Conference Washington DC</p> <p>Johnson B, Donovan C, Garberich R, Hibbs J, Larson D, Henry T, Sharkey S. Outcome and Characteristics of Shockable versus Non-shockable Cardiac Arrest in ST Elevation Myocardial Infarction at a Regional Transfer Center. Presented on March 18, 2017 at ACC Conference, Washington DC</p> <p>Sharma A, Nwaudo D, Pavlovec P, Strauss C, Garberich R, Sun B, Manunga J, Calcaterra D, Titus J, Harris K. Aortic dissection: long-term outcomes. Presented at AHA Scientific Sessions, Anaheim CA, November 11, 2017.</p>
<p>2017 Publications</p>	<p>Sandoval Y, Smith SW, Shah AS, Anand A, Chapman AR, Love SA, Schulz K, Cao J, Mills NL, Apple FS. Rapid Rule-Out of Acute Myocardial Injury Using a Single High-Sensitivity Cardiac Troponin I Measurement. Clin Chem. 2017 Jan;63(1):369-376. doi: 10.1373/clinchem.2016.264523</p> <p>Miranda DF, Bennett MK, Zimbwa P. Acute Fulminant Giant Cell Myocarditis Presenting with Syncopal Events Treated Successfully with Orthotopic Heart Transplant. Journal of the Minneapolis Heart Institute Foundation. 2017;1(1):72-75.</p> <p>Carlson MD. Reflections on Admissions for Heart-and Social System-Failure. JAMA Cardiol. 2017 Sep 1;2(9):948-949. doi: 10.1001/jamacardio.2017.1492. PubMed PMID: 28538951.</p> <p>Greenslade JH, Adikari T, Mueller C, Sandoval Y, Nestelberger T, Parsonage W, Hawkins T, Cullen L. Characteristics and occurrence of type 2 myocardial infarction in emergency department patients: a prospective study. Emerg Med J. 2017 Aug 7. pii: emermed-2017-206869.</p>

Publications and Abstracts by MHI Cardiology Fellows 2012 – 2018

doi: 10.1136/emered-2017-206869. [Epub ahead of print] PubMed PMID: 28784608

Díaz-Garzón J, **Sandoval Y**, Smith SW, Love S, Schulz K, **Thordsen SE**, **Johnson BK**, Driver B, Jacoby K, **Carlson MD**, Dodd KW, Moore J, Scott NL, Bruen CA, Hatch R, Apple FS. Discordance between ICD-Coded Myocardial Infarction and Diagnosis according to the Universal Definition of Myocardial Infarction. Clin Chem. 2017 Jan;63(1):415-419. doi: 10.1373/clinchem.2016.263764

Sandoval Y, Thygesen K. Myocardial Infarction Type 2 and Myocardial Injury. Clin Chem. 2017 Jan;63(1):101-107. doi: 10.1373/clinchem.2016.255521. Review. PubMed PMID: 28062614

Apple FS, **Sandoval Y**, Jaffe AS, Ordonez-Llanos J; IFCC Task Force on Clinical Applications of Cardiac Bio-Markers. Cardiac Troponin Assays: Guide to Understanding Analytical Characteristics and Their Impact on Clinical Care. Clin Chem. 2017 Jan;63(1):73-81. doi: 10.1373/clinchem.2016.255109. Review. PubMed PMID: 28062612

Sandoval Y, Smith SW, Love SA, Sexter A, Schulz K, Apple FS. Single high-sensitivity cardiac troponin I to rule-out acute myocardial infarction. Am J Med. 2017 Mar 23. pii: S0002-9343(17)30257-7. doi: 10.1016/j.amjmed.2017.02.032. [Epub ahead of print] PubMed PMID: 28344141.

Sandoval Y, Lobo AS, Brilakis ES. Covered stent implantation through a single 8-french guide catheter for the management of a distal coronary perforation. Catheter Cardiovasc Interv. 2017 Oct 1;90(4):584-588. doi: 10.1002/ccd.27020. [Epub 2017 Mar 17] PubMed PMID: 28303639.

Apple FS, **Sandoval Y**, Jaffe AS. In Reply. Clin Chem. 2017 Jun;63(6):1167-1170. doi: 10.1373/clinchem.2017.273250. Epub 2017 Apr 20. PubMed PMID: 28428359.

Sandoval Y, Smith SW, Sexter A, **Thordsen SE**, Bruen CA, **Carlson MD**, Dodd KW, Driver BE, Hu Y, Jacoby K, **Johnson BK**, Love SA, Moore JC, Schulz K, Scott NL, Apple FS. Type 1 and 2 Myocardial Infarction and Myocardial Injury: Clinical Transition to High-Sensitivity Cardiac Troponin I. Am J Med. 2017 Jul 21. pii: S0002-9343(17)30716-7. doi: 10.1016/j.amjmed.2017.05.049. [Epub ahead of print] PubMed PMID: 28739197

Sandoval Y, Lobo AS, Somers VK, Rosenfield K, Bradley SM, Sorajja P, Tajti P, Brilakis ES. Sleep deprivation in interventional cardiology: Implications for patient care and physician-health. Catheter Cardiovasc Interv. 2017 Jul 14. doi: 10.1002/ccd.27185. [Epub ahead of print] PubMed PMID: 28707310

Publications and Abstracts by MHI Cardiology Fellows 2012 – 2018

Sandoval Y, Smith SW, **Thordsen SE**, Bruen CA, Carlson MD, Dodd KW, Driver BE, Jacoby K, **Johnson BK**, Love SA, Moore JC, Sexter A, Schulz K, Scott NL, Nicholson J, Apple FS. Diagnostic Performance of High Sensitivity Compared with Contemporary Cardiac Troponin I for the Diagnosis of Acute Myocardial Infarction. *Clin Chem*. 2017 Oct;63(10):1594-1604. doi: 10.1373/clinchem.2017.272930. Epub 2017 Jul 12. PMID: 28701316

Sandoval Y. Editorial commentary: Improving our understanding of type 2 myocardial infarction and myocardial injury. *Trends Cardiovasc Med*. 2017 Aug;27(6):418-419. doi: 10.1016/j.tcm.2017.03.007. Epub 2017 Mar 28. PubMed PMID: 28457612

Danek BA, Karatasakis A, Tajti P, **Sandoval Y**, Karmpalotis D, Alaswad Jaffer F, Yeh RW, Kandzari DE, Lembo NJ, Patel MP, Mahmud E, Choi JW, Doing AH, Lombardi WL, Wyman RM, Toma C, Garcia S, Moses JW, Kirtane AJ, Hatem R, Ali ZA, Parikh M, Karacsonyi J, Rangan BV, Khalili H, Burke MN, Banerjee S, Brilakis ES. Incidence, Treatment, and Outcomes of Coronary Perforation During Chronic Total Occlusion Percutaneous Coronary Intervention. *Am J Cardiol*. 2017 Oct 15;120(8):1285-1292. doi: 10.1016/j.amjcard.2017.07.010. Epub 2017 Jul 24. PubMed PMID: 28826896

Sandoval Y, Burke MN, Lobo AS, Lips DL, Seto AH, Chavez I, Sorajja P, Abu-Fadel MS, Wang Y, Poulouse A, Gössl M, Mooney M, Traverse J, Tierney D, Brilakis ES. Contemporary Arterial Access in the Cardiac Catheterization Laboratory. *JACC Cardiovasc Interv*. 2017 Nov 27;10(22):2233-2241. doi: 10.1016/j.jcin.2017.08.058. Review. PubMed PMID: 29169493.

Chapman AR, Lee KK, McAllister DA, Cullen L, Greenslade JH, Parsonage W, Worster A, Kavsak PA, Blankenberg S, Neumann J, Sörensen NA, Westermann D, Buijs MM, Verdell GJE, Pickering JW, Than MP, Twerenbold R, Badertscher P, Sabti Z, Mueller C, Anand A, Adamson P, Strachan FE, Ferry A, Sandeman D, Gray A, Body R, Keevil B, Carlton E, Greaves K, Korley FK, Metkus TS, **Sandoval Y**, Apple FS, Newby DE, Shah ASV, Mills NL. Association of High-Sensitivity Cardiac Troponin I Concentration With Cardiac Outcomes in Patients With Suspected Acute Coronary Syndrome. *JAMA*. 2017 Nov 21;318(19):1913-1924. doi: 10.1001/jama.2017.17488. PubMed PMID: 29127948.

Shah ASV, **Sandoval Y**, Noaman A, Sexter A, Vaswani A, Smith SW, Gibbins M, Griffiths M, Chapman AR, Strachan FE, Anand A, Denvir MA, Adamson PD, D'Souza MS, Gray AJ, McAllister DA, Newby DE, Apple FS, Mills NL. Patient selection for high sensitivity cardiac troponin testing and diagnosis of myocardial infarction: prospective cohort study. *BMJ*. 2017 Nov 7;359:j4788. doi: 10.1136/bmj.j4788. PubMed PMID: 29114078; PubMed Central PMCID: PMC5683043.

Publications and Abstracts by MHI Cardiology Fellows 2012 – 2018

	<p>Chu MC, Dickey WP, Eales F, Johnson BK, Pagan-Carlo L, Skeik N. Idiopathic inflammatory ascending aortitis treated successfully with steroids. J Minn Heart Inst. 2017. 1(2);145-148.</p> <p>Elbadawi A, Elgendy IY, Megaly M, Ha LD, Mahmoud K, Alotaki E, Ogunbayo GO, Baig B, Abuzaid AS, Saad M, Depta JP. Am J Cardiol. 2017;120:1055-1061. PubMed PMID: 28826897.</p> <p>Megaly M, Saad M, Tajti P, Burke MN, Chavez I, Goessl M, Lips D, Mooney M, Poulouse A, Sorajja P, Traverse J, Wang Y, Kohl LP, Bradley SM, Brilakis ES. J Interv Cardiol. 2018 Jul 4. Doi:10.1111/joic.12538. [Epub ahead of print] PMID: 29974508.</p> <p>Elbadawi A, Elgendy IY, Saad M, Megaly M, Mentias A, Shahin HI, London B. Is there still room for the prophylactic use of levosimendan in cardiac surgery? (Reply). Ann Thorac Surg. 2018 [Epub ahead of print] PMID: 30028976</p>
<p>2018 Abstracts</p>	<p>Lobo A, Sandoval Y, Burke MN, Chavez I, Goessl M, Henry T, Lips D, Bradley S, Mooney M, Poulouse A, Sorajja P, Traverse J, Wang Y, Brilakis E. Sleep Deprivation in Cardiology: A Multidisciplinary Survey. 2018 ACC Scientific Sessions, Orlando, FL. Session 1109: Professional Balance in Cardiology Training and Beyond. Presentation #1109-211.</p> <p>Shaukat A, Sandoval Y, Stanberry L, Garberich R, McMeans A, Burke MN, Chavez I, Gösse M, Henry T, Lips D, Mooney M, Poulouse A, Sorajja P, Traverse J, Wang Y, Bradley S, Brilakis E. Incidence, predictors, characteristics, management and outcomes of coronary perforations. Session 1157: Interventional Complications: Assessing Risk. 2018 ACC Scientific Sessions, Orlando, FL. Presentation #1157-304.</p> <p>Ahmed A, Garberich R, Aguirre F, Chambers J, Sandoval Y, Hibbs J, Henry T. Clinical characteristics and outcomes of left main ST-elevation myocardial infarction. 2018 ACC Scientific Sessions, Orlando, FL. Session 1203: Left Main, Multivessel, Bifurcation Lesions: Strategies to Manage High-Risk Patients. Presentation #1203-310.</p> <p>Thaler C, Lin D, Eckman P, Huynh N, Sandoval Y, Harris KM. Severely elevated troponin in a patient with arrhythmogenic right ventricular cardiomyopathy without evidence of arrhythmia or myocarditis. 2018 ACC Scientific Sessions, Orlando, FL. Session 1282: FIT Clinical Decision Making: Arrhythmia and Electrophysiology. Presentation #1282-169.</p> <p>Iverson A, Stanberry L, Garberich R, Antos A, Sandoval Y, Tajti P, Burke MN, Chavez I, Gösse M, Henry T, Lips D, Mooney M, Poulouse A, Sorajja P, Traverse J, Wang Y, Bradley S, Brilakis E. Impact of sleep deprivation on percutaneous coronary intervention. 2018 ACC Scientific Sessions,</p>

Publications and Abstracts by MHI Cardiology Fellows 2012 – 2018

	<p>Orlando, FL. Session 1289: Emerging Ideas in Vascular Access and Complications. Presentation #1289-298.</p> <p>Miranda DF, Mudy K, Mackey-Bojack SM, Sanderson SO, Zimbwa P. Cardiac cells with hoarding behavior: an interesting case of heart failure. Presented at ISHLT Conference, Nice, France, April 11, 2018. Presentation #1298</p> <p>Megaly M, Anzia L, Melby D, Gornick CC, Zakaib JS, Garberich R, Rush P, Sorajja P, Lesser J, Gössl M, Sengupta J. High incidence of new-onset atrial fibrillation or atrial flutter in patients who require pacemaker placement after TAVR. Presented May 10, 2018 at Heart Rhythm Society Scientific Sessions, Boston, MA. Presentation #B-PO02-078.</p>
<p>2018 Publications</p>	<p>Sandoval Y, Brilakis ES. Preventing and treating coronary perforations: Lessons from disaster management. <i>Catheter Cardiovasc Interv.</i> 2017 May;89(6):973-975. doi: 10.1002/ccd.27089. PubMed PMID: 28488413</p> <p>Gunsolus I, Sandoval Y, Smith SW, Sexter A, Schulz K, Herzog CA, Apple FS. Renal Dysfunction Influences the Diagnostic and Prognostic Performance of High-Sensitivity Cardiac Troponin I. <i>J Am Soc Nephrol.</i> 2018 Feb;29(2):636-643. doi: 10.1681/ASN.2017030341. Epub 2017 Oct 27. PubMed PMID: 29079658; PubMed Central PMCID: PMC5791068.</p> <p>Megaly M, Sandoval Y, Lillyblad MP, Brilakis ES. Aminophylline for Preventing Bradyarrhythmias During Orbital or Rotational Atherectomy of the Right Coronary Artery. <i>J Invasive Cardiol.</i> 2018 Feb 15. pii: JIC2018215-2. [Epub ahead of print] PubMed PMID: 29440624.</p> <p>Miranda DF, Lobo AS, Walsh B, Sandoval Y, Smith SW. New Insights Into the Use of the 12-Lead Electrocardiogram for Diagnosing Acute Myocardial Infarction in the Emergency Department. <i>Can J Cardiol.</i> 2018 Feb;34(2):132-145. doi:10.1016/j.cjca.2017.11.011. Epub 2017 Nov 29. Review. PubMed PMID: 29407007</p> <p>Sandoval Y, Apple FS, Smith SW. High-sensitivity cardiac troponin assays and unstable angina. <i>Eur Heart J Acute Cardiovasc Care.</i> 2018 Mar;7(2):120-128. doi: 10.1177/2048872616658591. Epub 2016 Jul 7. PubMed PMID: 27388716</p> <p>Iverson A, Stanberry L, Garberich R, Antos A, Sandoval Y, Burke MN, Chavez I, Gössl M, Henry TD, Lips D, Mooney M, Poulouse A, Sorajja P, Traverse J, Wang Y, Bradley S, Brilakis ES. Impact of sleep deprivation on the outcomes of percutaneous coronary intervention. <i>Catheter Cardiovasc Interv.</i> 2018 Jan 3. doi: 10.1002/ccd.27471. [Epub ahead of print] PubMed PMID: 29314592.</p>

Publications and Abstracts by MHI Cardiology Fellows 2012 – 2018

Sandoval Y, Sorajja P, Harris KM. Contemporary Management of Ischemic Mitral Regurgitation: A Review. Am J Med. 2018 Feb 28. pii: S0002-9343(18)30128-1. doi: 10.1016/j.amjmed.2018.01.048. [Epub ahead of print] Review. PubMed PMID: 29501456

Elbadawi A, Elgendy IY, Saad M, **Megaly M**, Mentias A, Abuzaid AS, Shahin HI, Goswamy V, Abowali H, London B. Meta-Analysis of Trials on Prophylactic Use of Levosimendan in Patients Undergoing Cardiac Surgery. Ann Thorac Surg. 2018 Mar 21. pii: S0003-4975(17)31529-1. doi: 10.1016/j.athoracsur.2017.11.027. [Epub ahead of print] PubMed PMID: 29573810.

Kohl LP, Isselbacher EM, Majahalme N, Evangelista A, Russo MJ, Hutchison S, Bossone E, Suzuki T, Pyeritz RE, Gleason TG, Conklin LD, Montgomery DG, Nienaber CA, Eagle KA, Harris KM. Comparison of Outcomes in DeBakey Type AI Versus All Aortic Dissection. Am J Cardiol. 2018 Jun 30. pii: S0002-9149(18)31043-9. doi: 10.1016/j.amjcard.2018.04.042. [Epub ahead of print] PubMed PMID: 29970240.