CURRICULUM VITAE

MICHAEL KEMAL ATALAY, M.D. PH.D. FACR, FSCCT, FSCMR

Business Address Department of Diagnostic Imaging

Rhode Island Hospital

593 Eddy Street

Providence, RI 02903

Business Telephone Number 401-444-5184

Business Fax Number 401-444-5017

Electronic Mail Address matalay@lifespan.org

EDUCATION

Undergraduate Princeton University

Princeton, NJ B.A. (*Physics*) June 1988

Medical School The Johns Hopkins School of Medicine

Baltimore, MD

M.D.

Aug 1989-June 1996 (June 1996)

Alpha Omega Alpha

Graduate The Johns Hopkins School of Medicine

Baltimore, MD

Ph.D. (Biomedical Engineering—Cardiac MRI)

Aug 1989-June 1996 (June 1996)

POST-GRADUATE TRAINING

Internship The Beth Israel Hospital

Boston, MA Medicine 1996-1997

Research Fellowship The Massachusetts General Hospital

Boston, MA

Post-doctoral Research Fellow

Radiology Research Division (Cardiac MRI)

1997-1998

Residency The Johns Hopkins Hospital

Baltimore, MD

Diagnostic Radiology

1998-2002 (Chief Resident, 2001-2002)

Fellowship The Johns Hopkins Hospital

Baltimore, MD

Cross-sectional Imaging

2002-2003

HONORS AND AWARDS

Princeton University

1987 Finalist for The Rhodes Scholarship

1986-1988 Varsity Lightweight Crew, National Champions '86 & '88;

Captain '88

The Johns Hopkins School of Medicine

1991-1996 Medical Scientist Training Program, scholarship

awarded by the NIH to qualifying M.D./Ph.D. candidates

covering tuition, stipend, travel, and insurance

1993 **Paul Lauterbur Award** for Outstanding Research in MRI;

Highest research prize (\$15k), Society of Computed Body Tomography & Magnetic Resonance ("ABSTRACTS" #2,

p. 14)

1996 Alpha Omega Alpha, Honor Medical Society, Johns

Hopkins Chapter

The Johns Hopkins Hospital Department of Radiology

2001-2002 Chief Resident, The Johns Hopkins Department of

Radiology

Fellow Teaching Award, selected by Johns Hopkins

Radiology Residents

Brown University / Rhode Island Hospital

2010 Recognized as a Fellow of the Society of Cardiovascular

Computed Tomography (FSCCT)

2011 **Certificate of Recognition** for exemplary teaching in

BIOL 3662 IMS III: Cardiovascular, Alpert Medical

School of Brown University

2013	Certificate of Recognition for exemplary teaching in BIOL 3662 IMS III: Cardiovascular, Alpert Medical School of Brown University
2016	Certificate of Recognition for exemplary teaching in BIOL 3662 IMS III: Cardiovascular, Alpert Medical School of Brown University
2018	Recognized as a Fellow of the Society of Cardiovascular Magnetic Resonance (FSCMR), 1st year offered
2018	Recognized as a Fellow of the American College of Radiology (FACR)
2019	Rhode Island Top Doctor (Radiology)—Rhode Island Monthly
2019	Certificate of Recognition for exemplary teaching in BIOL 3662 IMS III: Cardiovascular, Alpert Medical School of Brown University
2025	Rhode Island Top Doctor (Radiology)—Rhode Island Monthly

PROFESSIONAL LICENSES AND BOARD CERTIFICATION

2002-Present	American Board of Radiology
2003-Present	Medical license, State of Rhode Island, No. MD11156
2008	Level III certification, Society of Cardiovascular Computed
	Tomography (SCCT)

ACADEMIC APPOINTMENTS

2003-2012	Assistant Professor of Diagnostic Imaging and Medicine (Cardiology) Teaching Scholar Track Alpert Medical School of Brown University
2012-Present	Associate Professor of Diagnostic Imaging and Medicine (Cardiology) Teaching Scholar Track Alpert Medical School of Brown University
2021-Present	Professor of Diagnostic Imaging and Medicine (Cardiology) Teaching Scholar Track Alpert Medical School of Brown University

HOSPITAL APPOINTMENTS / POSITIONS

2003-Present	Attending Physician Department of Diagnostic Imaging Rhode Island Hospital, Providence, RI
2003-Present	Attending Physician The Miriam Hospital, Providence, RI
2003-Present	Attending Physician Women & Infants Hospital, Providence, RI
2003-Present	Director, Cardiac MRI and CT Department of Diagnostic Imaging Rhode Island Hospital, Providence, RI
2015-Present	Attending Physician Roger Williams Medical Center, Providence, RI
2015-Present	Attending Physician St. Joseph's Health Services, North Providence, RI
2015-2025	Vice Chair (formerly 'Director') of Imaging Research Department of Diagnostic Imaging Rhode Island Hospital, Providence, RI Oversaw all aspects of the Division of Imaging Research, including operations, finances, Ph.D.'s, support staff, & funded research; Run monthly meetings with research support staff and quarterly Division Research Meetings; Report Division activity at quarterly Department-wide meetings.
2015-2025	Lifespan Research Administration Committee Department of Diagnostic Imaging Rhode Island Hospital, Providence, RI
2019-2025	Director of the Advanced Imaging Lab Department of Diagnostic Imaging Rhode Island Hospital, Providence, RI
2021-Present	Attending Physician Newport Hospital, Newport, RI
2022-Present	Attending Physician Kent County Hospital, Warwick, RI
2022-Present	Director of the Brown Radiology Human Factors Lab Department of Diagnostic Imaging

Rhode Island Hospital, Providence, RI

OTHER APPOINTMENTS / POSITIONS

2007-2011	Member, Expert Panel, American College of Radiology, appropriateness criteria for cardiovascular imaging
2007-2016	Member, Scientific Program Subcommittee, Cardiopulmonary section, Annual Scientific Meeting, American Roentgen Ray Society (ARRS)
	Primary responsibility: Scientific conference abstract and electronic submission reviewer & conference moderator
2008-2009	Chair, Cardiopulmonary Imaging section, Annual Scientific Meeting, American Roentgen Ray Society (ARRS)
2011-2016	Member, US Chapter Group (2 radiologists/4 cardiologists), Society of Cardiovascular Magnetic Resonance (SCMR). <i>Aim:</i> To develop and advise Society policy. Appointed by SCMR President, Scott Flamm, M.D.
2011-2014	Member, SCMR Examination Board (International group of 12 cardiologist, radiologists, and research scientists) <i>Aim:</i> To generate a large collection of test questions to use in a standardized, international examination of competency in cardiovascular MRI. Chair: Sven Plein M.D./Ph.D. UK
2012-2016	Chair, Cardiac Imaging section, Annual Scientific Meeting, American Roentgen Ray Society (ARRS)
2020-2023	Member, Cardiac Subcommittee of the Scientific Program, Radiological Society of North America (RSNA)
	Primary responsibility: Annual abstract review
2021	Abstract Reviewer, Society of Cardiovascular Magnetic Resonance (SCMR) Virtual Scientific Session 2021
2021-2022	Publications Committee, Society of Cardiovascular Magnetic Resonance (SCMR)
2022-2025	Abstract Reviewer, Cardiovascular section, Radiological Society of North America (RSNA)
2022-2025	Annual Program Meeting Committee, International Society of Magnetic Resonance in Medicine (ISMRM)

HOSPITAL COMMITTEES

2004-2005 Member, Education Committee, Department of Diagnostic Imaging, Brown/Rhode Island Hospital

Primary responsibility: Resident applicant interviews

2011	Member, Search Committee for Electrophysiology Director, Department of Medicine, Brown/Rhode Island Hospital
2011	Member, Search Committee for Staff Electrophysiologist, Department of Medicine, Brown/Rhode Island Hospital
2014-2018	Member, Education Committee, Department of Diagnostic Imaging, Brown/Rhode Island Hospital
2015	Member, Search Committee for Electrophysiology Director, Department of Medicine, Brown/Rhode Island Hospital
2019	Member, Search Committee for Staff Cardiologists, Department of Medicine, Brown/Rhode Island Hospital, FH-1521
2020-2024	Member, Medical Physics Steering Committee, Brown/Rhode Island Hospital, Chair: Eric Klein M.D.
2021-2022	Member, Search Committee Director of Echocardiography, Department of Medicine, Brown/Rhode Island Hospital

JOURNAL REVIEWER (ad hoc)

2006-Present	American Journal of Cardiology
2009-Present	American Journal of Roentgenology
2011-Present	Circulation: Cardiovascular Interventions
2014-Present	Heart Rhythm, Recognized Reviewer 2017, 2020
2015-Present	The Journal of Thoracic and Cardiovascular Surgery
2015-Present	The Journal of the American Heart Association
2016-Present	European Journal of Radiology, Recognized Reviewer 2017
2020-Present	Journal of the American College of Cardiology: Cardiovascular Imaging
2020-Present	Circulation: Cardiovascular Imaging
2020-Present	Abdominal Radiology

MEMBERSHIP IN SOCIETIES

1998-Present	Radiological Society of North America (RSNA)
1998-Present	American Roentgen Ray Society (ARRS)
2003-Present	Rhode Island Radiological Society (RIRS), Local Chapter of the American Radiological Society (ARS)
2014-2015	Secretary
2015-2016	Treasurer
2016-2017	Vice President

2017-2018 President

2004-Present Society of Cardiovascular Magnetic Resonance (SCMR)
2006-Present Society of Cardiovascular Computed Tomography (SCCT)

ORIGINAL PUBLICATIONS IN PEER-REVIEWED JOURNALS

- 1. **Atalay MK**, Forder JR, Chacko VP, Kawamoto S, Zerhouni EA. Oxygenation in the rabbit myocardium: Assessment by susceptibility dependent magnetic resonance imaging. Radiology. 1993; 189(3):759-764. PMID: 8234701.
- 2. Judd RM, **Atalay MK**, Rottman GA, Zerhouni EA. Effects of myocardial water exchange on T1 enhancement during bolus administration of MR contrast agents. Magn Reson Med. 1995;33(2):215-223. PMID: 7707912.
- 3. **Atalay MK**, Reeder SB, Zerhouni EA, Forder JR. Blood oxygenation dependence of tissue relaxation parameters T1 & T2 in the isolated, perfused rabbit heart at 4.7T. Magn Reson Med. 1995;34(4):623-627. PMID: 8524032.
- 4. Reeder SB, **Atalay MK**, McVeigh ER, Zerhouni EA, Forder JR. Quantitative cardiac perfusion: A noninvasive spin-labeling method exploiting coronary vessel geometry. Radiology. 1996;200(1):177-184. PMID: 8657907.
- 5. **Atalay MK**, Poncelet BP, Kantor HL, Brady TJ, Weisskoff RM. Cardiac susceptibility artifacts due to the heart-lung interface. Magn Reson Med. 2001;45(2):341-345. PMID: 11180442.
- 6. **Atalay MK**, Bluemke DA. Magnetic resonance imaging of large vessel vasculitis. Curr Opin Rheumatol. 2001;13(1):41-47. PMID: 11148714.
- 7. Posteraro AE, **Atalay MK**, Double inlet left ventricle with transposition of the great vessels. Med Health RI. 2004;87(6):182. PMID: 15344674.
- 8. **Atalay MK**. Establishing a Cardiac MRI program: problems, pitfalls, and expectations. J Am Coll Radiol. 2005;2(9):740-748. PMID: 17411921.
- 9. **Atalay MK**. Evaluation of the cardiac surgery patient by MRI and CT imaging: The state of the art. Med Health RI. 2006;89(1):14-19. PMID: 16519200.
- 10. **Atalay MK,** Prince EA, Cronan JJ. Referral patterns to a cardiac MRI service: Who sends what? J Am Coll Radiol. 2008;5(5):638-643. PMID: 18442769.
- 11. Hopkins R, Gitter H, Stave J, Bert A, **Atalay M**. Stable partial dehiscence of aortic homograft inserted freehand by using the subcoronary intra-aortic root noncoronary sinus Ross scallop inclusion technique. J Thorac Cardiovasc Surg. 2008;135(1):214-216. PMID: 18179949.
- 12. Kochilas L, Gundogan F, Atalay M, Bliss JM, Vatta M, Pena LS, Abuelo D. A

- novel mutation of the fibrillin-1 (FBN1) gene in a newborn with severe Marfan syndrome. J Perinatol. 2008;28(4):303-305. PMID: 18379569.
- 13. Taner AT, **Atalay MK**, Gutman NH. Chest pain as the presenting features of high output heart disease due to congenital arteriovenous malformation. Med Health RI. 2008;91(10):320. PMID: 19044108.
- 14. **Atalay MK**. Cardiac MRI & CT: The state of the art. US Radiology. 2008;1(1): 34-39.
- 15. Kern J, Modi R, **Atalay MK**, Kochilas L. Clinical myocarditis masquerading as acute coronary syndrome. J Pediatr 2009; 154(4):612-5. PMID: 19324224.
- 16. **Atalay MK**, Taner AT. Gradual enhancement of a large left atrial papillary fibroelastoma at cardiac MRI: The waiting game. Tex Heart Inst J. 2010;37(5):612-613. PMID: 20978584.
- 17. **Atalay MK**, Haji-Momenian S, Grand DJ. Three contrast injection protocols for ECG-gated 64-slice CT angiography: Comparing vessel density and perceived quality. J Comput Assist Tomogr. 2010;34(5):660-665. PMID: 20861766.
- 18. Casserly B, **Atalay MK**, Poppas A, Klinger JR, Abu-Hijleh M. An unusual cause of chest pain. Diagnosis: Cor triatriatum sinistrum with secondary unilateral pulmonary venous hypertension and right lung hypoplasia. Thorax 2011; 66(4):285-286. PMID: 21071763.
- 19. Choudhary G, **Atalay MK**, Ritter N, Shin V, Grand D, Pearson C, Kirchner RM, Wu WC. Interobserver reliability in the assessment of coronary stenoses by multi-detector computed tomography. J Comput Assist Tomogr. 2011;35(1): 126-134. PMID: 21245698.
- 20. **Atalay MK**, Walle NL, Grand DJ, Mayo-Smith WW, Cronan JJ, Egglin TK. Scan length optimization for pulmonary embolism at CT angiography: Analysis based on the 3-dimensional spatial distribution of 370 emboli in 100 patients. Clin Radiol. 2011;66(5):405-411. PMID: 21300329.
- 21. **Atalay MK**, Kochilas L. Familial pseudocoarctation of the aorta. Pediatr Cardiol. 2011;32(5):692-695. PMID: 21347833.
- 22. **Atalay MK**, Prince EA, Pearson CA, Chang KJ. The prevalence and clinical significance of non-cardiac findings at cardiac MRI. AJR Am J Roentgenol. 2011;196(4):W387-393. PMID: 21427301.
- 23. Boyer WB, **Atalay MK**, Sharaf BL. Left main pseudoaneurysm following post-partum coronary dissection. Circ Cardiovasc Interv. 2011;4(3);303-305. PMID: 21673324.

- 24. Grand DJ, **Atalay M**, Cronan JJ, Mayo-Smith WW, Dupuy DE. CT-guided percutaneous lung biopsy: Comparison of conventional CT fluoroscopy to CT fluoroscopy with electromagnetic navigation system in 60 consecutive patients. Eur J Radiol. 2011;79(2):e133-136. PMID: 21680125.
- 25. **Atalay MK**, Walle NL, Egglin TK. The prevalence and nature of excluded findings at reduced scan length CT angiography for pulmonary embolism. J Cardiovasc Comput Tomogr. 2011;5(5):325-332. PMID: 21930104.
- 26. Earls JP, White RD, Woodard PK, Abbara S, **Atalay MK**, Carr JJ, Haramati LB, Hendel RC, Ho VB, Hoffman U, Khan AR, Mammen L, Martin ET 3rd, Rozenshtein A, Ryan Thomas, Schoepf J, Steiner RM, White CS. Appropriateness Criteria Chronic Chest Pain—High Probability of Coronary Artery Disease. J Am Coll Radiol. 2011;8(10);679-686. PMID: 21962781.
- 27. Bergman B, Okolo J, **Atalay MK**, Abbott JD. Utility of noninvasive imaging in suspected saphenous vein graft aneurysm thrombosis. Circ Cardiovasc Interv. 2011;4(5);e36-37. PMID: 22010194.
- 28. Fernandez AB, Leitner J, Okolo J, **Atalay MK**, Goldstein L, Abbott JD. Value of cardiovascular magnetic resonance in suspected cardiac amyloidosis. J Cardiovascular Medicine. 2012;13(9);590-592. PMID: 22306785.
- 29. Bettman MA, Baginski SG, White RD, Woodard PK, Abbara S, **Atalay MK**, Dorbala S, Haramati LB, Hendel RC, Martin ET 3rd, Ryan T, Steiner RM. Appropriateness Criteria Acute Chest Pain—Suspected Pulmonary Embolism. J Thorac Imaging. 2012;27(4);W28-31. PMID: 22343403.
- 30. **Atalay MK**, Stockwell P, Feit L. Cardiac CT angiography of an anomalous intramuscular left main coronary artery. Med Health RI. 2012;95(2);46-47. PMID: 22474874.
- 31. Truesdell AG, Delgado GA, Li J, Abbott JD, **Atalay MK**, Singh AK. Challenges in the management of postpartum spontaneous coronary artery dissection: an illustrative case series and review of the literature. Interventional Cardiology 2012;4(3):371-386. https://www.openaccessjournals.com/articles/challenges-in-the-management-of-postpartum-spontaneous-coronary-artery-dissection.html
- 32. **Atalay MK**, Schneider F. Cardiac magnetic resonance imaging of burned-out hypertrophic cardiomyopathy. Med Health RI. 2012;95(5);143. PMID: 22808630.
- 33. **Atalay MK**, Poppas A. Cardiac CT angiography findings in paradoxical coronary artery embolism. Med Health RI. 2012;95(5);141-142. PMID: 22808629.
- 34. Mudge CS, Healey TT, Atalay MK, Pezzullo JA. Feasibility of detecting

- pulmonary embolism using noncontrast MRI. ISRN Radiology. 2013; vol. 2013:1-5. Article ID 729271. PMID: 24967277.
- 35. **Atalay MK**, Chang KJ, Grand DJ, Hajimomenian S, Machan JT, Sheehan FH. The transaxial orientation is superior to both the short axis and horizontal long axis orientations for determining right ventricular volume and ejection fraction using Simpson's method with cardiac magnetic resonance. ISRN Cardiology. 2013; vol. 2013. 9 pages. PMID: 23691358.
- 36. Lorvidhaya P, Mendoza I, Sehli S, **Atalay MK**, Kim MH. Prospective evaluation of cinefluoroscopy and chest radiography for Riata lead defects: Implications for future lead screening. J Interv Card Electrophysiol. 2013;38(2):131-135. PMID: 24013704.
- 37. Anderson TJ, **Atalay MK**, Grand DJ, Baird GL, Cronan JJ, Beland MD. Management of the nondiagnostic thyroid fine-needle aspiration: Can we avoid repeat biopsy? Radiology. 2014;272(3):777-784. PMID: 24749714.
- 38. Lang C, **Atalay MK**. Cardiac magnetic resonance imaging and computed tomography: State of the art in clinical practice. RI Med J. 2014;97(2):28-34. PMID: 24494211.
- 39. Beland MD, Anderson TJ, **Atalay MK**, Grand DJ, Cronan JJ. Resident experience decreases nondiagnostic rate of thyroid fine-needle aspiration biopsies. Acad Radiol. 2014;21(11):1490-1494. PMID: 25088838.
- 40. Kim J, Parikh P, Mahboob M, Arrighi JA, **Atalay MK**, Rowin EJ, Maron MS. Asymptomatic young man with Danon Disease. Tex Heart Inst J. 2014;41(3):332-334. PMID: 24955057.
- 41. Kim J, Cohen SB, **Atalay MK**, Maslow AD, Poppas A. Quantitative assessment of right ventricular volumes and ejection fraction in patients with left ventricular systolic dysfunction by real time three-dimensional echocardiography versus cardiac magnetic resonance imaging. Echocardiography. 2015;32(5):805-812. PMID: 25109323.
- 42. Cummings K, Luna A, **Atalay MK.** MR Imaging of Pericardial Diseases. Applied Radiology. 2015;44(6):8-16. https://www.appliedradiology.com/communities/mr-community/mr-imaging-of-pericardial-diseases
- 43. Afari ME, Rehman MU, **Atalay MK**, Broderick R. Multimodality imaging in exercise induced sudden cardiac arrest. Tex Heart Inst J. 2015;42(6):548-551. PMID: 26664308.
- 44. Cilia L, Parikh L, Ouseph MM, Stopa E, **Atalay MK**. Systemic amyloidosis masquerading as intractable cardiomyopathy. RI Med J. 2016;99(10);54-56.

- PMID: 27706281.
- 45. Yaghi S, Liberman AL, **Atalay MK**, Song C, Furie K, Bernstein R. cardiac magnetic resonance imaging: A new tool to identify cardioaortic sources in ischaemic stroke. J Neurol Neurosurg Psychiatry. 2017;88(1):31-37. PMID: 27659922.
- 46. Yaghi S, Chang AD, Hung P, Mac Grory B, Collins S, Gupta A, Reynolds J, Finn CB, Hemendinger M, Cutting SM, McTaggart RA, Jayaraman M, Leasure A, Sansing L, Panda N, Song C, Chu A, Merkler A, Gialdini G, Sheth KN, Kamel H, Elkind MSV, Greer D, Furie K, **Atalay MK**. Left atrial appendage morphology and embolic stroke of undetermined source: A cross-sectional multi-center pilot study. J Stroke Cerebrovasc Dis. 2018:27(6):1497-1501. PMID: 29398537.
- 47. Maslow A, **Atalay MK**, Sodha N. Intramural Hematoma. J Cardiothorac Vasc Anesth. 2018;32(3):1341-1362. PMID: 29625862.
- 48. Furman MS, Healey TT, Agarwal S, Grand DJ, **Atalay MK**. "Heavy-hearted havoc"—A case series of petrified myocardium. J Cardiovasc Comput Tomogr. 2018;12(6):e21-e23. PMID: 30342979.
- 49. Arunachalam K, Beale C, Apostolidou E, **Atalay MK**, Levine D, Aspry K, Yousefzai R. Multi-modality Imaging in Hypereosinophilic Syndrome with Cardiac Involvement. Cardiovascular Imaging Case Reports. CASE (Phila). 2019 May 16;3(4):149-156. PMID: 31468017.
- 50. Mac Grory B, Chang A, **Atalay MK**, Yaghi S. Left atrial appendage thrombus and embolic stroke. Stroke. 2018;49(9):e286-e289. PMID: 30355001.
- 51. Azher I, Kaushal A, Chang AD, Cutting S, Mac Grory B, Burton T, Dakay K, Thompson B, Resnik M, Wendell L, Potter NS, Mahta A, Rao S, Paciaroni M, Elkind MSV, Jayaraman M, **Atalay M,** Furie K, Yaghi S. Serum troponin level in acute ischemic stroke identifies patients with visceral infarcts. J Stroke Cerebrovasc Dis. 2019;28(5):1173-1177. PMID: 30665837.
- 52. Yaghi S, Chang AD, Akiki R, Collins S, Novack T, Hemendinger M, Schomer A, Mac Grory B, Cutting S, Burton T, Song C, Poppas A, McTaggart R, Jayaraman M, Merkler A, Kamel H, Elkind MSV, Furie K, **Atalay MK**. The left atrial appendage morphology is associated with embolic stroke subtypes using a simple classification system: A proof of concept study. J Cardiovasc Comput Tomogr. 2020;14(1):27-33. PMID: 31023631.
- 53. Chang AD, Ignacio GC, Akiki R, Mac Grory B, Cutting S, Burton T, Jayaraman M, Merkler A, Song C, Poppas A, Kamel H, Elkind MSV, Furie K, **Atalay M**, Yaghi S. Increased left atrial appendage density on computerized tomography is associated with cardioembolic stroke. J Stroke Cerebrovasc Dis.

- 2020:29(4):104604. PMID: 31932211.
- 54. Yaghi S, Chang AD, Scher E, Panda N, Chu A, Wu M, Berger J, Lord A, Mac Grory B, Furie K, Elkind M, **Atalay MK**, Song C. Left atrial appendage morphology improves prediction of stagnant flow and stroke risk in atrial fibrillation. Circ Arrhythm Electrophysiol. 2020;13(2):e008074. PMID: 31986073.
- 55. Sharma E, McCauley B, Ghosalkar DS, **Atalay MK**, Collins S, Parulkar A, Sheikh W, Ahmed MB, Chu A. Aortic valve calcification as a predictor of post-tavr pacemaker dependence. Cardiol Res. 2020;11(3):155-167. PMID: 32494325.
- 56. Moustafa A, Khan MS, Alsamman MA, Jamal F, **Atalay MK**. Prognostic significance of T1 mapping parameters in heart failure with preserved ejection fraction: A systematic review. Heart Fail Rev. 2021 Nov;26(6):1325-1331 doi: 10.1007/s10741-020-09958-4. PMID: 32405810.
- 57. Boyd C, Jayaraman MJ, Baird GL, Einhorn WS, Stib MT, **Atalay MK**, Boxerman JL, Lourenco AP, Jindal G, Hidlay DT, DiBiasio EL, McTaggart RA. Impact of experience and grayscale inversion on the detection of emergent large vessel occlusion stroke with CT angiography. Eur Radiol. 2020;30(8):4447-4453. PMID: 32232790.
- 58. Bai HX, Hsieh B, Xiong Z, Halsey K, Choi JW, Tran TML, Pan I, Shi LB, Wang DC, Mei J, Jiang XL, Zeng QH, Egglin TK, Hu PF, Agarwal S, Xie F, Li S, Healey T, **Atalay MK**, Liao WH. Performance of radiologists in differentiating COVID-19 from non-COVID-19 viral pneumonia at chest CT. Radiology. 2020;296(2):E46-E54. PMID: 32155105.
- 59. Bai HX, Wang R, Xiong Z, Hsieh B, Chang K, Halsey K, Tran TML, Choi JW, Wang DC, Shi LB, Mei J, Jiang XL, Pan I, Zeng QH, Hu PF, Li YH, Fu FX, Huang RY, Sebro R, Yu QZ, **Atalay MK**, Liao WH. Artificial intelligence augmentation of radiologist performance in distinguishing COVID-19 from pneumonia of other origin at chest CT. Radiology. 2020;296(3):E156-E165. PMID: 32339081.
- 60. Louis DW, Papaila A, Sheikh W, **Atalay MK**, Abbott BG. Multimodality imaging for the diagnosis of isolated cardiac sarcoidosis. J Am Coll Cardiol Case Rep. 2020;2:1074-1078.
- 61. Maslow AD, Hunter C, Chen T, Gorgone M, Klick J, **Atalay M**, Mahmood F. The mitral coaptation to ventricular septal space: Two and three-dimensional transesophageal echocardiographic assessment. J Cardiothorac Vasc Anesth. 2020 Jul 24;S1053-0770(20)30734-5. PMID: 32807602.
- 62. Walsh TP, Baird GL, Atalay MK, Agarwal S, Arcuri S, Klinger JR, Mullin CJ,

- Normadin B, Shiva S, Whittenhall M, Ventetuolo CE. Experimental design of EDIPHY (Effects of Dehydroepiandrosterone in Pulmonary Hypertension Trial). Pulm Circ. 2021 May 21;11(2). PMID: 34094503.
- 63. Purkayastha S, Xiao Y, Jiao Z, Thepumnoeysuk R, Halsey K, Wu J, Tran TML, Hsieh B, Choi JW, Wang D, Vallières M, Wang R, Collins S, Feng X, Feldman M, Zhang PJ, **Atalay M**, Sebro R, Yang L, Fan Y, Liao WH, Bai HX. Machine Learning-Based Prediction of COVID-19 Severity and Progression to Critical Illness Using CT Imaging and Clinical Data. Korean J Radiol. 2021 Jul;22(7):1213-1224. doi: 10.3348/kjr.2020.1104. Epub 2021 Mar 9. PMID: 33739635
- 64. Imran HM, Ather K, Gutman NH, **Atalay MK**, Poppas A. Eosinophilic myocarditis in a patient with sickle cell disease. J Am Coll Cardiol Case Rep. 2021 Apr 7;3(6):916-921. PMID: 34317655
- 65. Beale RA, Russo R, Beale C, Levin W, **Atalay MK**, Fingleton J, Poppas A, Apostolidou E. Mitral valve blood cyst diagnosed with the use of multimodality imaging. J Am Coll Cardiol Case Rep. 2021 Feb 20;5(3):173-176. doi: 10.1016/j.case.2021.01.004. PMID: 34195517
- 66. Jiao Z, Choi JW, Halsey K, Wu J, Tran TML, Hsieh B, Wang D, Eweje F, Wang R, Chang K, Wu J, Collins SA, Yi TY, Delworth A, Liu T, Healey TT, Lu S, Wang J, Feng X, **Atalay M**, Yang L, Feldman M, Zhang PJ, Liao W-H, Fan L, Bai HX. Prognostication of COVID-19 patients presenting to the emergency department using artificial intelligence based on chest radiographs and clinical data. Lancet Digit Health. 2021 May;3(5):e286-e294. PMID: 33773969.
- 67. Ather K, Parulkar SS, Levine D, Tran C, **Atalay MK**, Apostolidou E. A Case of Isolated Cardiac Sarcoidosis Diagnosed With Multimodality Cardiac Imaging. CASE (Phila). 2021 Jun 1;5(4):213-216. PMID: 34430769
- Wang R, Jiao Z, Choi JW, Xiong Z, Halsey K, Tran TML, Pan I, Collins SA, Feng X, Wu J, Chang K, Shi LB, Yang S, Yu QZ, Liu J, Fu FX, Jiang XL, Wand DC, Zhu LP, Yi XP, Healey TT, Zeng QH, Liu T, Hu PF, Huang RY, LiYH, Sebro RA, Zhang PJL, Wang J, Atalay M, Liao W-H, Fan L, Bai HX. Artificial intelligence for prediction of COVID-19 progression using CT imaging and clinical data. European Radiology. 2021 Jul 5:1-8. doi: 10.1007/s00330-021-08049-8. PMID: 34333954
- 69. Agarwal S, **Atalay MK**. Aorto-cameral fistulas: Spectrum of CT findings and review. Clin Imaging. 2021 Jul 29;80:193-198. PMID: 34330201
- 70. Patel YR, Louis DW, **Atalay M**, Agarwal S, Shah NR. Cardiovascular magnetic resonance findings in young adult patients with acute myocarditis following

- mRNA COVID-19 vaccination: a case series. J Cardiovasc Magn Reson. 2021 Sep 9;23(1):101. PMID: 34496880
- 71. Zeba F, Yanning W, Melek J, Duan F, **Atalay MK**, Jankowich M, Rounds S. A review of prognostic markers in combined pulmonary fibrosis and emphysema and clinical significance of radiological markers of pulmonary hypertension. *Lung.* 2021 Dec;199(6):677-680. doi: 10.1007/s00408-021-00490-2. Epub 2021 Nov 6.
- 72. Kim C, Choi JW, Jiao Z, Wand DC, Wu J, Yi T, Halsey K, Eweje F, Tran TML, Liu C, Wang R, Sollee J, Hsieh C, Chang K, Yang F-X, Singh R, Ou J-L, Huang R, Fend C, Feldman M, Liu T, Gong JS, Lu S, Eickhoff C, Feng X, Kamel I, Sebro R, **Atalay MK**, Healey T, Fan Y, Liao W-H, Wang J, Bai HX. An automated COVID-19 triage pipeline using artificial intelligence based on chest radiographs and clinical data. NPJ Digit Med. 2022 Jan 14;5(1):5. doi: 10.1038/s41746-021-00546-w.
- 73. Cheng J, Sollee J, Hsieh C, Yue H, Vandal N, Shanahan J, Choi JW, Tran TML, Halsey K, Iheanacho F, Warren J, Ahmed A, Eickhoff C, Feldman M, Barbosa EM, Jr, Kamel I, Lin CT, Yi T, Healey T, Zhang P, Wu J, **Atalay M**, Bai HX, Jiao Z, Wang J. COVID-19 mortality prediction in the intensive care unit with deep learning based on longitudinal chest X-rays and clinical data. Eur Radiol. 2022 Feb 19:1-11. PMID: 35184218
- 74. Patel YR, Shah NR, Lombardi K, Agarwal S, Has P, Patel R, Poppas A, **Atalay MK**. Cardiac MRI Findings In Male Patients with COVID-19 Vaccination-Associated Acute myocarditis compared to Male Patients with Acute Myocarditis from Other Causes. Radiol Cardiothorac Imaging. 2022 Jun 9;4(3):e220008. PMID: 35761952
- 75. **Atalay MK**, Baird GL, Stibb MT, George PF, Oueidat K, Cronan JJ. The impact of emerging technologies on residency selection by medical students in 2017 and 2021, with a focus on diagnostic radiology. Acad Radiol. 2022 Sep 1;S1076-6332(22)00376-2. PMID: 36058817
- 76. Patel YR, Shah NR, Lombardi K, Agarwal S, Slaber G, Patel R, Poppas A, **Atalay MK.** Follow-Up Cardiovascular Magnetic Resonance Findings in Patients With COVID-19 Vaccination-Associated Acute Myocarditis. JACC Cardiovasc Imaging. 2022 Nov;15(11):2007-2010. PMID: 36357142
- 77. Bernstein MH, Baird GL, **Atalay MK.** The Impact of AI Accuracy Is Probably Overstated. Radiology. 2023 Nov;309(2):e231858. doi: 10.1148/radiol.231858. PMID: 38015084

- 78. Baird GL, Bernstein MH, **Atalay MK.** What Happens When AI Is Wrong? Radiology. 2023 Oct;309(1):e231190. doi: 10.1148/radiol.231190. PMID: 37847137
- 79. Bernstein M*, **Atalay MK***, Dibble EH, Maxwell AWP, Karam AR, Agarwal S, Ward RC, Healey TT, Baird GL. Can incorrect Artificial Intelligence (AI) results impact radiologists, and if so, what can we do about it? A multi-reader pilot study of Lung Cancer Detection with Chest Radiography. Eur Radiol. 2023, Nov;33(11):8263-8269. PMID: 37266657 (*co-first author)
- 80. Zhong Z, Li J, Kulkarni S, Zhang H, Fayad FH, Li Y, Collins S, Bai H, Ahn SH, **Atalay MK**, Gao X, Jiao Z. De-biased Disentanglement Learning for Pulmonary Embolism Survival Prediction on Multimodal Data. IEEE J Biomed Health Inform. 2024 Apr 3;PP. doi: 10.1109/JBHI.2024.3384848. Online ahead of print. PMID: 38568767
- 81. Cavanagh G, Louis DW, **Atalay MK.** Left Anterior Descending Coronary Artery Mimic: A Case of Coronary Artery to Pulmonary Artery Fistula. JACC Case Rep. 2023 Dec 29;29(3):102187. doi: 10.1016/j.jaccas.2023.102187. eCollection 2024 Feb 7. PMID: 38361563
- 82. Kim DD, Chandra RS, Yang L, Wu J, Feng X, **Atalay M**, Bettegowda C, Jones C, Sair H, Liao WH, Zhu C, Zou B, Kazerooni AF, Nabavizadeh A, Jiao Z, Peng J, Bai HX. Active Learning in Brain Tumor Segmentation with Uncertainty Sampling and Annotation Redundancy Restriction. J Imaging Inform Med. 2024 Mar 21. doi: 10.1007/s10278-024-01037-6. Online ahead of print. PMID: 38514595
- 83. Chaban YV, Vosshenrich J, McKee H, Gunasekaran S, Brown M, **Atalay MK**, Heye T, Markl M, Woolen SA, Simonetti OP, Hanneman K. Environmental Sustainability and MRI: Challenges, Opportunities, and a Call for Action. J Magn Reson Imaging. 2024 Apr;59(4):1149-1167. doi: 10.1002/jmri.28994. Epub 2023 Sep 11.
- 84. Zhong Z, Li J, Sollee J, Collins S, Bai H, Zhang H, Healey T, **Atalay MK**, Gao X, Jiao Z. Multi-modality Regional Alignment Network for Covid X-Ray Survival Prediction and Report Generation. IEEE J Biomed Health Inform. 2024 Jun 21:PP. doi: 10.1109/JBHI.2024.3417849. Online ahead of print. PMID: 38905090
- 85. Cavanagh G, Louis DW, **Atalay MK.** Left Anterior Descending Coronary Artery Mimic: A Case of Coronary Artery to Pulmonary Artery Fistula. JACC Case Rep. 2023 Dec 29;29(3):102187. doi: 10.1016/j.jaccas.2023.102187. eCollection 2024 Feb 7. PMID: 38361563

- 86. Zhong Z, Li J, Kulkarni S, Zhang H, Fayad FH, Li Y, Collins S, Bai H, Ahn SH, **Atalay MK**, Gao X, Jiao Z. De-Biased Disentanglement Learning for Pulmonary Embolism Survival Prediction on Multimodal Data. IEEE J Biomed Health Inform. 2024 Jun;28(6):3732-3741. doi:10.1109/JBHI.2024.3384848.Epub 2024 Jun 6.
- 87. Kaczynski M, Desai S, Osorio B, Hulten E, Agarwal S, **Atalay MK**, Patel Y. Cardiac Magnetic Resonance Imaging in Lyme Carditis-A Case Series and Review of Literature. J Cardiovasc Dev Dis. 2024 Dec 25;12(1):2. doi: 10.3390/jcdd12010002.
- 88. Cavanagh G, Schoen JH, Hanneman K, Rula EY, **Atalay MK**. Excess Greenhouse Gas Emissions Associated With Inappropriate Medical Imaging in the US Medicare Part B Population From 2017 to 2021. J Am Coll Radiol. 2025 Mar 28:S1546-1440(25)00148-6. doi: 10.1016/j.jacr.2025.02.043. Online ahead of print. (Featured on JACR Podcast)
- 89. Zhong Z, Zhang H, Fayad FH, Lancaster AC, Sollee J, Kulkarni S, Lin CT, Li J, Gao X, Collins S, Greineder CF, Ahn SH, Bai HX, Jiao Z, **Atalay MK**. Pulmonary Embolism Survival Prediction Using Multimodal Learning Based on Computed Tomography Angiography and Clinical Data. J Thorac Imaging. 2025 Apr 9. doi: 10.1097/RTI.00000000000000831. Online ahead of print. PMID: 40200808
- 90. Kadiyala V, Ding E, Jedlinski R, Netto T, Agarwal S, **Atalay M**, Patel Y, Saad M, Abbott BG, Hulten E. Structural Heart Interventional Cardiology Planning and Procedures The Heart Team Approach. R I Med J (2025). Feb 3;108(2):56-62. PMID: 39878665
- 91. Zhong Z, Li J, Wand Y, Lulu B, Ahn SH, Mullin CJ, Greineder CF, **Atalay MK**, Collins S, Baird GL, Lin CT, Stayman JW, Kolb TM, Kamel I, Bai HX, Jiao Z. Abn-BLIP: Abnormality-aligned Bootstrapping Language-Image Pre-training for pulmonary embolism diagnosis and report generation from CTPA. Med Image Anal. 2026 Jan;107(Pt A) Epub 2025 Aug 30. PMID: 40945174
- 92. Sanders R, Walsh TP, Baird GL, **Atalay MK**, Agarwal S, Arcuri S, Klinger JR, Mullin CJ, Simmons J, Singh N, Whittenhall M, Ventetuolo CE. Effects of Dehydroepiandrosterone in Pulmonary Hypertension (EDIPHY): A Randomized, Double-Blind, Placebo-Controlled Crossover Trial. medRxiv (Preprint). 2025 Aug 2:2025.08.01.25332627. doi:10.1101/2025.08.01.25332627. PMID: 40766123
- 93. Scaringi JA, McTaggart RA, Alvin MD, **Atalay MK**, Bernstein MH, Jayaraman MV, Jindal G, Movson JS, Swenson DW, Baird GL. Implementing an AI algorithm in the clinical setting: a case study for the accuracy paradox. Eur Radiol. 2025 Jul;35(7):4347-4353. doi: 10.1007/s00330-024-11332-z. Epub 2024 Dec 31.

- 94. Zinn J, Kassis N, Atalay MK, Allen EB, Santos MA, Donaldson AA. Sense of Impending Doom: Cardiac Arrest Due to Anomalous Left Coronary Artery From the Right Pulmonary Artery. J Adolesc Health. 2025 Oct;77(4):782-785. doi: 10.1016/j.jadohealth.2025.06.013. Epub 2025 Aug 14.
- 95. Mai M, Baird G, Dietsche E, Healey T, **Atalay MK**, Agarwal S. Diagnostic value of grayscale inversion imaging for detecting difficult cases of pulmonary nodules. Clin Imaging. 2025 Nov 14:129:110676. doi: 10.1016/j.clinimag.2025.110676. Online ahead of print.

American College of Radiology Case-in-Point

- 1. Sandman D, **Atalay MK**. Postsurgical felt pledget mimicking a pseudoaneurysm, 8/11/2009
- 2. Suarez-Weiss KE, Pietryga J, Vakharia J, **Atalay MK**. Internal hernia secondary to hepatic vestigial band, 7/12/2021

NON-PEER REVIEWED PUBLICATIONS

- 1. **Atalay MK**. Myocardial blood oxygenation: Assessment using susceptibility dependent magnetic resonance imaging. Ph.D. Dissertation. Johns Hopkins University, 1996.
- 2. **Atalay MK**. Editorial to "What has happened to cardiac MRI?" J Am Coll Radiol. 2007;4(4):227-228.
- 3. Expert Panel on Cardiac Imaging: Mammen L, Yucel EK, Khan A, **Atalay MK**, Haramati LB, Ho VB, Rozenshtein A, Rybicki FJ, Schoepf UJ, Stanford W, Stein B, Woodard PK, Jaff M. Acute Chest Pain—Suspected Aortic Dissection. American College of Radiology, Appropriateness Criteria 2008.
- 4. Expert Panel on Cardiac Imaging: Stanford W, Yucel EK, Khan A, **Atalay MK**, Haramati LB, Ho VB, Mammen L, Rozenshtein A, Rybicki FJ, Schoepf UJ, Stein B, Woodard PK, Jaff M. Acute Chest Pain—Low Probability of Coronary Artery Disease. American College of Radiology, Appropriateness Criteria 2008.
- 5. Expert Panel on Cardiac Imaging: Woodard PK, Stanford W, Yucel EK, Khan A, **Atalay MK**, Haramati LB, Ho VB, Mammen L, Rozenshtein A, Rybicki FJ, Schoepf UJ, Stein B, Jaff M. Chronic Chest Pain—Low to Intermediate Probability of Coronary Artery Disease. American College of Radiology, Appropriateness Criteria 2008.
- 6. Expert Panel on Cardiac Imaging: Abbara S, Ghoshhajra B, White RD, Woodard

- PK, **Atalay MK**, Haramati LB, Hendel RC, Khan A, Martin ET, Rozenshtein A, Steiner RM. Dyspnea—Suspected Cardiac Origin. American College of Radiology, Appropriateness Criteria 2010.
- 7. **Collaborator**: ACCF/SCCT/ACR/AHA/ASE/ASNC/NASCI/SCAI/SCMR 2010 Appropriate use criteria for cardiac computed tomography. J Am Coll Cardiol 2010; 56(22):1864-94. J Cardiovasc Comput Tomogr. 2010 Nov-Dec;4(6):407.e1-33. Circulation. 2010 Nov 23;122(21):e525-55.
- 8. **Guest Editor** for Topics in Magnetic Resonance Imaging (TMRI), Cardiac MR: Update 2014. Top Magn Reson Imaging. 2014 Feb;23(1):1.
- 9. **Invited Review**: **Atalay MK**. Oligemia and Decreased Mortality in Pulmonary Embolism: Revisiting Westermark. Circ Cardiovasc Imaging. 2021;14:e013381. DOI: 10.1161/CIRCIMAGING.121.013381
- Blankstein R, Shaw LJ, Gulati M, Atalay MK, Bax J, Calnon DA, Dyke CK, Ferencik M, Heitner JF, Henry TD, Hung J, Knuuti J, Lindner JR, Phillips LM, Raman SV, Rao SV, Rybicki FJ, Saraste A, Stainback RF, Thompson RC, Williamson E, Nieman K, Tremmel JA, Woodard PK, Di Carli MF, Chandrashekhar YS. Implications of the 2021 AHA/ACC/ASE/CHEST/SAEM/SCCT/SCMR Chest Pain Guideline for Cardiovascular Imaging: A Multisociety Viewpoint. 2022 May;15(5):912-926. PMID: 35512960
- 11. Letter to Radiology: Baird GL, Bernstein MH, **Atalay MK**. Bias, Noise, and Consensus Interpretation in Radiology: A reply to Jaramillo (2022). *Dec*; 305(3):E67. PMID: 35972359
- 12. Letter to Radiology: Baird GL, Bernstein MH, **Atalay MK**. What happens when AI is Wrong? A reply to Dratsch (2023). *Accepted May 2023*.

BOOK CHAPTER

1. Hartley-Blossom Z, Agarwal S, **Atalay MK**. Title: Imaging of Intramural Hematoma and Penetrating Atherosclerotic Ulcer by CT and MRI. In: Aortic Dissection and Acute Aortic Syndromes. F Sellke, MD, editor. Springer Nature Publisher. Dec 2021.

PUBLICATIONS UNDER REVIEW or NEAR SUBMISSION

1. **Atalay MK**, Pouw M, Baird GL, Chang K, Agarwal S. Diagnosing cardiac amyloidosis at non-ECG gated contrast CT: How good are we? *In final preparation for submission to Journal of Cardiovascular Computed Tomography*.

2. Chang AD, Dominquez L, Collins S, Merck D, **Atalay** MK. Low cardiac index is associated with an increased attenuation ratio between the main pulmonary artery and descending aorta on computed tomography for pulmonary angiography. *In final preparation for submission to Journal of Computer Assisted Tomography*.

MEETING PRESENTATIONS AND PUBLISHED ABSTRACTS (†Platform Presentation)

- 1. Guccione JM, Hunter W, Royce M, O'Dell W, **Atalay MK**, Judd B and Leppo M. Comparison between epicardial sarcomere lengths in the anterior and posterior walls during left ventricular ejection. 64th Meeting of the American Heart Association (Dallas, 1991).
- 2. **Atalay MK**[†], Forder JR, Chacko VP, Kawamoto S, Zerhouni EA. Oxygenation in the rabbit myocardium: Assessment by susceptibility dependent magnetic resonance imaging. Annual Course of the Society of Computed Body Tomography & Magnetic Resonance (Orlando, 1993). **Winner of the Paul Lauterbur Award for outstanding research in MRI**.
- 3. Forder JR, **Atalay MK**, Chacko VP, Kawamoto S, Zerhouni EA. Determination of regional oxygen content in the isolated blood perfused rabbit heart: Assessment by susceptibility dependent magnetic resonance imaging at 4.7T. 12th Annual Scientific Meeting and Exhibition of the Society of Magnetic Resonance in Medicine (New York City, 1993).
- 4. **Atalay MK**, Reeder SB, Zerhouni EA, Forder JR. Blood oxygenation dependence of tissue relaxation parameters (T1 & T2) in the isolated, perfused rabbit heart at 4.7T. 2nd Annual Scientific Meeting and Exhibition of the Society of Magnetic Resonance (San Francisco, 1994).
- 5. **Atalay MK**, Zerhouni EA, Forder JR. Relationship between regional oxygen content and MRI signal intensity in the perfused rabbit heart: Assessment in the setting of regional ischemia. 67th Scientific Session of the American Heart Association (Dallas, 1994).
- 6. Davis D, **Atalay MK**, Chatham JC, Forder JR. Alteration in myocardial substrate utilization and intracellular redox state in response to ketone bodies: a study using 13C- and 1H-NMR spectroscopy. 3rd Annual Scientific Meeting and Exhibition of the Society of Magnetic Resonance (Nice, France, 1995).
- 7. Hsu EW, **Atalay MK**, Mori S, Forder JR. Reduction of water apparent diffusion coefficient in regional myocardial ischemia. 3rd Annual Scientific Meeting and Exhibition of the Society of Magnetic Resonance (Nice, France, 1995).
- 8. **Atalay MK**[†], Reeder SB, McVeigh ER, Zerhouni EA, Forder JR. Noninvasive quantitation of myocardial perfusion using spin labeling: An approach exploiting

- coronary vessel geometry. 3rd Annual Scientific Meeting and Exhibition of the Society of Magnetic Resonance (Nice, France, 1995).
- 9. Forder JR, Xue R, **Atalay MK**, Hsu E. Decrease of tissue water diffusion in regional myocardial ischemia. Experimental Biology (Washington, DC,1996).
- 10. **Atalay MK**[†], Poncelet BP, Kantor HL, Brady TJ, Weisskoff RM. Susceptibility artifact at the cardiac apex of porcine hearts at 3T is primarily due to the heartlung interface. 6th Annual Scientific Meeting and Exhibition of the Society of Magnetic Resonance (Sydney, Australia, 1998).
- 11. **Atalay MK**, Poncelet BP, Kantor HL, Brady TJ, Weisskoff RM. Cardiac MRI at 3T: BOLD signal changes during breath hold and nitrogen breathing. 6th Annual Scientific Meeting and Exhibition of the Society of Magnetic Resonance (Sydney, Australia, 1998).
- 12. Poncelet BP, **Atalay MK**, Koelling TM, Reese TG, Brady TJ, Kantor HL, Weisskoff RM. Myocardial flow reserve in porcine model of focal hyperemia and ischemia: quantitative assessment using double gated FAIR MRI. 6th Annual Scientific Meeting and Exhibition of the Society of Magnetic Resonance (Sydney, Australia, 1998).
- 13. **Atalay MK**, Poncelet BP, Kantor HL, Reese TG, Brady TJ, Weisskoff RM. Coronary reserve in porcine stenosis model: non-invasive assessment using BOLD MRI at 3T. 7th Annual Scientific Meeting and Exhibition of the Society of Magnetic Resonance (Philadelphia, 1999).
- 14. Poncelet BP, **Atalay MK**, Kantor HL, Reese TG, Brady TJ, Weisskoff RM. Quantitative assessment of myocardial flow reserve in a porcine model of LAD stenosis. 7th Annual Scientific Meeting and Exhibition of the Society of Magnetic Resonance (Philadelphia, 1999).
- 15. Poncelet BP[†], **Atalay MK**, Kantor HL, Reese TG, Brady TJ, Weisskoff RM. Quantitative assessment of myocardial flow reserve in a porcine model of LAD stenosis. 72nd Scientific Session of the American Heart Association (Dallas, 1999).
- 16. **Atalay MK**[†], Arcuri D, Grimaldi P, Ridlen M, Cronan JJ. Creating a dedicated cardiac MR service in a radiology department: lessons learned. 33rd Annual Meeting and Scientific Sessions of the North American Society of Cardiovascular Imaging (Amelia Island, FL, 2005).
- 17. **Atalay MK**[†], Prince E, Cronan JJ. Referral patterns in a new cardiac MR service: Who sends what? 33rd Annual Meeting and Scientific Sessions of the North American Society of Cardiovascular Imaging (Amelia Island, FL, 2005).

- 18. **Atalay MK**, Prince E, Mayo-Smith W, Cronan JJ. Exam duration and PACS volumes in cardiac MR: When is enough enough? 33rd Annual Meeting and Scientific Sessions of the North American Society of Cardiovascular Imaging (Amelia Island, FL, 2005).
- 19. Prince E[†], **Atalay MK**, Ridlen MS. Prevalence and significance of non-cardiovascular findings on cardiac MR: Seeing outside the box. 91st Scientific Assembly of the Radiological Society of North America (Chicago, 2005).
- 20. Bowkley C[†], **Atalay MK**, Egglin TE, Mayo-Smith W. Can cardiac CT field of view be used to exclude pulmonary embolus? 92nd Scientific Assembly of the Radiological Society of North America (Chicago, 2006).
- 21. **Atalay MK**, Stockwell PL, Feit LR, Drew TM. Ventricular end-diastolic volume ratios correlate highly with shunt severity: Quantification using MRI. 10th Annual Meeting of the Society of Cardiovascular Magnetic Resonance (Rome, 2007).
- 22. **Atalay MK**[†], Grand DJ, Chang KJ, Machan J. Measuring right ventricular volumes and ejection fraction with Simpson's method: Which MRI axis is best? 93rd Scientific Assembly of the Radiological Society of North America (Chicago, 2007).
- 23. **Atalay MK**, Hajimomenian S[†], Grand DJ. Three contrast injection protocols for ECG-Gated 64-Slice CT angiography (CTA): A search for the best and brightest. 93rd Scientific Assembly of the Radiological Society of North America (Chicago, 2007).
- 24. **Atalay MK**[†], Hajimomenian S, Pezzullo JA, Grand DJ, Mayo-Smith WW, Cronan JJ. Small, Unsuspected pulmonary embolism detected on outpatient ECG-gated CTA for chest pain: Does size matter? 93rd Scientific assembly of the Radiological Society of North America (Chicago, 2007).
- 25. **Atalay MK**[†], Hajimomenian S, Grand DJ. ECG-gated 64-slice CT angiography: How does vessel density affect study quality? 93rd Scientific Assembly of the Radiological Society of North America (Chicago, 2007).
- 26. Grand DJ[†], Mayo-Smith WW, **Atalay MK**, Dupuy DE, Ridlen MS. Detection of liver lesions with 64-slice multidetector CT: The addition of subtraction. 93rd Scientific Assembly of the Radiological Society of North America (Chicago, 2007).
- 27. **Atalay MK**[†], Grand DJ, Chang KJ. The horizontal long axis: A window into right ventricular size and function? 108th Annual Meeting of the American Roentgen Ray Association (Washington, DC, 2008).
- 28. Chen JY[†], Pezzullo JA, Klinger J, **Atalay MK**, Mayo-Smith WW. Can CT

- measurements predict pulmonary arterial and venous pressures? Correlation of multidetector row CT morphologic measurements with right heart catheterization pressures. 108th Annual Meeting of the American Roentgen Ray Association (Washington, DC, 2008).
- 29. Grand DJ[†], Mayo-Smith WW, **Atalay MK**, Dupuy DE, Cronan JJ. Detecting renal lesions with 64 detector-row CT: Does subtraction imaging help? 108th Annual Meeting of the American Roentgen Ray Association (Washington, DC, 2008).
- 30. Hajimomenian S[†], Chang KJ, Grand DJ, Sheehan FH, **Atalay MK**. Measuring right ventricular volumes and ejection fraction with Simpson's method: Which MRI axis is best? Comparison with a "Gold Standard". 12th Annual Meeting of the SCMR (Orlando, 2009).
- 31. Mikaelian B[†], Kiehl E, **Atalay MK**, Machan JT, Ellison K, Lorvidhaya P, Kirk M, Buxton AE. Myocardial infarct and peri-infarct zone volumes determined by magnetic resonance imaging do not predict inducible ventricular tachycardia. 58th Annual Meeting of the American College of Cardiology (ACC) (Orlando, 2009).
- 32. **Atalay MK**, Egglin TK, Walle N[†], Grand DJ, Mayo-Smith WW, Cronan JJ. FOV optimization at CT PE: Keeping both emboli and radiation dose in sight. 95th Scientific Assembly of the Radiological Society of North America (Chicago, 2009).
- 33. Grand DJ[†], **Atalay MK**, Cronan JJ, Mayo-Smith WW, Dupuy DE. CT-guided percutaneous lung biopsy using an electromagnetic navigation system: Initial experience. 95th Scientific Assembly of the Radiological Society of North America (Chicago, 2009).
- 34. Couto CA, **Atalay MK**, Maslow A, Singh A. Cross-sectional imaging of the post-surgical thoracic aorta: Common findings and imaging pitfalls. 95th Scientific Assembly of the Radiological Society of North America (Chicago, 2009); Electronic Exhibit: **Certificate of Merit**.
- 35. Sandman D, **Atalay MK**. Postsurgical felt pledget mimicking a pseudoaneurysm. Case in Point *online*, American College of Radiology 8/11/2009.
- 36. **Atalay MK**, Egglin TK, Walle N, Grand DJ, Mayo-Smith WW, Cronan JJ. Scan length optimization for pulmonary embolization at CT angiography: Analysis based on the 3-D spatial distribution of emboli. 5th Annual Meeting of the Society of Cardiovascular Computed Tomography, (Las Vegas, 2010).
- 37. **Atalay MK**, Walle N, Mitchell C. CT and MR imaging evaluation of atrial septal defects: Seeing the (w)hole picture. 96th Scientific Assembly of the RSNA (Chicago, IL, 2010); Electronic Exhibit: **Selected as an AMA Category 1 CME**

activity.

- 38. **Atalay MK**, Walle N, Mitchell C. CT and MR imaging evaluation of the patent ductus arteriosus: Creative strategies for optimal viewing. 96th Scientific Assembly of the RSNA (Chicago, 2010); Electronic Exhibit: **Certificate of Merit** (273/1915) with Excellence in Design (19/1915).
- 39. Healey TT, Mudge CS[†], **Atalay MK**, Pezzullo JA. Diagnosing pulmonary embolism without contrast or radiation: Is it possible? 29th Annual Meeting of the Society of Thoracic Radiology (Bonita Springs, FL, 2011). **Dr. Mudge won resident research award for best oral presentation**.
- 40. **Atalay MK**[†], Mitchell C. Sizing-up the ascending aorta with ECG-gated CTA: Are body axes sufficient? 111th Annual Meeting of the American Roentgen Ray Association (Chicago, 2011).
- 41. Ethier M, Beland M, **Atalay MK**, Monchik J. Guiding the surgeon through difficult territory: Preliminary experience with pre-operative ultrasound guided dye localization or recurrent thyroid cancer. 111th Annual Meeting of the American Roentgen Ray Association (Chicago, 2011); Educational Exhibit.
- 42. Jayaraman MV[†], Beland MD, **Atalay MK**, Ahn S, Dibiasio EL, Rizvi SA. Doppler waveform analysis of jugular venous flow in patients with and without Multiple Sclerosis. 49th Annual Meeting of the American Society of Neuroradiology (Seattle, 2011).
- 43. **Atalay MK**[†], Healey TT, Donat W, Myers J, Joventino L. Patients with stage IV pulmonary sarcoidosis and no prior cardiac history have significantly greater prevalence of myocardial late gadolinium enhancement at CMR than those with other stages of disease. 97th Scientific Assembly of the Radiological Society of North America (Chicago, 2011).
- 44. **Atalay MK**, Srivastava[†]. Ventricular end-diastolic volume ratios correlate highly with shunt severity: Quantification using CMR. 97th Scientific Assembly of the Radiological Society of North America (Chicago, 2011).
- 45. **Atalay MK**[†], Walle N, Egglin TK. The prevalence and nature of missed findings at CT pulmonary embolism in a busy emergency department. 97th Scientific Assembly of the Radiological Society of North America (Chicago, 2011).
- 46. Truesdell AG, Delgado GA, Li J, Abbott JD, **Atalay MK**, Singh A. Challenges in the Management of Postpartum Spontaneous Coronary Artery Dissection. 17th World Congress on Heart Disease (Toronto, 2012).
- 47. Kim J, Cohen S, **Atalay MK**, Poppas A. Right Ventricular Assessment by Real-Time 3D Echocardiography Versus Cardiac Magnetic Resonance in Patients With

- Left Ventricular Systolic Dysfunction. 23rd American Society of Echocardiography Scientific Sessions (National Harbor, MD, 2012).
- 48. Lorvidhaya P, Mendoza I, Sehli S, **Atalay MK**, Kim MH. Prospective Evaluation of Cinefluoroscopy and Chest Radiography for Riata Screening: Implications for Future Lead Assessment. 34th Annual Scientific Sessions of the Heart Rhythm Society (Denver, 2013).
- 49. Anderson TJ[†], **Atalay MK**, Grand DJ, Beland MD. Can Ultrasound Features of Thyroid Nodules Predict Outcomes after a Non-Diagnostic Fine Needle Aspiration? 99th Scientific Assembly of the Radiological Society of North America (Chicago, 2013).
- 50. Anderson TJ[†], **Atalay MK**, Grand DJ, Beland MD. Is Repeat FNA after a Non-Diagnostic Thyroid Nodule FNA Necessary? 99th Scientific Assembly of the Radiological Society of North America (Chicago, 2013).
- 51. Afari ME, Rehman MU, **Atalay MK**, Broderick R. Multimodality Imaging in Exercise Induced Sudden Cardiac Arrest. 64th Annual Meeting of the American College of Cardiology (San Diego, 2015).
- 52. **Atalay MK**[†], Tuttle A, Baird G, Kwon D, Sodha N. The Impact of Maximum Aortic Wall Thickness & Luminal Compression Ratio on Patient Outcomes in acute Type A IMH. 101st Scientific Assembly of the Radiological Society of North America (Chicago, 2015).
- 53. **Atalay MK**[†], Pouw M, Agarwal S, Chang K, Baird G. Assessing myocardial chamber sizes and enhancement on non-gated CT: Towards diagnosing cardiac amyloid. 4th World Congress of Thoracic Imaging (Boston, 2017).
- 54. Pouw M[†], Agarwal S, Chang K, Baird G, **Atalay MK**. Diagnosing cardiac amyloid on non-gated contrast CT: How good are we? 4th World Congress of Thoracic Imaging (Boston, 2017).
- 55. Vachani A, **Atalay MK**, Bremner R, Broussard B, Copeland K, Egressy K, Ferguson S, Friedman L, Harris RJ, Kidd J, Leach J, McQuary P, Qui L, Sarkar S, Sheilbani N, Schuff J, Vincent B, Hesterberg L. A MultiGene Classifier for the Diagnosis of Benign Versus Malignant Pulmonary Nodules. American Thoracic Society (Washington, DC, 2017)
- Yaghi S, Chang A, Hung P, MacGrory B, Collins S, Reynolds J, Finn CB, Hemendinger M, Cutting SM, McTaggart RA, Jayaraman M, Leasure A, Sanding L, Panda N, Song C, Chu A, Merkler A, Gialdini G, Sheth K, Kamel H, Elkind M, Greer D, Furie K, Atalay MK. Left Atrial Appendage Morphology and Embolic Stroke of Source: A Cross Sectional Multi-Center Pilot Study. American Thoracic Society (Washington, DC, 2017)

- 57. Vachani A, **Atalay MK**, et al. A Blood-Based MultiGene Expression Classifier to Distinguish Benign From Malignant Pulmonary Nodules. Chest Annual Meeting (Toronto, 2017)
- 58. **Atalay MK**, Baird GL, Stib MT, George P, Cronan JJ. The Impact of emerging technologies on residency selection by medical students. 104th Scientific Assembly of the Radiological Society of North America (Chicago, 2018).
- 59. Chang AD[†], Collins S, Merck D, Baird GL, **Atalay MK**. Modeling cardiac output using vessel density across the cardiovascular anatomy in CTPE. 104th Scientific Assembly of the Radiological Society of North America (Chicago, 2018). (Alpert Medical Student Andrew Chang received a \$500 RSNA training award.)
- 60. Patel R, Levinson AT, Martin DW, Levine D, **Atalay M**, Amass T. An unusual case of cardiac sarcoidosis. American Thoracic Society 2019 International Conference (Dallas, 2019).
- 61. Yaghi S, Chang AD, Akiki R, Collins S, Novack T, Hemendinger M, Schomer A, Mac Grory B, Cutting S, Burton T, Song C, Poppas A, McTaggart R, Jayaraman M, Merkler A, Kamel H, Elkind MSV, Furie K, **Atalay MK**. High risk left atrial appendage morphologies are associated with cardioembolic and embolic stroke of unknown source subtypes. International Stroke Conference (Honolulu, 2019).
- 62. Chang A[†], Dominguez-Konicki L, Ignacio GC, **Atalay MK**, Shilo D. Attenuation gradients across thoracic vasculature on ctpa predict mortality following pulmonary embolism. 105th Scientific Assembly of the Radiological Society of North America (Chicago, 2019).
- 63. Dietsche E, Baird GL, Healey T, **Atalay MK**, Agarwal S. Does Use of Gray-scale Inversion Improve Detection of Pulmonary Nodules on Chest Radiograph. Society of Thoracic Radiology (Indian Wells, CA 2020).
- 64. Zeba F[†], Yanning W, Melek J, Duan F, **Atalay MK**, Jankowich M, Rounds S. A review of prognostic markers in combined pulmonary fibrosis and emphysema and clinical significance of radiological markers of pulmonary hypertension. Chest annual meeting (virtual, 2020).
- 65. **Atalay MK**[†], Baird GL, Stib MT, George P, Cronan JJ. The Impact of Emerging Technologies on Residency Selection by Medical Students: 2017 vs 2021. 107th Scientific Assembly of the Radiological Society of North America (Chicago, 2021).
- 66. Fayad F[†], Zhong Z, Sollee J, Jiao Z, Bai H, **Atalay MK**. Pulmonary Embolism Mortality Prediction with Deep Learning Based on Computed Tomographic

- Pulmonary Angiography and Clinical Data. American Heart Association Scientific Sessions (Chicago, 2022).
- 67. Bernstein MH[†], **Atalay MK**, Dibble E, Maxwell AWP, Karam AR, Agarwal S, Ward RC, Healey TT, Baird GL. Can incorrect Artificial Intelligence (AI) results impact radiologists, and if so, what can we do about it? A multi-reader pilot study of lung cancer detection with chest radiography. Poster presented at the 108th Scientific Assembly of the Radiological Society of North America (Chicago, 2022).
- 68. Hillier[†], Konidis E, Luu J, Selvanayagam J, **Atalay MK**, Zuluaga A, Mavrogeni S, Roifman R, Kelle S, and Friedrich MG for the International Study Group on Breathing-Enhanced OS-CMR. Breathing-Enhanced Oxygenation-Sensitive CMR for Detecting Significant Coronary Artery Stenosis First Multi-Center Data. Society of Cardiovascular MR (San Diego, 2023).
- 69. Imran T, Parra L, Arcuri D, **Atalay MK**, Nguyen C, Wu WC, Choudhary G. Characterizing cardiac involvement in heart failure with preserved ejection fraction using CMR diffusion tensor imaging. Society of Cardiovascular MR (London, CMR 2024)

INVITED PRESENTATIONS

REGIONAL

- 1. Cardiovascular MRI: The Future is Now. Grand Rounds Lecturer, Department of Medicine, Rhode Island Hospital, Providence, RI, January 2004.
- 2. Assessment of Coronary Heart Disease by Magnetic Resonance Imaging. Faculty, New England Roentgen Ray Society (NERRS), Waltham, MA, April 2004.
- 3. Assessment of Coronary Heart Disease by Magnetic Resonance Imaging. Faculty, New England Roentgen Ray Society (NERRS), Waltham, MA, April 2005.
- 4. Cardiovascular MRI for the Pulmonologist. **Grand Rounds Lecturer**, Division of Pulmonary Medicine, Rhode Island Hospital, Providence, RI, May 2005.
- 5. *Cardiac MRI: Who Needs It?* Faculty, Rhode Island Chapter of the American College of Cardiology and Rhode Island Hospital, 4th Annual Cardiology for the Primary Care Provider, Providence, RI, September 2005.
- 6. *Cardiovascular MRI: The Future is Now.* Speaker, Rhode Island Hospital Founder's Day, Providence, RI, October 2005.

- 7. Assessment of Coronary Heart Disease by Magnetic Resonance Imaging. Faculty, New England Roentgen Ray Society (NERRS), Boston, MA, February 2006.
- 8. Cardiac MRI & CT: The Future is Now. **Grand Rounds Lecturer**, Department of Medicine, The Memorial Hospital of Rhode Island, Pawtucket, RI, February 2006.
- 9. Assessment of Coronary Heart Disease by Magnetic Resonance Imaging. Faculty, New England Roentgen Ray Society (NERRS), Waltham, MA, April 2006.
- 10. *Cardiac MRI*. Faculty, American College of Physicians, Rhode Island Chapter Scientific Meeting, Newport, RI, October 2006.
- 11. (Two Lectures) (1) Cardiac MRI: Update and (2) Cardiac CT: The Next Revolution. **Keynote Speaker**, Pennsylvania Radiological Society, Annual Meeting, Philadelphia, PA, October 2006.
- 12. *New Advances in Cardiac CT.* **Guest Speaker**, Primary Care Physicians of Rhode Island, Providence, RI, January 2007.
- 13. Cardiovascular Imaging: Current Techniques and Future Directions. **Grand Rounds Lecturer**, Rhode Island Hospital, Department of Medicine, Providence, RI, January 2007.
- 14. (Two Lectures) (1) Cardiac MRI: Current & Future Indications and (2) Cardiac CT: The Next Revolution. **Keynote Speaker**, North Carolina Radiological Society, Annual Meeting, Raleigh, NC, March 2007.
- 15. Assessment of Coronary Heart Disease by Magnetic Resonance Imaging. Faculty, New England Roentgen Ray Society (NERRS), Waltham, MA, April 2007.
- 16. (Two Lectures) (1) Cardiac MRI and (2) Cardiac CT. Grand Rounds Lecturer, Department of Radiology, West Penn Hospital, Pittsburgh, PA, October 2007.
- 17. Introduction to Magnetic Resonance Physics. Faculty, New England Roentgen Ray Society (NERRS), Waltham, MA, April 2008.
- 18. Assessment of Coronary Heart Disease by Magnetic Resonance Imaging. Faculty, New England Roentgen Ray Society (NERRS), Boston, MA, October 2008.
- 19. Atherosclerosis on routine CT: An incidental conundrum. **Grand Rounds**Lecturer, Rhode Island Hospital Department of Medicine, Providence, RI,
 January 2009.

- 20. Cardiac MRI & CT: Clinical Applications. **Grand Rounds Lecturer**, Department of Medicine, The Roger Williams Hospital, Providence, RI, January 2009.
- 21. *Cardiac Imaging*. Faculty, Rhode Island Hospital, 5th Annual Nursing Cardiology Symposium, Warwick, RI, February 2009.
- 22. MRI of Heart & Mediastinal Masses. Faculty, New England Roentgen Ray Society (NERRS), Waltham, MA, March 2011.
- 23. Cardiac CT & MRI: Uses and Limitations. Faculty, Rhode Island Chapter of the American College of Cardiology and Rhode Island Hospital. 10th Annual Cardiology for the Primary Care Provider, Providence, RI, September 2011.
- 24. *Imaging of Cardiac & Extracardiac Masses*. **Grand Rounds Lecturer**, Department of Radiology, The University of Wisconsin, Madison, WI, May 2013.
- 25. MRI for Cardiomyopathies in 2013: Methods, Applications, and Outcomes. Grand Rounds Lecturer, Division of Cardiology, Rhode Island Hospital, October 2013.
- 26. Cardiac Diagnoses through ER Imaging: Pearls and Pitfalls. Faculty, New England Roentgen Ray Society (NERRS), Boston, MA, March 2014.
- 27. (2 lectures) (1) Peering Inside the Box: Cardiac Diagnoses through ER Imaging, (2) Imaging of the Acute Aorta in 2015: Pearls and Pitfalls. **Grand Rounds**Lecturer, Department of Radiology, Medical College of Virginia/Virginia
 Commonwealth University, Richmond, VA, Jan 2015.
- 28. *MRI for Ventricular Tachycardia*. Faculty, CME Arrhythmia Conference, Alpert Medical School, Brown University, Providence, RI, April 2016.
- 29. *MRI for Arrhythmia*. Faculty, CME Arrhythmia Conference, Alpert Medical School, Brown University, Providence, RI, April 2017.
- Imaging of the Acute Aorta in 2017: Pearls and Pitfalls. Grand Rounds
 Lecturer, Department of Radiology, Christiana Health Care, Wilmington, DE, April 2017.
- 31. *Imaging of Congenital Heart Disease*. Faculty, Review course, New England Roentgen Ray Society (NERRS), Boston, MA, April 2017.
- 32. *MRI of Patients with Arrhythmia and Cardiac devices*. Faculty, CME Arrhythmia Conference, Alpert Medical School, Brown University, Providence, RI, April 2018.
- 33. CT & MRI in the Assessment of Valve Disease: An Open-and-Shut Case. Faculty,

- CME Valve Symposium, Alpert Medical School, Brown University, Providence, RI, April 2019.
- 34. *CMR for the Pulmonologist*. CME Citywide Chest conference. Alpert Medical School, Brown University, Providence, RI, February 2020.
- 35. The Role of Cardiac CT in the Diagnosis & Management of Cardiovascular Pathology. Faculty, CME Cardiology Symposium, Alpert Medical School, Brown University, Providence, RI, March 2021.

NATIONAL

- 1. *Cardiac MRI: The Basics*. Faculty, American Roentgen Ray Society (ARRS), Annual Meeting, Orlando, FL, May 2007.
- 2. Cardiac CT. **Keynote Speaker** (Cardiac/Chest CT Session), American Roentgen Ray Society (ARRS), Annual Meeting, Washington, DC, April 2008.
- 3. *Cardiac MRI: The Basics*. Faculty, American Roentgen Ray Society (ARRS), Annual Meeting, Washington, DC, April 2008.
- 4. *Cardiac MRI: The Basics*. Faculty, American Roentgen Ray Society (ARRS), Annual Meeting, Boston, MA, April 2009.
- 5. Myocardial Scar Imaging with CMR. **Keynote Speaker** (Cardiac Imaging Session), American Roentgen Ray Society (ARRS), Annual Meeting, San Diego, CA, May 2010.
- 6. *Cardiac MRI: The Basics*. Faculty, American Roentgen Ray Society (ARRS), Annual Meeting, San Diego, CA, May 2010.
- 7. *Cardiac MRI: The Basics*. Faculty, American Roentgen Ray Society (ARRS), Annual Meeting, Chicago, IL, May 2011.
- 8. *Cardiac MRI: The Basics*. Faculty, American Roentgen Ray Society (ARRS), Annual Meeting, Vancouver, CA, May 2012.
- 9. Cardiac Radiology: Read with the Experts (Interactive game powered by RSNA-DxLiveTM). Faculty, Radiological Society of North America (RSNA), 98th Annual Meeting, Chicago, IL, November 2012.

 Invited radiologists show and discuss interesting and educational imaging cases.
- 10. Introduction to Cardiac MR: Infarcts, Cardiomyopathies and Masses (How-to workshop). Faculty, Radiological Society of North America (RSNA), 98th Annual Meeting, Chicago, IL, November 2012.

- 11. Late Gadolinium Enhancement: Is it Real and What Does it Mean? Faculty, American Roentgen Ray Society (ARRS), Annual Meeting, Washington, DC, April 2013.
- 12. Introduction to Cardiac MR: Infarcts, Cardiomyopathies and Masses (How-to workshop). Faculty, Radiological Society of North America (RSNA) 99th Annual Meeting, Chicago, IL, November 2013.
- 13. Case review series, Cardiopulmonary section. Faculty, Radiological Society of North America (RSNA) 105th Annual Meeting, Chicago, IL, November 2019; (>900 attendees).

 Invited radiologists show and discuss interesting and educational imaging cases.
- 13. Human Factors Course (Talk: Inner Noise: Errors in Radiology Due to Human Factors). Faculty, Radiological Society of North America (RSNA) 108th Annual Meeting, Chicago, IL, November 2022.
- 14. Errors in Radiology: The Human Factor is the X-Factor (Errors in Radiology Due to Perception, Judgement, and Noise). Faculty, Radiological Society of North America (RSNA) 110th Annual Meeting, Chicago, IL, November 2023.

INTERNATIONAL

- 1. Read with the Experts. Faculty, Society of Cardiovascular Magnetic Resonance (SCMR), Annual Meeting, Rome, Italy, February 2007.

 Invited imagers show and discuss interesting and educational imaging cases.
- 2. Instructional Course: Getting the correct slice position. Faculty, Society of Cardiovascular Magnetic Resonance (SCMR), Annual Meeting, Los Angeles, CA, February 2008.
- 3. *Instructional Course: Getting the correct slice position.* Faculty, Society of Cardiovascular Magnetic Resonance (SCMR), Annual Meeting, Orlando, FL, February 2009.
- 4. (4 lectures) (1) Cardiac MRI: The Basics, (2) Imaging of Cardiac & Extracardiac Masses, (3) Radiofrequency Ablation of Lung Cancer: Why Less is More, (4) Imaging of the Acute Aorta. Invited Faculty, 1st International Congress of Chest and Cardiac Imaging at the King Fahd Medical City, Riyadh, Saudi Arabia, April 2012.
- 5. (4 lectures) (1) Fundamentals of Cardiac MRI: Everything you need to know, (2) Imaging of Cardiac & Extracardiac Masses, (3) Interstitial Lung Disease: Classification and Imaging Findings, (4) Imaging of the Acute Aorta. Invited Faculty, 2015 Global Radiology Education, Bali, Indonesia, February 2015.

- 6. (5 lectures) (1) Fundamentals of Cardiac MRI: All you need to know, (2) Imaging of Cardiac & Extracardiac Masses, (3) Interstitial Lung Disease: Classification and Imaging Findings, (4) Imaging of the Acute Aorta: Pearls and Pitfalls, (5) Imaging of Pulmonary Embolism: Update 2017. Invited Faculty, 2017 Chest Imaging Conference, Omani Radiological Society, Muscat, Oman, February 2017.
- 7. (2 lectures) (1) MRI of Ischemic Cardiomyopathy, (2) MRI of Non-Ischemic Cardiomyopathy. Invited Faculty, 2017 Meeting of the Radiological Society of South Africa, Cape Town, SA, October 2017.
- 8. (4 lectures) (1) Imaging of Pulmonary Embolism: Update 2019 (Paulino Garcia Memorial Lecture), (2) The Interstitial and Diffuse Lung Diseases—A Practical Approach, (3) Peering Inside the Box: Cardiac Diagnoses Any Radiologist Can Make, (4) Cardiopulmonary Case Review. Invited Faculty, 2019 Global Radiology Education/Philippine College of Radiology Conference, Manila, Philippines, February 2019.
- 9. Structural thoracic imaging in COVID-19, One of two featured speakers in Webinar for the World Molecular Imaging Society (WMIS), April 2020.
- 10. How Does CMR Utilization Compare to Other MR Imaging Studies? Faculty, Society of Cardiovascular Magnetic Resonance (SCMR), Virtual Annual Meeting, February 2021.

GRANTS

COMPLETED

2005-2007 Myocardial Abnormalities in Sarcoidosis: Assessment using MR Imaging and Correlation with Clinical Outcome. Rhode Island Medical Imaging Seed Grant (\$15k) (Co-PI: L Joventino, M.D., Cardiology, Rhode Island Hospital)

Role: Principal Investigator

2006-2008 Structure-Function Relationships Resulting in Ventricular Tachyarrhythmias after Myocardial Infarction. Rhode Island Medical Imaging Seed Grant (\$15k) (Co-PI: A Buxton, M.D., Cardiology, Rhode Island Hospital)

Role: Principal Investigator

2013-2015 Multicenter Open-label Study to Evaluate Efficacy of Gadobutrolenhanced Cardiac Magnetic Resonance Imaging (CMRI) for Detection of Significant Coronary Artery Disease (CAD) in Subjects With Known or Suspected CAD by a Blinded Image Analysis (Identifier: NCT01890421) Funded by Bayer Pharmaceutical, Inc.

Role: Site Principal Investigator

2017-2019 Left Atrial Appendage Morphology in Cryptogenic Stroke, AHA Award

#17MCPRP33670965 (PI: S Yaghi, M.D., Neurology, Brown University)

Role: Co-Investigator (4%)

2020 Effect of body position on regional lung displacement during free

breathing: Towards improving efficiency and safety during image-guided lung mass biopsy. Rhode Island Medical Imaging Seed Grant (\$15k) (PI:

A Karam, MD, Diagnostic Imaging, Rhode Island Hospital)

Role: Co-Principal Investigator

ACTIVE

2015-2018 A Study To Evaluate A Panel Of Blood Biomarkers For Use In Patients

Undergoing Evaluation For Lung Cancer, ONC-LN-04. Funded by

Oncocyte Corporation.

Role: Site Principal Investigator

2018-2023 Effects of DHEA in Pulmonary Hypertension (DiPH), NHLBI Award

1R01HL141268-01 (PI: CE Ventetuolo, M.D., M.S., Pulmonary

Medicine, Brown University) Role: **Co-Investigator** (10%)

2019-2022 Scarring and Arrhythmia in Infarcted Aged Heart: Role of Senescent

Fibroblasts, NHLBI Award 1R01HL139467-01A1 (PI: G Koren, M.D.,

Cardiology, Brown University) Role: **Co-Investigator** (10%)

2020-2023 Breathing-Maneuver-Induced Myocardial Oxygenation Reserve Validated

by FFR (B-MORE) Protocol #: 2019-4137 (PI: M Friedrich, M.D., Cardiology, The Research Institute of the McGill University Health Centre). Funded by Circle Cardiovascular Imaging.

D. 1. Giv. D. i. . I. I.

Role: Site Principal Investigator

UNIVERSITY TEACHING ROLES

RECURRING

BIOMED 629: General Introduction to Radiology

The Warren Alpert Medical School of Brown University

2003-Present

Director: Dr. Don Yoo

Review chest, abdominal, and pelvic teaching cases with medical students to discuss

anatomy, disease, and imaging techniques.

BIOL 3662 Integrated Medical Science III: Cardiovascular Pathophysiology, Lecturer (Introduction to Cardiac CT & MRI)

The Warren Alpert Medical School of Brown University (Basic Science)

Director: Drs. Ed Keating & Joseph Wyllie

2006-Present

BIOL 3662 Integrated Medical Science III: Cardiovascular Pathophysiology, **Group** Leader

The Warren Alpert Medical School of Brown University (Basic Science)

Director: Drs. Kate French & Verity Ramirez

2010-Present

The role of Group Leaders in this curriculum is to guide medical student discussion through a series of clinical vignettes, to clarify points of confusion when they arise, and to ensure that salient features of each case are considered and understood.

Radiology Lecture Series for Primary Care-Population Medicine Program Longitudinal Integrated Curriculum (LIC) for 3rd year Medical Students interested in population health,

Lecturer (Cardiac CT: The Future is Now)

Directors: Drs. Don Yoo & Michael Furman

2018-Present

ENGN 1931S: Medical Physics, New Course Spring 2020, Lecturer (An Introduction to Medical Imaging Physics)

Brown University (Undergraduate & Graduate)

Director: Dr. Eric Klein

2020-Present

RAD 6335 Cardiothoracic Imaging and Intervention

The Warren Alpert Medical School of Brown University

Director: Dr. Terrance Healey

2020-Present

Focused review of cardiothoracic teaching cases with medical students to discuss anatomy, disease, and imaging techniques. Students also observe pulmonologists, thoracic surgeons, and oncologists to learn more about strategies for diagnosing and treating a host of diseases of the thorax.

GUEST LECTURER

BIO 017: Biotechnology in Medicine; Introduction to Medical Imaging, Lecturer

Brown University (Undergraduate)

Director: Dr. Ed Hawrot

2006

PH 2620: Selected Topics in Biophysics, Lecturer (MRI Physics—from proton to picture)

Brown University (Undergraduate & Graduate)

Director: Dr. Jay Tang

2012

Biol 1200: Protein Biophysics and Structural Biology, Lecturer (MRI Physics—from

proton to picture)

Brown University (Undergraduate & Graduate)

Director: Dr. Wolfgang Peti

2013

HOSPITAL TEACHING AND CLINICAL CONFERENCE ROLES

Clinical Assignments

Monthly Thoracic Aorta Conference, Rhode Island Hospital, **primary covering** radiologist (Review all imaging studies at each conference)

Weekly Pulmonary Tumor Board, Rhode Island Hospital, **shared radiology coverage**, ~0.5/month (Review all imaging studies at each conference)

Weekly Multidisciplinary Lung Cancer Clinic, Rhode Island Hospital, **shared radiology coverage**, ~1/month (Review all imaging studies at each conference)

Monthly Interstitial Lund Disease Conference, Rhode Island Hospital, **shared radiology coverage**, ~quarterly (Review all imaging studies at each conference)

Teaching Assignments

Weekly cardiology Fellows Conference, Rhode Island Hospital (Attend and participate when schedule permits and provide 2-3 lectures per year)

Weekly radiology Fellows Conference, Rhode Island Hospital (Attend and participate)

Weekly pulmonology Fellows Conference, Rhode Island Hospital (Attend and participate when schedule permits)

Radiology Residents: ~ 8 didactic teaching and case review sessions per year

Radiology Residents: **Ultrasound physics** (2 lecture/year), **MRI physics** (2 lectures/year)

Physics underlies all medical imaging and is an important component of radiology residents' education. Since arriving at Brown in 2003, I have participated actively in the didactic curriculum for ultrasound and MRI physics.

Mr Heley