

CURRICULUM VITAE

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01 April, 2019



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** 1317 citations and 20 h-index in Google scholars	
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1. EDUCATION AND POST-GRADUATE TRAINING

1-1. EDUCATION

1994.03 – 2000.02 M.D. (License #70559)

Pusan National University, School of Medicine, Pusan, Korea

2002.03 – 2004.02 M.S.

University of Ulsan, College of Medicine, Seoul, Korea

2008.03 – 2013.02 Ph.D.

University of Ulsan, College of Medicine, Seoul, Korea

2015.08 – 2016.07 Visiting Scholar, Dalio Institute of Cardiovascular Center,

New York -Presbyterian Hospital and

the Weill Cornell Medical College, New York, NY

1-2. POST-GRADUATE TRAINING

2000.03 – 2005.02 Internship & Residencyship in Radiology

Asan Medical Center, Seoul, Korea

2005.03 – 2008.04 Military Service as a doctor

Aerospace Medical Center, Chungju, Chungbuk, Korea

2008.05 – 2009.02 Fellowship of pediatric radiology

Asan Medical Center, Seoul, Korea

2009.03 – 2011.02 Radiologist in private clinic

Dongyang Radiology Clinic, Daejeon, Korea

2011.03 – 2012.03 Fellowship of cardiovascular radiology

Asan Medical Center, Seoul, Korea

2012.03 – 2017.02 Assistant professor of Radiology

Asan Medical Center, Seoul, Korea

2017.02 – current Associate professor of Radiology,

Director of Cardiovascular Imaging Center, Heart Institute,
Asan Medical Center, University of Ulsan College of Medicine,
Seoul, Korea

2. PUBLICATIONS

2-1. INTERNATIONAL JOURNALS

* Blue color mean main authorship (first or corresponding author)

52 publications as the first- or corresponding authors

99 publications as any authors

2004

1. Yang DH, Kim JK, Kim KW, Bae SJ, Kim KH, Cho KS. MRI of small cell carcinoma of the uterine cervix with pathologic correlation. AJR Am J Roentgenol 2004;182:1255-8.

2005

2. Kim TH, Yang DH, Choi JW, Kim ST, Yoon JH, Shin JH, Seo JB, Gong GY, Lim TH. Manganese dipyridoxyl diphosphate (MnDPDP)-enhanced magnetic resonance imaging of acute reperfused myocardial injury in a cat model: part I: comparison with pathologic examination. *Invest Radiol* 2005;40:49-55.
3. Park SH, Ha HK, Kim MJ, Kim KW, Kim AY, Yang DH, Lee MG, Kim PN, Shin YM, Yang SK, Myung SJ, Min YI. False-negative results at multi-detector row CT colonography: multivariate analysis of causes for missed lesions. *Radiology* 2005;235:495-502.
4. Yang DH, Kim TH, Choi JW, Kim ST, Yoon JH, Shin JH, Seo JB, Lim TH. Manganese dipyridoxyl diphosphate (MnDPDP)-enhanced magnetic resonance imaging of acute reperfused myocardial injury in a cat model: part II: comparison with cine magnetic resonance imaging. *Invest Radiol* 2005;40:56-61.
5. Yang DH, Seo JB, Lee IS, Do KH, Ko SM, Lee SH, Song JW, Lee JS, Song KS, Lim TH. Displaced aortic arch sign on chest radiographs: a new sign for the detection of a left paratracheal esophageal mass. *Eur Radiol* 2005;15:936-40.

2006

6. Byun JH, Yang DH, Yoon SE, Won HJ, Shin YM, Jeong YY, Jang SJ. Contrast-enhancing hepatic eosinophilic abscess during the hepatic arterial phase: a mimic of hepatocellular carcinoma. *AJR Am J Roentgenol* 2006;186:168-73.
7. Goo HW, Yang DH, Ra YS, Song JS, Im HJ, Seo JJ, Ghim T, Moon HN. Whole-body MRI of Langerhans cell histiocytosis: comparison with radiography and bone scintigraphy. *Pediatr Radiol* 2006;36:1019-31.
8. Yang DH, Goo HW. Generalized lymphangiomatosis: radiologic findings in three pediatric patients. *Korean J Radiol* 2006;7:287-91.
9. Yang DH, Kim KW, Kim TK, Park SH, Kim SH, Kim MH, Lee SK, Kim AY, Kim PN, Ha HK, Lee MG. Autoimmune pancreatitis: radiologic findings in 20 patients. *Abdom Imaging* 2006;31:94-102.

2007

10. Goo HW, Yang DH, Park IS, Ko JK, Kim YH, Seo DM, Yun TJ, Park JJ. Time-resolved three-dimensional contrast-enhanced magnetic resonance angiography in patients who have undergone a Fontan operation or bidirectional cavopulmonary connection: initial experience. *J Magn Reson Imaging* 2007;25:727-36.
11. Pyun HW, Suh DC, Kim JK, Kim JS, Choi YJ, Kim MH, Yang HR, Jang YM, Ko MS, Cha EY, Yang DH, Kim SJ. Concomitant multiple revascularizations

- in supra-aortic arteries: short-term results in 50 patients. AJNR Am J Neuroradiol 2007;28:1895-901.
12. Suh DC, Kim JK, Choi CG, Kim SJ, Pyun HW, Ahn C, **Yang DH**, Lim KS, Leem JG, Hahm KD, Lee JH, Kwon SU, Kim JS. Prognostic factors for neurologic outcome after endovascular revascularization of acute symptomatic occlusion of the internal carotid artery. AJNR Am J Neuroradiol 2007;28:1167-71.

2008

13. **Yang DH**, Goo HW. Horseshoe adrenal gland in right atrial isomerism and asplenia. Pediatr Radiol 2008;38:815.
14. **Yang DH**, Goo HW, Seo DM, Yun TJ, Park JJ, Park IS, Ko JK, Kim YH. Multislice CT angiography of interrupted aortic arch. Pediatr Radiol 2008;38:89-100.

2010

15. Goo HW, **Yang DH**. Coronary artery visibility in free-breathing young children with congenital heart disease on cardiac 64-slice CT: dual-source ECG-triggered sequential scan vs. single-source non-ECG-synchronized spiral scan. Pediatr Radiol 2010;40:1670-80.
16. Goo HW, **Yang DH**, Hong SJ, Yu J, Kim BJ, Seo JB, Chae EJ, Lee J, Krauss B. Xenon ventilation CT using dual-source and dual-energy technique in children with bronchiolitis obliterans: correlation of xenon and CT density values with pulmonary function test results. Pediatr Radiol 2010;40:1490-7.

2011

17. Goo HW, **Yang DH**, Kim N, Park SI, Kim DK, Kim EA. Collateral ventilation to congenital hyperlucent lung lesions assessed on xenon-enhanced dynamic dual-energy CT: an initial experience. Korean J Radiol 2011;12:25-33.
18. Park SY, Kang JW, **Yang DH**, Lim TH. Intracardiac migration of a Kirschner wire: case report and literature review. Int J Cardiovasc Imaging 2011;27 Suppl 1:85-8.

2012

19. Kim BH, Do KH, Goo HW, **Yang DH**, Oh SY, Kim HJ, Lee KY, Lee JE. National survey of radiation doses of pediatric chest radiography in Korea: analysis of the factors affecting radiation doses. Korean J Radiol 2012;13:610-7.
20. Kim JB, **Yang DH**, Kang JW. Right aortic arch and an aberrant left subclavian artery arising from a Kommerell diverticulum complicated by acute aortic dissection. J Thorac Cardiovasc Surg 2012;144:978-9.

2013

21. Kang JW, Song HG, **Yang DH**, Baek S, Kim DH, Song JM, Kang DH, Lim TH, Song JK. Association between bicuspid aortic valve phenotype and patterns of valvular dysfunction and bicuspid aortopathy: comprehensive evaluation using MDCT and echocardiography. *JACC Cardiovasc Imaging* 2013;6:150-61.
22. Koo HJ, **Yang DH**, Kang JW, Han K, Chung CH, Song JK, Lee I, Lim TH. Demonstration of prosthetic aortic valve dehiscence in a patient with noninfectious aortitis by multimodality imaging: findings of echocardiography and computed tomography. *Circulation* 2013;128:759-61.

2014

23. Kim DH, Handschumacher MD, Levine RA, Sun BJ, Jang JY, **Yang DH**, Kang JW, Song JM, Kang DH, Lim TH, Song JK. Aortic valve adaptation to aortic root dilatation: insights into the mechanism of functional aortic regurgitation from 3-dimensional cardiac computed tomography. *Circ Cardiovasc Imaging* 2014;7:828-35.
24. Kim YS, Kim JH, Kim JB, **Yang DH**, Kang JW, Hwang SK, Choo SJ, Chung CH. Influence of radiologically evident residual intimal tear on expansion of descending aorta following surgery for acute type I aortic dissection. *Korean J Thorac Cardiovasc Surg* 2014;47:6-12.
25. Koo HJ, **Yang DH**, Oh SY, Kang JW, Kim DH, Song JK, Lee JW, Chung CH, Lim TH. Demonstration of mitral valve prolapse with CT for planning of mitral valve repair. *Radiographics* 2014;34:1537-52.
26. Suh CH, **Yang DH**, Kang JW, Jung SH, Song JK, Lim TH. Demonstration of doubly committed juxta-arterial ventricular septal defect with aortic valve prolapse by cardiac computed tomography. *J Cardiovasc Comput Tomogr* 2014;8:83-4.
27. **Yang DH**, Kang JW, Kim HK, Choe J, Baek S, Kim SH, Park GM, Kim YH, Kim TH, Tseng WY, Lim TH. Association between C-reactive Protein and type of coronary arterial plaque in asymptomatic patients: assessment with coronary CT angiography. *Radiology* 2014;272:665-73.
28. Yoon GY, **Yang DH**, Kang JW, Song JK, Lee JW, Lim TH. Demonstration of inverted left atrial appendage using cardiac computed tomography: an unusual complication mimicking left atrial mass after cardiac surgery. *Circulation* 2014;130:e66-7.
29. Yoon YE, Hong YJ, Kim HK, Kim JA, Na JO, **Yang DH**, Kim YJ, Choi EY. 2014 korean guidelines for appropriate utilization of cardiovascular magnetic resonance imaging: a joint report of the korean society of cardiology and the korean society of radiology. *Korean Circ J* 2014;44:359-85.
30. Yoon YE, Hong YJ, Kim HK, Kim JA, Na JO, **Yang DH**, Kim YJ, Choi EY, The

Korean Society of C, the Korean Society of R. 2014 Korean guidelines for appropriate utilization of cardiovascular magnetic resonance imaging: a joint report of the Korean Society of Cardiology and the Korean Society of Radiology. *Korean J Radiol* 2014;15:659-88.

2015

31. Cho YK, Kang YM, Hwang JY, Kim EH, Yang DH, Kang JW, Park JY, Lee WJ, Kim HK, Jung CH. Association between serum gamma-glutamyltransferase and the progression of coronary artery calcification. *Atherosclerosis* 2015;243:300-6.
32. Chung MS, Yang DH, Kim DH, Kang JW, Lim TH. Subvalvular pannus formation causing aortic stenosis in patient with a normal prosthetic aortic valve: computed tomography finding. *Eur Heart J Cardiovasc Imaging* 2015;16:458.
33. Eom HJ, Yang DH, Kang JW, Kim DH, Song JM, Kang DH, Song JK, Kim JB, Jung SH, Choo SJ, Chung CH, Lee JW, Lim TH. Preoperative cardiac computed tomography for demonstration of congenital cardiac septal defect in adults. *Eur Radiol* 2015;25:1614-22.
34. Han K, Yang DH, Shin SY, Kim N, Kang JW, Kim DH, Song JM, Kang DH, Song JK, Kim JB, Jung SH, Choo SJ, Chung CH, Lee JW, Lim TH. Subprosthetic Pannus after Aortic Valve Replacement Surgery: Cardiac CT Findings and Clinical Features. *Radiology* 2015;276:724-31.
35. Hwang JY, Do KH, Yang DH, Cho YA, Yoon HK, Lee JS, Koo HJ. A Survey of Pediatric CT Protocols and Radiation Doses in South Korean Hospitals to Optimize the Radiation Dose for Pediatric CT Scanning. *Medicine (Baltimore)* 2015;94:e2146.
36. Jung CH, Lee MJ, Kang YM, Yang DH, Kang JW, Kim EH, Park DW, Park JY, Kim HK, Lee WJ. 2013 ACC/AHA versus 2004 NECP ATP III Guidelines in the Assignment of Statin Treatment in a Korean Population with Subclinical Coronary Atherosclerosis. *PLoS One* 2015;10:e0137478.
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38. Kim YJ, Yong HS, Kim SM, Kim JA, Yang DH, Hong YJ, Korean Society of R, Korean Society of C. Korean guidelines for the appropriate use of cardiac CT. *Korean J Radiol* 2015;16:251-85.
39. Park GM, Lee JH, Lee SW, Yun SC, Kim YH, Cho YR, Gil EH, Kim TS, Kim CJ, Cho JS, Park MW, Her SH, Yang DH, Kang JW, Lim TH, Koh EH, Lee WJ, Kim MS, Lee KU, Kim HK, Choe J, Park JY. Comparison of Coronary Computed Tomographic Angiographic Findings in Asymptomatic Subjects With Versus Without Diabetes Mellitus. *Am J Cardiol* 2015;116:372-8.

40. Yang DH, Kang JW, Kim N, Song JK, Lee JW, Lim TH. Myocardial 3-Dimensional Printing for Septal Myectomy Guidance in a Patient With Obstructive Hypertrophic Cardiomyopathy. *Circulation* 2015;132:300-1.
41. Yang DH, Kim YH, Roh JH, Kang JW, Han D, Jung J, Kim N, Lee JB, Ahn JM, Lee JY, Park DW, Kang SJ, Lee SW, Lee CW, Park SW, Park SJ, Lim TH. Stress Myocardial Perfusion CT in Patients Suspected of Having Coronary Artery Disease: Visual and Quantitative Analysis-Validation by Using Fractional Flow Reserve. *Radiology* 2015;276:715-23.
42. Yoon SH, Ohno Y, Araki M, Barbanti M, Lin MS, Ahn JM, Yang DH, Kim YH, Imme S, Gulino S, Tamburino CI, Sgroi C, Park DW, Kang SJ, Lee SW, Lee CW, Park SW, Muramatsu T, Kao HL, Tamburino C, Park SJ. Comparison of aortic root anatomy and calcification distribution between Asian and Caucasian patients who underwent transcatheter aortic valve implantation. *Am J Cardiol* 2015;116:1566-73.

2016

43. Cho YK, Jung CH, Kang YM, Hwang JY, Kim EH, Yang DH, Kang JW, Park JY, Kim HK, Lee WJ. 2013 ACC/AHA Cholesterol Guideline Versus 2004 NCEP ATP III Guideline in the Prediction of Coronary Artery Calcification Progression in a Korean Population. *J Am Heart Assoc* 2016;5.
44. Chung MS, Yang DH, Kim YH, Roh JH, Song J, Kang JW, Ahn JM, Park DW, Kang SJ, Lee SW, Lee CW, Park SW, Park SJ, Lim TH. Stent fracture and longitudinal compression detected on coronary CT angiography in the first- and new-generation drug-eluting stents. *Int J Cardiovasc Imaging* 2016;32:637-46.
45. Eom HJ, Yang DH, Kim YH, Roh JH, Kweon J, Kang SJ, Kim N, Kang JW, Lim TH. Coronary bifurcation stent morphology in dual-source CT: validation with micro-CT. *Int J Cardiovasc Imaging* 2016;32:1659-1665.
46. Ha H, Hwang D, Kim GB, Kweon J, Lee SJ, Baek J, Kim YH, Kim N, Yang DH. Estimation of turbulent kinetic energy using 4D phase-contrast MRI: Effect of scan parameters and target vessel size. *Magn Reson Imaging* 2016;34:715-723.
47. Ha H, Hwang D, Kim GB, Kweon J, Lee SJ, Baek J, Kim YH, Kim N, Yang DH. Reply to letter by Dyverfeldt and Ebbers regarding the article "Estimation of turbulent kinetic energy using 4D phase-contrast MRI: Effect of scan parameters and target vessel size". *Magn Reson Imaging* 2016;34:1338-1340.
48. Ha H, Kim GB, Kweon J, Huh HK, Lee SJ, Koo HJ, Kang JW, Lim TH, Kim DH, Kim YH, Kim N, Yang DH. Turbulent Kinetic Energy Measurement Using Phase Contrast MRI for Estimating the Post-Stenotic Pressure Drop: In Vitro Validation and Clinical Application. *PLoS One* 2016;11:e0151540.
49. Ha H, Kim GB, Kweon J, Kim YH, Kim N, Yang DH, Lee SJ. Multi-VENC

- acquisition of four-dimensional phase-contrast MRI to improve precision of velocity field measurement. *Magn Reson Med* 2016;75:1909-19.
50. Ha H, Kim GB, Kweon J, Lee SJ, Kim YH, Kim N, **Yang DH**. The influence of the aortic valve angle on the hemodynamic features of the thoracic aorta. *Sci Rep* 2016;6:32316.
51. Ha H, Kim GB, Kweon J, Lee SJ, Kim YH, Lee DH, **Yang DH**, Kim N. Hemodynamic Measurement Using Four-Dimensional Phase-Contrast MRI: Quantification of Hemodynamic Parameters and Clinical Applications. *Korean J Radiol* 2016;17:445-62.
52. Jung J, Kim YH, Kim N, **Yang DH**. Patient-specific 17-segment myocardial modeling on a bull's-eye map. *J Appl Clin Med Phys* 2016;17:1-13.
53. Kang JW, Do KH, Han K, Chae EJ, **Yang DH**, Lee CW. Survey of Thoracic CT Protocols and Technical Parameters in Korean Hospitals: Changes before and after Establishment of Thoracic CT Guideline by Korean Society of Thoracic Radiology in 2008. *J Korean Med Sci* 2016;31 Suppl 1:S32-7.
54. Kang SH, Park GM, Lee SW, Yun SC, Kim YH, Cho YR, Park HW, Suh J, **Yang DH**, Kang JW, Lim TH, Jung CH, Koh EH, Lee WJ, Kim MS, Lee KU, Park JY. Long-Term Prognostic Value of Coronary CT Angiography in Asymptomatic Type 2 Diabetes Mellitus. *JACC Cardiovasc Imaging* 2016;9:1292-1300.
55. Kang SJ, Kweon J, **Yang DH**, Lee JG, Jung J, Kim N, Mintz GS, Kang JW, Lim TH, Park SW, Kim YH. Mathematically Derived Criteria for Detecting Functionally Significant Stenoses Using Coronary Computed Tomographic Angiography-Based Myocardial Segmentation and Intravascular Ultrasound-Measured Minimal Lumen Area. *Am J Cardiol* 2016;118:170-6.
56. Kang SJ, **Yang DH**, Kweon J, Kim YH, Lee JG, Jung J, Kim N, Mintz GS, Kang JW, Lim TH, Park SW. Better Diagnosis of Functionally Significant Intermediate Sized Narrowings Using Intravascular Ultrasound-Minimal Lumen Area and Coronary Computed Tomographic Angiography-Based Myocardial Segmentation. *Am J Cardiol* 2016;117:1282-8.
57. Kim GB, Ha H, Kweon J, Lee SJ, Kim YH, **Yang DH**, Kim N. Post-stenotic plug-like jet with a vortex ring demonstrated by 4D flow MRI. *Magn Reson Imaging* 2016;34:371-5.
58. Kim GB, Lee S, Kim H, **Yang DH**, Kim YH, Kyung YS, Kim CS, Choi SH, Kim BJ, Ha H, Kwon SU, Kim N. Three-Dimensional Printing: Basic Principles and Applications in Medicine and Radiology. *Korean J Radiol* 2016;17:182-97.
59. Kim GH, **Yang DH**, Kang JW, Kim DH, Jung SH, Lim TH. Subvalvular pannus and thrombosis in a mitral valve prosthesis. *J Cardiovasc Comput Tomogr* 2016;10:191-2.
60. Koo HJ, **Yang DH**, Kim YH, Kang JW, Kang SJ, Kweon J, Kim HJ, Lim TH. CT-based myocardial ischemia evaluation: quantitative angiography, transluminal attenuation gradient, myocardial perfusion, and CT-derived

- fractional flow reserve. Int J Cardiovasc Imaging 2016;32 Suppl 1:1-19.
61. Kweon J, Yang DH, Kim GB, Kim N, Paek M, Stalder AF, Greiser A, Kim YH. Four-dimensional flow MRI for evaluation of post-stenotic turbulent flow in a phantom: comparison with flowmeter and computational fluid dynamics. Eur Radiol 2016;26:3588-97.
62. Park GM, Cho YR, Lee SW, Yun SC, Gil EH, Kim DW, Kim TS, Kim CJ, Cho JS, Park MW, Her SH, Kim YH, Yang DH, Kang JW, Lim TH, Jung CH, Koh EH, Lee WJ, Kim MS, Lee KU, Kim HK, Choe J, Park JY. Family history of diabetes and the risk of subclinical atherosclerosis. Diabetes Metab 2016;42:170-7.
63. Yang DH, Kang SJ, Kim YH, Kang JW, Ahn JM, Park DW, Lee SW, Lee CW, Park SW, Park SJ, Lim TH. Recanalization of Organized Thrombi Demonstrated by Coronary CT Angiography Compared With OCT. JACC Cardiovasc Imaging 2016;9:887-890.

2017

64. Chung MS, Yang DH, Kim YH, Kang SJ, Jung J, Kim N, Heo SH, Baek S, Seo JB, Choi BW, Kang JW, Lim TH. Myocardial segmentation based on coronary anatomy using coronary computed tomography angiography: Development and validation in a pig model. Eur Radiol 2017;27:4044-4053.
65. Group APGW, Beck KS, Kim JA, Choe YH, Hian SK, Hoe J, Hong YJ, Kim SM, Kim TH, Kim YJ, Kim YH, Kurabayashi S, Lee J, Leong L, Lim TH, Lu B, Park JH, Sakuma H, Yang DH, Yaw TS, Wan YL, Zhang Z, Zhao S, Yong HS. 2017 Multimodality Appropriate Use Criteria for Noninvasive Cardiac Imaging: Expert Consensus of the Asian Society of Cardiovascular Imaging. Korean J Radiol 2017;18:871-880.
66. Ha H, Koo HJ, Lee JG, Kim GB, Kweon J, Lee SJ, Kang JW, Lim TH, Kim DH, Song JM, Kang DH, Song JK, Kim YH, Kim N, Yang DH. Association between flow skewness and aortic dilatation in patients with aortic stenosis. Int J Cardiovasc Imaging 2017;33:1969-1978.
67. Kang SJ, Yang DH, Koo HJ, Yun SC, Lee JG, Kang JW, Lim TH, Mintz GS, Park SW, Kim YH. Intravascular ultrasound-derived morphological predictors of myocardial ischemia assessed by stress myocardial perfusion computed tomography. Catheter Cardiovasc Interv 2017;89:E207-E216.
68. Park GM, Cho YR, Lee SW, Yun SC, Won KB, Ann SH, Kim YG, Kim SJ, Roh JH, Kim YH, Yang DH, Kang JW, Lim TH, Jung CH, Koh EH, Lee WJ, Kim MS, Lee KU, Park JY, Kim HK, Choe J, Lee SG. Prediabetes is not a risk factor for subclinical coronary atherosclerosis. Int J Cardiol 2017;243:479-484.
69. Park J, Kim HS, Hwang HJ, Yang DH, Koo HJ, Kang JW, Kim YH. Geographic and demographic variabilities of quantitative parameters in stress myocardial computed tomography perfusion. Korean J Intern Med 2017;32:847-854.

70. Yang DH, Kim YH. CT myocardial perfusion imaging: current status and future perspectives. *Int J Cardiovasc Imaging* 2017;33:1009-1020.
71. Yang DH, Kim YH, Roh JH, Kang JW, Ahn JM, Kweon J, Lee JB, Choi SH, Shin ES, Park DW, Kang SJ, Lee SW, Lee CW, Park SW, Park SJ, Lim TH. Diagnostic performance of on-site CT-derived fractional flow reserve versus CT perfusion. *Eur Heart J Cardiovasc Imaging* 2017;18:432-440.
72. Yoon SH, Kim YH, Yang DH, Roh JH, Lee EY, Lee PH, Sugiyama D, Chang M, Ahn JM, Choi WJ, Kang JW, Lim TH, Kim JB, Jung SH, Chung CH, Choo SJ, Lee JW, Kang SJ, Park DW, Lee SW, Lee CW, Park SW, Park SJ. Risk of New Native-Vessel Occlusion After Coronary Artery Bypass Grafting. *Am J Cardiol* 2017;119:7-13.
73. Yang DH, Kim DH, Handschumacher MD, Levine RA, Kim JB, Sun BJ, Jang JY, Kim N, Baek S, Kang JW, Song JM, Kang DH, Lim TH, Song JK. In vivo assessment of aortic root geometry in normal controls using 3D analysis of computed tomography. *Eur Heart J Cardiovasc Imaging* 2017;18:780-786.

2018

74. Koo HJ, Yang DH, Kang JW, Lee JY, Kim DH, Song JM, Kang DH, Song JK, Kim JB, Jung SH, Choo SJ, Chung CH, Lee JW, Lim TH. Demonstration of infective endocarditis by cardiac CT and transoesophageal echocardiography: comparison with intra-operative findings. *Eur Heart J Cardiovasc Imaging* 2018;19:199-207.
75. Yang DH, Kang SJ, Koo HJ, Chang M, Kang JW, Lim TH, Baek S, Han S, Lee PH, Roh JH, Ahn JM, Park DW, Lee SW, Lee CW, Park SW, Park SJ, Mintz GS, Kim YH. Coronary CT angiography characteristics of OCT-defined thin-cap fibroatheroma: a section-to-section comparison study. *Eur Radiol* 2018;28:833-843.
76. Kweon J, Kang SJ, Kim YH, Lee JG, Han S, Ha H, Yang DH, Kang JW, Lim TH, Kwon O, Ahn JM, Lee PH, Park DW, Lee SW, Lee CW, Park SW, Park SJ. Impact of coronary lumen reconstruction on the estimation of endothelial shear stress: in vivo comparison of three-dimensional quantitative coronary angiography and three-dimensional fusion combining optical coherent tomography. *Eur Heart J Cardiovasc Imaging* 2018;19:1134-1141
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78. Lee W, Kim JB, Yang DH, Kim C, Kim J, Ju MH, Kim HJ, Kang JW, Jung SH, Kim YH, Choo SJ, Lee CW, Chung CH, Lee JW, Lim TH. Comparative effectiveness of coronary screening in heart valve surgery: Computed tomography versus conventional coronary angiography. *J Thorac Cardiovasc*

- Surg 2018;155:1423-1431 e3.
79. Song Y, **Yang DH**, B OH, Cho SJ, Kang JW, Kim YH, Kim JB, Kim DH, Song JM, Kang DH, Song JK, Lim TH. Geometric predictors of left ventricular outflow tract obstruction in patients with hypertrophic cardiomyopathy: a 3D computed tomography analysis. Eur Heart J Cardiovasc Imaging 2018;19:1149-1156.
80. Koo HJ, Lee JY, Kim GH, Kang JW, Kim YH, Kim DH, Song JM, Kang DH, Song JK, Lim TH, **Yang DH**. Paravalvular leakage in patients with prosthetic heart valves: cardiac computed tomography findings and clinical features. Eur Heart J Cardiovasc Imaging 2018; 19:1419-1427
81. Koo HJ, Ha H, Kang JW, Kim JA, Song JK, Kim HJ, Lim TH and **Yang DH**. Impact of pannus formation on hemodynamic dysfunction of prosthetic aortic valve: pannus extent and its relationship to prosthetic valve motion and degree of stenosis. Clin Res Cardiol. 2018;107:554-564.
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84. Jang JY, Kang JW, **Yang DH**, Lee S, Sun BJ, Kim DH, Song JM, Kang DH and Song JK. Impact of a Geometric Correction for Proximal Flow Constraint on the Assessment of Mitral Regurgitation Severity Using the Proximal Flow Convergence Method. J Cardiovasc Ultrasound. 2018;26:33-39.
85. Ha H, Koo HJ, Huh HK, Kim GB, Kweon J, Kim N, Kim YH, Kang JW, Lim TH, Song JK, Lee SJ and **Yang DH**. Effect of pannus formation on the prosthetic heart valve: In vitro demonstration using particle image velocimetry. PLoS One. 2018;13:e0199792.
86. Cho YK, Kang YM, Yoo JH, Lee J, Lee SE, **Yang DH**, Kang JW, Park JY, Jung CH, Kim HK and Lee WJ. The impact of non-alcoholic fatty liver disease and metabolic syndrome on the progression of coronary artery calcification. Sci Rep. 2018;8:12004.
87. **Yang DH**, Park SH, Lee K, Kim T, Kim JB, Yun TJ, Kim GB, and Kim N. Application of three-dimensional printing in cardiovascular surgery: a case-based review. Cardiovascular Imaging Asia 2018;2(4):166-175.
88. Hae H, Kang SJ, Kim WJ, Choi SY, Lee JG, Bae Y, Cho H, **Yang DH**, Kang JW, Lim TH, Lee CH, Kang DY, Lee PH, Ahn JM, Park DW, Lee SW, Kim YH, Lee CW, Park SW, Park SJ. Machine learning assessment of myocardial ischemia using angiography: Development and retrospective validation. PLoS

Med 2018;15:e1002693.

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2-2. DOMESTIC JOURNALS

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2. **Yang DH**, Goo HW. Pediatric 16-slice CT protocols: radiation dose and image quality. *J Korean Radiol Soc* 2008;59:333-347.
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5. Cho SJ, **Yang DH**, Kang JW, Lim TH. Left Ventricular Noncompaction in Adults: Imaging and Clinical Findings in 63 Patients. *J Korean Soc Radiol* 2018;78:170-178.

2-3. PUBLISHED BOOK CHAPTERS

1. Yang D.H., Lim TH. (2015) Non-aortic Valvular Heart Disease. In: Lim TH. (eds) Practical Textbook of Cardiac CT and MRI. Springer, Berlin, Heidelberg
2. Hwang S.H., Yang D.H. (2015) Cardiac Imaging to Guide Electrophysiologic Intervention. In: Lim TH. (eds) Practical Textbook of Cardiac CT and MRI. Springer, Berlin, Heidelberg
3. Yang D.H., Choi B.W. (2015) Imaging of Coronary Revascularization: Stent and CABG. In: Lim TH. (eds) Practical Textbook of Cardiac CT and MRI. Springer, Berlin, Heidelberg

3. PROFESSIONAL ACTIVITIES

3-1 EDITORIAL BOARDS

1. Korean Journal of Radiology (2018 ~)

3-2 REVIEWERS

1. Korean Journal of Radiology
2. Journal of Korean Society of Radiology
3. Cardiovascular Imaging in Asia
4. International Journal of Cardiovascular Imaging
5. International Journal of Cardiology
6. Journal of Cardiovascular Magnetic Resonance
7. JACC Cardiovascular Imaging

4. GRANT AND RESEARCH AWARD

4-1. NATIONAL RESEARCH FUND

1. Development of software for geometric analysis and classification of cardiac ventricles: validation using a cardiac phantom and clinical imaging (PI: Dong Hyun Yang). National Research Foundation of Korea (NRF-2013R1A1A1058711; 2013 - 2016).
2. Development of software for geometric analysis and classification of cardiac ventricles: validation using a cardiac phantom and clinical imaging (PI: Dong Hyun Yang). National Research Foundation of Korea (NRF-2016R1A1A1A05921207; 2017 - 2019)
3. Development and Clinical Application of Automated Quantitative Analysis Software for Myocardial Perfusion Computed Tomography (PI: Young-Hak Kim, Co-PI: Dong Hyun Yang). Korea Healthcare Technology Research and Development Project (HI12C0630)

4-2. PROSPECTIVE REGISTRY OR TRIAL

1. Prospective Myocardial Perfusion CT Registry (NCT 01696006 at ClinicalTrials.gov) (PI: Young-Hak Kim, Co-PI: Dong Hyun Yang)
2. The Prospective Evaluation of Myocardial Perfusion Computed Tomography Trial (PERFUSE: NCT 02208388 at ClinicalTrials.gov) (PI: Young-Hak Kim, CT Core-lab director: Dong Hyun Yang)

5. A PATENT APPLICATION

1. METHOD OF CLASSIFYING AN ARTIFACT AND A DISEASED AREA IN A MEDICAL IMAGE (Registration number: 10-1611488, Registration date: 2016-04-05)
2. CFD MODELING AND ANALYSIS METHOD BASED ON MATERIAL PROPERTIES(Registration number: 10-1530352, Registration date: 2015-06-15)
3. METHOD OF ANALYZING BLOOD FLOW (Registration number:10-1513232, Registration date: 2015-04-13)
4. METHOD FOR MEASURING DIAMETER OF VESSEL (Registration number:10-1511300, Registration date: 2015-04-06)
5. INTEGRATED ANALYSIS METHOD OF MATCHING MYOCARDIAL AND CARDIOVASCULAR ANATOMY INFORMATIONS (Registration number: 10-1479577, Registration date:2014-12-30)

GCP & 연구윤리관련 교육 (최근 2년)

프로그램명	주최	장소	기간
국내임상시험관리규정 KGCP포함	질병관리본부	Internet	2018.12.17 ~ 2019.12.31
국내임상시험관리규정 KGCP포함	질병관리본부	Internet	2017.12.15~2018.12.31