### Daniel Kim, PhD

Business Address: 737 N. Michigan Avenue Suite 1600, Chicago, IL 60611

Business Phone: 312.926.1733 Email: daniel.kim3@northwestern.edu

### **EDUCATION**

(Include degree, award date, Institution and discipline)

BS, 08/96, Case Western Reserve University, Biomedical Engineering

MS, 05/96, University of Virginia, Biomedical Engineering PhD, 01/03, University of Virginia, Biomedical Engineering

### **TRAINING**

(Include degree, award date, Institution and discipline) Post-Doc, 03/06, New York University, Cardiovascular MRI

### LICENSURE / CERTIFICATION

### **ACADEMIC APPOINTMENTS**

ACADEMIC ALL OIL	
1996-1998	Research Assistant, Biomedical Engineering, University of Virginia, Charlottesville, VA
1997-1998	Teaching Assistant, Biomedical Engineering, University of Virginia, Charlottesville, VA
1998-1999	Associate Staff, The Johns Hopkins University Applied Physics Laboratory, Laurel, MD
1999-2002	Research Assistant, Biomedical Engineering, University of Virginia, Charlottesville, VA
2003-03/2006	Post-doctoral Fellow, Radiology, New York University, New York, NY
04/2006-07/2011	Assistant Professor, Radiology, New York University, New York, NY
01/2009-07/2011	Director, Pulse Sequence & MR Physics Core, Radiology, NYU, New York, NY
08/2011-06/2015	Associate Professor, Radiology, University of Utah, Salt Lake City, Utah
07/2015-12/2015	Tenured, Associate Professor, Radiology, University of Utah, Salt Lake City, Utah
01/2016-06/2018	Adjunct Associate Professor, Radiology, University of Utah, Salt Lake City, Utah
09/2013-06/2018	Adjunct Associate Professor, Bioengineering, University of Utah, Salt Lake City, Utah
01/2016-08/2018	Tenured, Associate Professor, Radiology, Northwestern University, Chicago, Illinois
06/2017-	Director, MR Physics & Pulse Sequence Development, Radiology, Northwestern
	University, Chicago, Illinois
09/2018-	Tenured, Professor, Radiology, Northwestern University, Chicago, Illinois
07/2019-	Director, Center for Translational Imaging Cardiovascular Imaging, Northwestern
	University, Chicago, Illinois

#### **HOSPITAL APPOINTMENTS**

### **OTHER EMPLOYMENT** (optional)

### **HONORS AND AWARDS**

- A. Elected Society Memberships
- B. International/National/Regional
- C. University

1996 Magna Cum Laude, Case Western Reserve University, Cleveland, OH

2002 The Kerrie Exely Hinckley Memorial Award, University of Virginia Medical Imaging Program, Charlottesville, VA

2018 Distinguished Investigator Award, The Academy for Radiology & Biomedical Imaging Research

### **INSTITUTIONAL SERVICE** (Committees, Councils, Task Forces)

A. University

#### 2014 - 2015 Committee Member, Radiation Safety Committee, Human Use Subcommittee (HUS)

B. School

2016-MSTP Admission committee

2019-MSTP (Ramirez de Arellano) college mentor

## C. Department

2012 2012 2013	Instructor, Siemens IDEA pulse sequence programming course, Radiology, University of Utah North America Siemens IDEA Users Group Meeting, Radiology, University of Utah Organizer & Co-Chair, UCAIR Annual Symposium, Radiology, University of Utah
2014-2015	Radiology Resident Admission Committee, University of Utah
2016-	Judge for Radiology Research Day for Residents
2016-	Lecturer, MRI Physics to Residents, Radiology
2017-	Co-leader, NIH Grant Mock Study Section, Radiology
2017-	Research Oversight Committee, Radiology
2019-	Steering committee member, T32 training grant, Biomedical Engineering, Northwestern
	University
2020-	APT committee member, Radiology, Northwestern University

### D. Hospital

### **COMMUNITY / PUBLIC SERVICE**

2005 - 2009 Board Member, Joy Christian Fellowship, Tenafly, New Jersey

### PARTICIPATION IN PROFESSIONAL SOCIETIES AND EXTRAMURAL ORGANIZATIONS

A. Professional Society Memberships

2001-Member, International Society for Magnetic Resonance in Medicine

2009-Member, Society for Cardiovascular Magnetic Resonance

Member, American Heart Association 2012-

2017-Member, Radiological Society of North America

### B. Leadership and Service (leadership positions held, committee service, etc.)

2015-ISMRM co-moderator: New Insights & Innovations in Cardiovascular MRI ISMRM co-moderator: Sunrise Educational Course: Fast Cardiac Imaging 2015-

SCMR Program Committee Member 2020-2020-2021 SCMR/ISMRM workshop co-organizer

2020 ISMRM co-moderator: Cardiovascular MRI: The Heart Live Q&A Session: Cardiovascular MRI:

The Heart

# EDITORIAL AND MANLISCRIDT REVIEW DESDONSIDII ITIES

EDITORIAL A	AND MANUSCRIPT REVIEW RESPONSIBILITIES
2006-	Ad hoc Reviewer, Magnetic Resonance in Medicine
2006-	Ad hoc Reviewer, NMR in Biomedicine
2006-	Ad hoc Reviewer, Journal of Magnetic Resonance Imaging
2009-	Ad hoc Reviewer, American Journal of Cardiology
2013-	Ad hoc Reviewer, JACC: Cardiovascular Imaging
2014-	Ad hoc Reviewer, IEEE Transactions on Medical Imaging
2014-	Editorial Advisory Board, NMR in Biomedicine
2015-	Ad hoc Reviewer, Circulation: Arrhythmia and Electrophysiology
2016-	Ad hoc Reviewer, PLOS ONE
2016-	Reviewer, SMRA (Society for Magnetic Resonance Angiography)
2008-	Reviewer, ISMRM (International Society of Magnetic Resonance in Medicine)
2018-	Ad hoc Reviewer, Journal of Cardiovascular Magnetic Resonance
2019-	Editorial Advisory Board, Journal of Computer Assisted Tomography
2020-	Reviewer, SCMR (Society for Cardiovascular Magnetic Resonance)

### **GRANT REVIEW RESPONSIBILITIES**

2009	Ad hoc mail Reviewer, NIH, Challenge Grants Panel
2012	Ad hoc mail Reviewer, NIH, Clinical Pediatric and Fetal Applications in SBIB (ZRG1 SBIB-V;
	October)
2013	Ad hoc mail Reviewer, NIH, Clinical Pediatric and Fetal Applications in SBIB (ZRG1 SBIB-V;
	October)
2013	Ad hoc Reviewer, NIH, Medical Imaging (MEDI; February)
2014	Ad hoc Reviewer, NIH, Medical Imaging (MEDI; February)
2014	Ad hoc Reviewer, NIH, Biomedical Imaging Technology (BMIT-B; June)
2015	Ad hoc Reviewer, NIH, Member Conflict: Medical Imaging Investigators (ZRG1 SBIB-Z 03;
	March)
2015	Ad hoc Reviewer, CDMRP, PRMRP, Congenital Heart Disease panel (July)
2015	Ad hoc Reviewer, NIH, Clinical and Integrative Cardiovascular Sciences (CISS; October)
2016	Ad hoc Reviewer, NIH, Clinical and Integrative Cardiovascular Sciences (CISS; June)
2016	Ad hoc Reviewer, NIH, Clinical Pediatric and Fetal Applications in SBIB [ZRG1 SBIB-H (82);
	October]
2017	Ad hoc Reviewer, NIH, Biomedical Imaging Technology (BMIT-B; February & June & Sept)
2017	Ad hoc Reviewer, AHA, Radiology and Imaging – Clinical (April)
2017	Ad hoc Reviewer, CDMRP, PRMRP Discovery Award, Heart Disease panel (Sept)
2018	Standing Member, NIH, Emerging Imaging Technology and Applications (EITA; July 2018-June
	2022)
2019	Chair Person, NIH, NIH, Bioengineering Research Partnerships [ZRG1 SBIB-H (55)]
2020	Ad hoc Reviewer, AHA, Radiology and Imaging - Career Development Award Clinical Sciences
	(January)

#### **GRANT AWARDS AND CLINICAL TRIALS**

A. Current (in chronological order)

Agency: NIH/NHLBI ID#: R01HL116895

Title: MRI of Diffuse Left Ventricular Fibrosis in Atrial Fibrillation

Principal Investigator: Daniel Kim

Role on project: PI Percent effort: 25%

Direct costs per year: \$250,000

Total costs for project period: \$1,862,500 Project period: 02/01/14-02/28/20 (2<sup>nd</sup> NCE)

Agency: NIH/NHLBI ID#: R01HL138578

Title: Rapid Real-Time Cardiovascular MRI for Detecting Coronary Artery Disease

Principal Investigators: Daniel Kim, Daniel Lee

Role on project: co-PI Percent effort: 15%

Direct costs per year: \$255,944

Total costs for project period: \$1,136,869 Project period: 09/01/17-08/31/21 (NCE)

Agency: NIH/NIA ID#: R21AG055954

Title: MRI of Left Atrial Hemodynamic Disorders in Atrial Fibrillation

Principal Investigators: Daniel Kim, Michael Markl

Role on project: co-PI Percent effort: 10%

Direct costs per year: \$125,000

Total costs for project period: \$415,698 Project period: 09/01/17-05/31/21 (2<sup>nd</sup> NCE)

Agency: NIH/NIA

ID#: R21AG055954-02S1

Title: Administrative Supplement to MRI of Left Atrial Hemodynamic Disorders in Atrial Fibrillation

Principal Investigators: Daniel Kim, Michael Markl

Role on project: co-PI Percent effort: 2%

Direct costs per year: \$45,408

Total costs for project period: \$71,745 Project period: 09/15/18-05/31/21 (2<sup>nd</sup> NCE)

Agency: NIH/NIBIB ID#: R21EB024315

Title: Rapid Pediatric Cardiovascular MRI without Contrast Agent or Anesthesia

Principal Investigator: Daniel Kim

Role on project: PI Percent effort: 15%

Direct costs per year: \$156,349

Total costs for project period: \$428,417 Project period: 09/10/17-06/30/21 (2<sup>nd</sup> NCE)

Agency: NIH/NIBIB ID#: R21EB024315-02S1

Title: Administrative Supplement to Rapid Pediatric Cardiovascular MRI without Contrast Agent or Anesthesia

Principal Investigator: Daniel Kim

Role on project: PI Percent effort: 2%

Direct costs per year: \$94,295

Total costs for project period: \$138,320 Project period: 09/22/18-06/30/21 (2<sup>nd</sup> NCE)

Agency: NIH/NHLBI ID#: R01HL137920

Title: Pre-Procedural Evaluation of High-Risk Patients using Next-Generation Radial QISS

Principal Investigator: Robert Edelman

Role on project: subcontract PI

Percent effort: 5%

Direct costs per year: \$11,753

Total costs for project period: \$55,523

Project period: 12/15/17-11/30/21 (subcontract ended on 11/31/19)

Agency: NIH/NHLBI ID#: 2R01HL115828

Title: Functional Cardiovascular 4D MRI in Congenital Heart Disease

Principal Investigator: Michael Markl

Role on project: co-l Percent effort: 5%

Direct costs per year: \$518,322

Total costs for project period: \$3,635,989

Project period: 04/01/18-03/31/22

Agency: AHA

ID#: 14SFRN20480260

Title: Northwestern University Strategically Focused Atrial Fibrillation Research Network: Atrial myopathy in

atrial fibrillation

Principal Investigator: Rod Passman

Role on project: co-l Percent effort: 7.5%

Direct costs per year: \$255,772

Total costs for project period: \$1,053,790

Project period: 07/01/18-06/30/22

Agency: AHA

ID#: 19IPLOI34760317

Title: Wideband Cardiac MRI for Predicting Right Heart Failure after LVAD Implantation

Principal Investigator: Daniel Kim

Role on project: PI Percent effort: 7%

Direct costs per year: \$90,000

Total costs for project period: \$200,000 Project period: 07/01/19-06/30/21

Agency: NIH/NHLBI ID#: R01HL151079

Title: Real-time Wideband Cardiac MRI for Patients with a Cardiac Implantable Electronic Device

Principal Investigators: Daniel Kim, Daniel Lee

Role on project: co-PI Percent effort: 15%

Direct costs per year: \$435,837

Total costs for project period: \$2,483,629

Project period: 03/04/20-12/31/23

Agency: NIH/NHLBI ID#: R01HL151079S1

Title: Administrative Supplement to Real-time Wideband Cardiac MRI for Patients with a Cardiac Implantable

**Electronic Device** 

Principal Investigators: Daniel Kim, Daniel Lee

Role on project: co-PI Percent effort: 20%

Direct costs per year: \$430,827

Total costs for project period: \$680,708 Project period: 09/01/20-08/31/21

### B. Pending

Agency: NIH/NHLBI

ID#: R01 HL116895-06 (renewal)

Title: Precision MRI of Left Atrial Fibrosis for Patients with Atrial Fibrillation

Principal Investigators: Daniel Kim

Role on project: PI Percent effort: 35%

Direct costs per year: \$438,096

Total costs for project period: \$3,354,132

Project period: 03/01/21-02/28/26

Received 2% on July 2020; barring a government shutdown, it should be awarded in 2021

Agency: NIH/NIBIB ID#: R21 EB030806-01A Title: Next-Generation Cardiovascular MRI powered by Artificial Intelligence Principal Investigators: Daniel Kim, Aggelos Katsaggelos, Oliver Cossairt

Role on project: co-PI Percent effort: 8%

Direct costs per year: \$125,000

Total costs for project period: \$420,247 Project period: 04/01/21-03/31/23

Agency: NIH/NHLBI

ID#: R01HL138578-04 (renewal)

Title: Rapid Free-Breathing MRI of Subacute Myocardial and Coronary Endothelial Injuries Associated with

COVID-19

Principal Investigators: Daniel Kim, Daniel Lee

Role on project: co-PI Percent effort: 20%

Direct costs per year: \$499,608

Total costs for project period: \$2,622,53 Project period: 09/01/21-08/31/25 To be submitted on November 2020

### C. Past

Agency: American Heart Association

ID#: 14GRNT18350028

Title: Highly-accelerated non-gated cine MRI for assessment of cardiac function in A-Fib

Principal Investigator: Daniel Kim

Role on project: PI Percent effort: 10%

Direct costs per year: \$75,000

Total costs for project period: \$150,000 Project period: 01/01/14-12/31/16

Agency: American Heart Association

ID#: 0730143N

Title: Early detection of subclinical diabetic cardiomyopathy using displacement-encoded MRI

Principal Investigator: Daniel Kim

Role on project: PI Percent effort: 20%

Direct costs per year: \$65,000

Total costs for project period: \$260,000 Project period: 01/01/07-04/30/12

Agency: Radiological Society of North America

ID#: SD0605

Title: Comprehensive quantification of regional myocardial function using displacement-encoded MRI

Principal Investigator: Daniel Kim

Role on project: PI Percent effort: 10%

Direct costs per year: \$30,000

Total costs for project period: \$30,000 Project period: 07/01/06-06/30/07

Agency: NIH/NHLBI ID#: R01HL092439

Title: Non-contrast-enhanced peripheral MR angiography

Principal Investigator: Vivian S. Lee

Role on project: co-l Percent effort: 25%

Direct costs per year: \$431,963

Total costs for project period: \$2,436,610

Project period: 04/15/08-04/30/15

Agency: NIH/NIDDK ID#: R01DK063183

Title: MR angiography and renography for renovascular disease

Principal Investigator: Vivian S. Lee

Role on project: co-I Percent effort: 10%

Direct costs per year: \$274,908

Total costs for project period: \$3,715,271

Project period: 09/20/03-07/31/16

Agency: NIH/NIDDK ID#: R01DK088375

Title: Accurate measurement of renal function in cirrhosis

Principal Investigator: Vivian S. Lee

Role on project: co-l Percent effort: 5%

Direct costs per year: \$244,079

Total costs for project period: \$1,635,707

Project period: 06/01/10-10/31/16

Agency: NIH/NIDDK ID#: R01DK066251

Title: Magnetic Resonance Measurement of Heart and Liver

Principal Investigator: Gary M. Brittenham

Role on project: co-I (subcontract)

Percent effort: 10%

Direct costs per year: \$267,882

Total costs for project period: \$1,090,868

Project period: 09/15/03-06/30/07

Agency: NIH/NIDDK ID#: R01DK069373

Title: MRI Method for In Vivo Iron Quantification

Principal Investigator: Jens Jensen

Role on project: co-l Percent effort: 10%

Direct costs per year: \$168,980

Total costs for project period: \$530,716 Project period: 08/01/05-07/31/10

Agency: NIH/NIBIB ID#: R01EB000447

Title: Parallel Magnetic Resonance Imaging: new techniques and technologies

Principal Investigator: Daniel K. Sodickson

Role on project: co-l Percent effort: 10%

Direct costs per year: \$481,781

Total costs for project period: \$3,433,407

Project period: 04/15/02-02/28/14

Agency: NIH/NHLBI ID#: R01HL083309

Title: Quantitative Myocardial Perfusion Assessment with MRI

Principal Investigator: Leon Axel

Role on project: co-I Percent effort: 10%

Direct costs per year: \$391,158

Total costs for project period: \$1,490,396

Project period: 08/15/06-07/31/13

Guidance: For each grant/clinical trial, include your role and the direct costs you received for the award, as in the format below:

### **INVITED LECTURES**

A. International/National

- 2009 Advanced Cardiac Function Techniques, 17th Annual Meeting of ISMRM, Honolulu, HI
- 2010 Black-blood Sequences. In 13th Annual Meeting of SCMR, Phoenix, AZ
- 2011 <u>Plenary Lecture:</u> *T2 edema imaging can make a difference in patient management today.* In 14th Annual Meeting of SCMR, Nice, France
- 2013 Accelerated Function: Whole Heart & Real-Time. In 21st Annual Meeting of ISMRM, Salt Lake City, UT
- 2014 Accelerated CMR: Towards Comprehensive Clinical Cardiovascular Imaging. In 17th Annual Meeting of SCMR, SCMR/ISMRM Joint Workshop, New Orleans, LA
- 2015 Technical Foundations: Physics of Perfusion Imaging. In 23rd Annual Meeting of ISMRM, Toronto, Canada
- 2015 KT-Based Acceleration Methods. In 23rd Annual Meeting of ISMRM, Toronto, Canada
- 2016 Acceleration Strategies for CMR, In 28th Annual Meeting of SMRA, Chicago, IL
- 2017 Cardiac Devices: Safety Aspects & Challenges in Cardiac MR, In 25th Annual Meeting of ISMRM,
- 2020 Honolulu, HI

  Novel Approaches for Myocardial Tissue Characterization, In 23rd Annual Meeting of ISCMR, Orlando,
  FL
  - B. Regional
- 2009 Understanding k-space in MRI. SMRT Chapter of NY/NJ Regional Seminar, New York, NY
  - C. Local
- 2009 Best in Practice: Vascular Imaging. NYU Department of Radiology, New York, NY
- 2010 Best in Practice: MRI of Cardiac Viability. NYU Department of Radiology, New York, NY
- 2010 Peripheral and Central MRA: Clinical and Physics. Clinical State of the Art Body MRI, New York, NY
- 2011 Quantitative CMR assessment of cardiac remodeling and hemodynamic changes in atrial fibrillation.

  Margolis Foundation, UCAIR Imaging Symposium, Salt Lake City, UT
- 2013 Quantitative CMR assessment of cardiac remodeling and hemodynamic changes in atrial fibrillation.

  Margolis Foundation, UCAIR Imaging Symposium, Salt Lake City, UT
- 2014 MRI of LV Fibrosis to Predict Functional Response to LVAD. Margolis Foundation, UCAIR Imaging Symposium, Salt Lake City, UT
- 2016 High-Speed, Quantitative Cardiovascular MRI. CTI Seminar Series, Chicago, IL
- 2016 Basic CV MRI Physics for Physicians. CMR Northwestern, Chicago, IL
- 2016- Pulse Sequences for Perfusion. CMR Northwestern, Chicago, IL
- 2019 Real-time CMR for patients with a cardiac implantable electronic device. BME Departmental Seminar Series, Illinois Institute of Technology, Chicago, IL Rapid Real-time CMR for patients with a cardiac implantable electronic device. BME Fall
- 2019 Departmental Seminar Series, Ohio State University, Columbus, OH

### PUBLICATIONS AND SCHOLARLY WORK

Guidance: When reporting publications/scholarly work, list them in chronological order (earliest to most recent), list **all** authors in the order they appear on the publication, and put **your name in bold font**.

- A. Peer-reviewed Original Investigations
- 1. Beach JM, Schwenzer KJ, Srinivas S, **Kim D**, Tiedeman JS. Oximetry of retinal vessels by dual-wavelength imaging: calibration and influence of pigmentation. Journal of applied physiology. 1999; 86(2):748-58. PMID: 9931217
- 2. Farrell RA, Wharam JF, **Kim D**, McCally RL. Polarized light propagation in corneal lamellae. Journal of refractive surgery. 1999; 15(6):700-5. PMID: 10590013
- 3. **Kim D**, Bove CM, Kramer CM, Epstein FH. Importance of k-space trajectory in echo-planar myocardial tagging at rest and during dobutamine stress. Magnetic resonance in medicine. 2003; 50(4):813-20. PMID: 14523968
- 4. **Kim D**, Gilson WD, Kramer CM, Epstein FH. Myocardial tissue tracking with two-dimensional cine displacement-encoded MR imaging: development and initial evaluation. Radiology. 2004; 230(3):862-71. PMID: 14739307
- 5. **Kim D**, Epstein FH, Gilson WD, Axel L. Increasing the signal-to-noise ratio in DENSE MRI by combining displacement-encoded echoes. Magnetic resonance in medicine. 2004; 52(1):188-92. PMID: 15236385
- 6. Axel L, Montillo A, **Kim D**. Tagged magnetic resonance imaging of the heart: a survey. Medical image analysis. 2005; 9(4):376-93. PMID: 15878302
- 7. **Kim D**, Cernicanu A, Axel L. B(0) and B(1)-insensitive uniform T(1)-weighting for quantitative, first-pass myocardial perfusion magnetic resonance imaging. Magnetic resonance in medicine. 2005; 54(6):1423-9. PMID: 16254944
- 8. **Kim D**, Axel L. Multislice, dual-imaging sequence for increasing the dynamic range of the contrast-enhanced blood signal and CNR of myocardial enhancement at 3T. Journal of magnetic resonance imaging: JMRI. 2006; 23(1):81-6.

PMID: 16331593

- 9. **Kim D**, Lee VS, Srichai MB. Improved visualization of non-transmural scar using slice-selective inversion-recovery delayed contrast-enhanced MRI: a preliminary report. NMR in biomedicine. 2007; 20(2):121-7. PMID: 16998952
- 10. **Kim D**, Kellman P. Improved cine displacement-encoded MRI using balanced steady-state free precession and time-adaptive sensitivity encoding parallel imaging at 3 T. NMR in biomedicine. 2007; 20(6):591-601. PMID: 17211867
- 11. **Kim D**. Influence of the k-space trajectory on the dynamic T1-weighted signal in quantitative first-pass cardiac perfusion MRI at 3T. Magnetic resonance in medicine. 2008; 59(1):202-8. PMID: 17957778
- 12. **Kim D**, Gonen O, Oesingmann N, Axel L. Comparison of the effectiveness of saturation pulses in the heart at 3T. Magnetic resonance in medicine. 2008; 59(1):209-15. PMID: 18050347
- 13. Chen T, Babb J, Kellman P, Axel L, **Kim D**. Semiautomated segmentation of myocardial contours for fast strain analysis in cine displacement-encoded MRI. IEEE transactions on medical imaging. 2008; 27(8):1084-94. PMID:

18672426

- 14. Guo H, Au WY, Cheung JS, **Kim D**, Jensen JH, Khong PL, Chan Q, Chan KC, Tosti C, Tang H, Brown TR, Lam WW, Ha SY, Brittenham GM, Wu EX. Myocardial T2 quantitation in patients with iron overload at 3 Tesla. Journal of magnetic resonance imaging: JMRI. 2009; 30(2):394-400. PMID: 19629983
- 15. **Kim D**, Jensen JH, Wu EX, Sheth SS, Brittenham GM. Breathhold multiecho fast spin-echo pulse sequence for accurate R2 measurement in the heart and liver. Magnetic resonance in medicine. 2009; 62(2):300-6. PMID: 19526516
- 16. Feng L, Donnino R, Babb J, Axel L, **Kim D**. Numerical and in vivo validation of fast cine displacement-encoded with stimulated echoes (DENSE) MRI for quantification of regional cardiac function. Magnetic resonance in medicine.

2009; 62(3):682-90. PMID: 19585609

- 17. **Kim D**, Oesingmann N, McGorty K. Hybrid adiabatic-rectangular pulse train for effective saturation of magnetization within the whole heart at 3 T. Magnetic resonance in medicine. 2009; 62(6):1368-78. PMID: 19785021
- 18. Jensen JH, Tang H, Tosti CL, Swaminathan SV, Nunez A, Hultman K, Szulc KU, Wu EX, **Kim D**, Sheth S, Brown TR, Brittenham GM. Separate MRI quantification of dispersed (ferritin-like) and aggregated (hemosiderin-like) storage iron. Magnetic resonance in medicine. 2010; 63(5):1201-9. PMID: 20432291
- 19. Breton E, McGorty K, Wiggins GC, Axel L, **Kim D**. Image-guided radio-frequency gain calibration for high-field MRI. NMR in biomedicine. 2010; 23(4):368-74. PMID: 20014333
- 20. Chung S, **Kim D**, Breton E, Axel L. Rapid B1+ mapping using a preconditioning RF pulse with TurboFLASH readout. Magnetic resonance in medicine. 2010; 64(2):439-46. PMID: 20665788
- 21. Wu EX, **Kim D\***, Tosti CL, Tang H, Jensen JH, Cheung JS, Feng L, Au WY, Ha SY, Sheth SS, Brown TR, Brittenham GM. Magnetic resonance assessment of iron overload by separate measurement of tissue ferritin and hemosiderin iron. Annals of the New York Academy of Sciences. 2010; 1202:115-22. PMID: 20712781. \*equal first authorship
- 22. Otazo R, **Kim D**, Axel L, Sodickson DK. Combination of compressed sensing and parallel imaging for highly accelerated first-pass cardiac perfusion MRI. Magnetic resonance in medicine. 2010; 64(3):767-76. PMID: 20535813
- 23. Storey P, Atanasova IP, Lim RP, Xu J, **Kim D**, Chen Q, Lee VS. Tailoring the flow sensitivity of fast spinecho sequences for noncontrast peripheral MR angiography. Magnetic resonance in medicine. 2010; 64(4):1098-108. PMID: 20725934
- 24. Atanasova IP, **Kim D**, Lim RP, Storey P, Kim S, Guo H, Lee VS. Noncontrast MR angiography for comprehensive assessment of abdominopelvic arteries using quadruple inversion-recovery preconditioning and 3D balanced steady-state free precession imaging. Journal of magnetic resonance imaging: JMRI. 2011; 33(6):1430-9. PMID: 21591013
- 25. Cheung JS, Au WY, Ha SY, **Kim D**, Jensen JH, Zhou IY, Cheung MM, Wu Y, Guo H, Khong PL, Brown TR, Brittenham GM, Wu EX. Reduced transverse relaxation rate (RR2) for improved sensitivity in monitoring myocardial iron in thalassemia. Journal of magnetic resonance imaging: JMRI. 2011; 33(6):1510-6. PMID: 21591022
- 26. Feng L, Otazo R, Jung H, Jensen JH, Ye JC, Sodickson DK, **Kim D**. Accelerated cardiac T2 mapping using breath-hold multiecho fast spin-echo pulse sequence with k-t FOCUSS. Magnetic resonance in medicine. 2011; 65(6):1661-9.

PMID: 21360737

- 27. **Kim D**, Jensen JH, Wu EX, Feng L, Au WY, Cheung JS, Ha SY, Sheth SS, Brittenham GM. Rapid monitoring of iron-chelating therapy in thalassemia major by a new cardiovascular MR measure: the reduced transverse relaxation rate. NMR in biomedicine. 2011; 24(7):771-7. PMID: 21190261
- 28. Lattanzi R, Glaser C, Mikheev AV, Petchprapa C, Mossa DJ, Gyftopoulos S, Rusinek H, Recht M, **Kim D**. A B1-insensitive high resolution 2D T1 mapping pulse sequence for dGEMRIC of the HIP at 3 Tesla. Magnetic resonance in medicine. 2011; 66(2):348-55. PMID: 21688318
- 29. Breton E, **Kim D**, Chung S, Axel L. Quantitative contrast-enhanced first-pass cardiac perfusion MRI at 3 tesla with accurate arterial input function and myocardial wall enhancement. Journal of magnetic resonance imaging: JMRI. 2011;

34(3):676-84. PMID: 21761467

- 30. **Kim D**, Dyvorne HA, Otazo R, Feng L, Sodickson DK, Lee VS. Accelerated phase-contrast cine MRI using k-t SPARSE-SENSE. Magnetic resonance in medicine. 2012; 67(4):1054-64. PMID: 22083998
- 31. Xu J, McGorty KA, Lim RP, Bruno M, Babb JS, Srichai MB, **Kim D**, Sodickson DK. Single breathhold noncontrast thoracic MRA using highly accelerated parallel imaging with a 32-element coil array. Journal of magnetic resonance imaging: JMRI. 2012; 35(4):963-8. PMID: 22147589
- 32. Storey P, Lim RP, Chandarana H, Rosenkrantz AB, **Kim D**, Stoffel DR, Lee VS. MRI assessment of hepatic iron clearance rates after USPIO administration in healthy adults. Investigative radiology. 2012; 47(12):717-24. PMID: 23070094
- 33. Srichai MB, Lim RP, Lath N, Babb J, Axel L, **Kim D**. Diagnostic performance of dark-blood T2-weighted CMR for evaluation of acute myocardial injury. Investigative radiology. 2013; 48(1):24-31. PMID: 23192160
- 34. Atanasova IP, **Kim D**, Storey P, Rosenkrantz AB, Lim RP, Lee VS. Sagittal fresh blood imaging with interleaved acquisition of systolic and diastolic data for improved robustness to motion. Magnetic resonance in medicine. 2013; 69(2):321-8. PMID: 23300129
- 35. Harrison A, Adluru G, Damal K, Shaaban AM, Wilson B, **Kim D**, McGann C, Marrouche NF, DiBella EV. Rapid ungated myocardial perfusion cardiovascular magnetic resonance: preliminary diagnostic accuracy. Journal of cardiovascular magnetic resonance. 2013; 15:26. PMID: 23537093
- 36. Sammet CL, Swaminathan SV, Tang H, Sheth S, Jensen JH, Nunez A, Hultman K, **Kim D**, Wu EX, Brittenham GM, Brown TR. Measurement and correction of stimulated echo contamination in T2-based iron quantification. Magnetic resonance imaging. 2013; 31(5):664-8. PMID: 23260394
- 37. Xu J, **Kim D**, Otazo R, Srichai MB, Lim RP, Axel L, Mcgorty KA, Niendorf T, Sodickson DK. Towards a five-minute comprehensive cardiac MR examination using highly accelerated parallel imaging with a 32-element coil array: feasibility and initial comparative evaluation. Journal of magnetic resonance imaging: JMRI. 2013; 38(1):180-8. PMID: 23197471
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  - B. Invited Reviews and Commentaries
  - C. Books and Book Chapters
  - D. Peer-Reviewed Educational Materials
  - E. Case Reports, Letters, Editorials
  - F. Practice Guidelines, Standards, and Consensus Statements
  - G. Public Policy and Legislative Testimony
  - H. Patents
- 1. **Kim D**, Jensen JH, Brittenham GM (2013). System, method and computer-accessible medium for providing breath-hold multi-echo fast spin-echo pulse sequence for accurate R2 measurement. U.S. Patent No. 61/166,640. Washington, D.C.:U.S. Patent and Trademark Office.
- 2. **Kim D** (2013). System, method and computer-accessible medium for providing hybrid adiabatic-rectangular pulse train for effectively complete saturation of magnetization within an anatomical structure. U.S. Patent No. 61/166,393. Washington, D.C.:U.S. Patent and Trademark Office.
  - I. Database Deposition
  - J. Software
  - K. Abstracts (\*denotes presenting author)

    Guidance: Put an asterisk beside the presenting author. Make note of any abstracts that received honors or awards.

- a. Oral Abstract Presentations
- 1. \*Cernicanu, A, Axel, L, **Kim, D**. Self-calibrated rapid T<sub>1</sub> measurements for quantitative perfusion studies. In Proceedings of the 90<sup>th</sup> Annual Meeting at RSNA, Chicago, IL, 2003, Abstract No. 1431.
- 2. \*Kim, D, Gilson, WD, Kramer, CM, Epstein, FH. High-resolution 2D myocardial strain imaging with breath-hold cine DENSE. In Proceedings of the 11th Annual Meeting of ISMRM, Toronto, Canada, 2003, Program No. 1552.
- 3. \*Kim, D, Bove, C.M., Kramer, CM, Epstein, FH. Myocardial tagging during high-dose dobutamine stress using an optimized FGRE-EPI sequence. In Proceedings of the 11th Annual Meeting of ISMRM, Toronto, Canada, 2003, Program No. 373.
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- 5. \*Cernicanu, A, **Kim, D**, Pai, V., Manglik, T., Axel, L. Arterial input function theoretical calibration for quantitative first-pass perfusion studies. In Proceedings of the 13th Annual Meeting of ISMRM, Miami, FL, 2005, Program No. 512.
- \*Kim, D, Cernicanu, A, Axel, L. B0 and B1-insensitive saturation pulse for accurate T1 estimation for first-pass perfusion MRI. In Proceedings of the 13th Annual Meeting of ISMRM, Miami, FL, 2005, Program No. 520.
- 7. \*Kim, D, Srichai, MB, Lee, VS. Bright-blood delayed contrast-enhanced imaging for improving the CNR between endocardial scar and blood. In Proceedings of the 14th Annual Meeting of ISMRM, Seattle, WA, 2006, Program No. 82.
- 8. \*Kim, D. Importance of k-space trajectory for accurate quantification of AIF and high CNR of myocardial wall enhancement in first-pass myocardial perfusion MRI. In Proceedings of the 15th Annual Meeting of ISMRM, Berlin, Germany, 2007, Program No. 849.
- 9. \*Xu, J, Otazo, R. Zuehlsdorff, S, **Kim, D**, Bi X, Duan Q, Nielles-Vallespin S, Srichai MB, Niendorf T, Jerecic R, Stoeckel B, Wang Y, Feng L, McGorty K, Sodickson DK. Feasibility of five-minute comprehensive cardiac MR examination using highly accelerated parallel imaging with a 32-element coil array. In Proceedings of the 17th Annual Meeting of ISMRM, Honolulu, HI, 2009, Program No. 670.
- 10. \*Otazo, R. **Kim, D**, Sodickson, DK. Highly-accelerated first-pass cardiac perfusion MRI using compressed sensing and parallel imaging. In Proceedings of the 17th Annual Meeting of ISMRM, Honolulu, HI, 2009, Program No. 383.
- 11. \*Kim, D, Jensen, JH, Wu, EX, Sheth, SS, Brittenham, GM. Breath-hold FSE for accurate imaging of myocardial and hepatic R2. In Proceedings of the 17th Annual Meeting of ISMRM, Honolulu, HI, 2009, Program No. 203.
- 12. \*Otazo, R, **Kim, D**, Axel, L, Sodickson, DK. Highly-accelerated first-pass cardiac perfusion MRI using compressed sensing and parallel imaging. In Proceedings of the 13th Annual Meeting of SCMR, Phoenix, AZ, 2010, Poster No. O71.
- 13. \*Kim, D, Wu, EX, Jensen, JH, Au WY, Feng L, Cheung JS, Ha SY, Sheth SS, Brittenham GM. A breath-hold R<sub>2</sub> mapping pulse sequence detects a decrease in myocardial ferritin iron after one-week of iron-chelating therapy. In Proceedings of the 13th Annual Meeting of SCMR, Phoenix, AZ, 2010, Poster No. O69.
- 14. \*Otazo, R, Xu, J, **Kim, D**, Axel, L, Sodickson, DK. Combination of compressed sensing and parallel imaging for highly-accelerated 3D first-pass cardiac perfusion MRI. In Proceedings of the 18th Annual Meeting of ISMRM, Stockholm, Sweden, 2010, Program No. 344.
- 15. \*Feng, L, Otazo, R, Jensen, JH, Sodickson, DK, **Kim, D**. Accelerated breath-hold multi-echo FSE pulse sequence using compressed sensing and parallel imaging. In Proceedings of the 18th Annual Meeting of ISMRM, Stockholm, Sweden, 2010, Program No. 351.
- 16. \*Breton, E, **Kim, D**, Chung, S, Axel, L. Rapid cardiac T1 mapping with two heart beats. In Proceedings of the 14th Annual Meeting of SCMR, Nice, France, 2011, Poster No. O107.
- 17. \*Otazo, R, **Kim, D**, Axel, L, Sodickson, DK. Combination of compressed sensing and parallel imaging with respiratory motion correction for highy-accelerated cardiac perfusion MRI. In Proceedings of the 14th Annual Meeting of SCMR, Nice, France, 2011, Poster No. O98.
- 18. \*Xu, J, **Kim, D,** Otazo, R, Srichai, M, Lim, R, Mcgorty, K, Avery, R, Axel, L, Niendorf, T, Sodickson, DK. Initial comparative evaluation of a five-minute comprehensive cardiac MR examination using highly accelerated parallel imaging. In Proceedings of the 19th Annual Meeting of ISMRM, Montreal, Canada, 2011, Program No. 576.

- 19. \*Otazo, R, Storey, P, **Kim, D,** Sodickson, DK, Lee, VS. Highly-accelerated dynamic non-contrast MRA using a combination of compressed sensing and parallel imaging. In Proceedings of the 19th Annual Meeting of ISMRM, Montreal, Canada, 2011, Program No. 93.
- 20. \*Lattanzi, R, Glaser, C, Mikheev, AV, Petchprapa, C, Mossa, DJ, Gyftopoulos, S, Rusinek, H, Recht, M, **Kim, D.** A B1-insensitive high resolution 2D T1 mapping pulse sequence for radial dGEMRIC of the Hip at 3T. In Proceedings of the 19th Annual Meeting of ISMRM, Montreal, Canada, 2011, Program No. 504.
- 21. \*Kim, D, Dyvorne, HA, Otazo, R, Sodickson, DK, Lee, VS. Accelerated phase-contrast MRI using compressed sensing and parallel imaging. In Proceedings of the 19th Annual Meeting of ISMRM, Montreal, Canada, 2011, Program No. 731.
- 22. \*Atanasova I, Storey P, **Kim D**, Lim RP, Lee V. ECG-gated fast spin echo MRA with interleaved acquisition of systolic and diastolic data for improved robustness of motion. In Proceedings of the 20th Annual Meeting of ISMRM, Melbourne, Australia, 2012, Program No. 3903.
- 23. Fitts M, Breton E, Kholmovski EG, Dosdall DJ, Vijayakumar S, Hong KP, Ranjan R, Marrouche NF, Axel L, \*Kim D. Arrhythmia Insensitive Rapid Cardiac T1 Mapping Pulse Sequence. In Proceedings of the 16th Annual Meeting of SCMR, San Francisco, CA, 2013. Poster No. O112.
- 24. \*Velagapudi KN, Harrison A, Adluru G, Shaaban A, Wilson B, **Kim D**, Marrouche NF, McGann CJ, DiBella EVR. Rapid Ungated CMR Perfusion Imaging to Evaluate Coronary Artery Disease in Patients with Arrhythmia. In Proceedings of the 21st Annual Meeting of ISMRM, Salt Lake City, UT, 2013, Program No. 0319.
- 25. Ranjan R, Kholmovski EG, Jeong EK, Hong K, Blauer J, Wilson BD, McGann CJ, \*Kim D. Cardiac ECV is more robust than post-contrast cardiac T1 for evaluating temporal changes in LV fibrosis. In Proceedings of the 17th Annual Meeting of SCMR, New Orleans, LA, 2014, Poster No. O54.
- 26. \*Zhang J, Conlin C, Carlston K, **Kim D**, Morrell G, Morton K, Lee V. Optimizing dose and imaging parameters in MR renography for quantitative measurement of renal function. In Proceedings of the 23rd Annual Meeting of ISMRM, Toronto, Canada, 2015, Program No. 4020.
- 27. \*Conlin CC, Zhang JL, Rousset F, Vachet C, Zhao Y, **Kim D**, Morrell G, Morton KA, Gerig G, Lee VS. Image registration with the generalized Hough transform as part of a free toolkit is an efficient and robust technique for improving the reliability of paramter estimates obtained from free-breathing MR renography. In Proceedings of the 23rd Annual Meeting of ISMRM, Toronto, Canada, 2015, Program No. 0465.
- 28. \*Adluru G, Bieging E, Chen L, **Kim D**, Wilson BD, DiBella EV. Radial simultaneous multi slice imaging for rapid cardiac imaging. In Proceedings of the 19th Annual Meeting of SCMR, Los Angeles, CA, 2016, Poster No. O111.
- 29. \*Zhang JL, Hanrahan C, Conlin CC, Hart C, Layec G, Carlston K, **Kim D**, Mueller M, Lee VS. Arterial transit time (ATT) heterogeneity in calf muscle: how DCE studies reveal a critical challenge for arterial spin labeling (ASL) acquisition. In Proceedings of the 24th Annual Meeting of ISMRM, Singapore, 2016, Program No. 0650.
- 30. \*Zhang JL, Hanrahan C, Conlin CC, Hart C, Layec G, Carlston K, **Kim D**, Mueller M, Lee VS. Quantitative muscle perfusion with DCE-MRI shows distinct load-dependent exercise-stimulated muscle perfusion patterns. In Proceedings of the 24th Annual Meeting of ISMRM, Singapore, 2016, Program No. 0258.
- 31. \*Kim D, Lee DC, Wilcox JE, Passman R, Hong K, Pham DT, Knight B, Markl M, Collins J, Carr J. Wideband cardiovascular MRI for imaging patients with intracardiac device implantation. In Proceedings of the 103rd Annual Meeting at RSNA, Chicago, IL, 2016, Abstract No. 16018349.
- 32. \*Daming Shen, Hassan Haji-Valizadeh, Robert Edelman, Cynthia K. Rigsby, Daniel Kim. "Deep Convolutional Network Enables Inline Image Reconstruction of Accelerated, Single-shot Coronary QISS MRA in Patients with Congenital Heart Disease". In: Proceedings of the 104th Scientific Assembly and Annual Meeting of RSNA, Chicago, Illinois, USA, 2018;
- 33. \*Haji-Valizadeh H, Shen D, Vali A, **Kim D**. "Convolutional Neural Network for Rapid Reconstruction of Compressed Sensing Accelerated Non-Contrast Thoracic MRA". In Proceedings of the 22nd Annual Meeting at SCMR, Bellevue, Washington, USA, 2019.
- 34. \*Kim D, Naresh NK, Lee DC. "T2\* Decay and Noise are Major Sources of Error for Quantification of AIF in First-Pass Myocardial Perfusion MRI: A Theoretical Analysis". In Proceedings of the 22nd Annual Meeting at SCMR, Bellevue, Washington, USA, 2019.

- 35. \*Haji-Valizadeh H, Shen D, Schiffers F, Cossairt O, **Kim D**. "Rapid Reconstruction of Accelerated, Free-Breathing, Thoracic, Non-Contrast Magnetic Resonance Angiography using Convolutional Neural Network". In: Proceedings of the 27th Annual Meeting of ISMRM, Montreal, Quebec, Canada, 2019, program number 0664.
- 36. \*Daming Shen, Hassan Haji-Valizadeh, Sushobhan Ghosh, Dan Kim. Transfer Learning Produces Better Reconstruction of Highly-Accelerated, Single-shot LGE Images than Conventional Deep Learning with Limited Training Data. In: Proceedings of Annual Meeting of Society for Magnetic Resonance Angiography, Nantes, France, 2019.
- 37. \*Gunasekaran S, D Lee, B Knight, R Avery, H Hassan Haji-Valizadeh, P Greenland, R Passman, M Markl, D Kim. Self-Navigated, Free-Breathing 3D Left Atrial Late Gaolinium Enhancement MRI at 1.5 Tesla: A Preliminary Study for Evaluation of Image Quality and Quantification of Atrial Fibrosis in patients with Atrial Fibrillation. SMRA, Nantes, France, 2019.
- 38. \*Haji-Valizadeh H, Shen D, Robinson JD, Rigsby CK, **Kim D**. "Rapid Reconstruction of Highly-Accelerated Real-Time Phase Contrast MRI Using Deep Convolutional Network: A Feasibility Study in Patients with Congenital Heart Disease". In: Proceedings of the 105th Scientific Assembly and Annual Meeting of RSNA, Chicago, Illinois, USA, 2019.
- 39. \*Gunasekaran S, Lee DC, Knight B, Avery RJ, Haji-Valizadeh H, Greenland P, Passman R, Markl M, Kim D. "Self-Navigated, Free-Breathing 3D Left Atrial Late Gadolinium Enhancement MRI: A Preliminary Study for Evaluation of Image Quality and Quantification of Atrial Fibrosis in Patients with Atrial Fibrillation at 1.5T MRI Scanners". In: Proceedings of the 105th Scientific Assembly and Annual Meeting of RSNA, Chicago, Illinois, USA, 2019.
- 40. \*Shen D, Haji-Valizadeh H, Ghosh S, **Kim D**. "Transfer Learning has Potential to Produce Better Reconstruction of Highly-Accelerated, Single-Shot LGE Images than Conventional Deep Learning." In: Proceedings of the 105th Scientific Assembly and Annual Meeting of RSNA, Chicago, Illinois, USA, 2019.
- 41. \*Shen D, Haji-Valizadeh H, Ghosh S, **Kim D**. "Automated Left Ventricle Segmentation of Cardiac LGE with Deep Learning." In Proceedings of the 23rd Annual Meeting at SCMR, Orlando, Florida, USA, 2020, Submission ID: 750764.
- 42. \*Baraboo J, Ma L, DiCarlo A, Sherlock D, Berhane H, Scott M, McCarthy P, Lee DC, Arora R, Greenland P, Passman R, **Kim D**, Markl M. "Al based automated left atrial and appendage 3D segmentation and hemodynamic quantification in atrial fibrillation." In Proceedings of the 23rd Annual Meeting at SCMR, Orlando, Florida, USA, 2020, Submission ID: 749459.
- 43. \*Ma L, Yerly J, Di Sopra L, Piccini D, Roy C, Blaisdell J, Carr JC, **Kim D**, Markl M, Stuber M. "5D flow MRI for cardiac and respiratory-resolved 3D blood flow dynamics in adult patients and pediatric patients with congenital heart disease." In Proceedings of the 23rd Annual Meeting at SCMR, Orlando, Florida, USA. 2020. Submission ID: 744949.
- 44. \*Fan L, Shen D, Haji-Valizadeh H, Naresh N, Carr J, Freed B, Lee D, **Kim D**. Rapid Dealiasing of Undersampled, Radial First-Pass Cardiac Perfusion MR Images using 3D Residual U-Net. In: Proceedings of 28th Annual Meeting of ISMRM, Virtual, 2020, program number 1317.
- 45. \*Ma L, Yerly J, Di Sopra L, Piccini D, Passman R, Greenland P, **Kim D**, Stuber M, Markl M. Decoding the Effects of Rhythm on Hemodynamics in Patients with Atrial Fibrillation Using a 5D Flow Framework. In: Proceedings of 28th Annual Meeting of ISMRM, Virtual, 2020, program number 1085.
- 46. \*DiCarlo A, Haji-Valizadeh H, Gunasekaran S, McCarthy P, Passman R, Greenland P, Lee D, **Kim D**, Markl M. Cardiac Rhythm Impacts Left Atrial Hemodynamics Measured with 4D Flow and Real Time PC MRI in Controls and Patients with Atrial Fibrillation/ In: Proceedings of 28th Annual Meeting of ISMRM, Virtual, 2020, program number 1085.
- 47. \*Shen D, Hong K, Allen B, Lee D, **Kim D**. 16-fold accelerated, single-shot late gadolinium enhancement CMR using GRASP for multi-TI reconstruction. In: Proceedings of 28th Annual Meeting of ISMRM, Virtual, 2020, program number 0785.

### b. Poster Presentations

 Epstein, FH, Kim, D, McVeigh, ER. Reducing signal oscillations during the approach to steady state in true fisp using partial dephasing. In Proceedings of the 9th Annual Meeting of ISMRM, Glasgow, Scotland, 2001, Program No. 1786.

- 2. Gilson, WD, **Kim**, **D**, Yang, Z, Epstein, FH. Simultaneous high resolution imaging of myocardial infarct area and displacement in mice using gadolinium-enhanced CSPAMM-based DENSE. In Proceedings of the 10th Annual Meeting of ISMRM, Honolulu, HI, 2002, Program No. 1685.
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- 120. Weiss E, Ma E, Baraboo J, DiCarlo A, **Kim D**, Cox J, McCarthy P, Markl M. "Impact of surgical intervention on 3D atrial hemodynamics in patients with atrial fibrillation." In Proceedings of the 23rd Annual Meeting at SCMR, Orlando, Florida, USA, 2020, Submission ID: 751220.
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- 122. Hong S, Hong K, Culver A, Allen B, Lee D, **Kim D**. 16-fold accelerated real-time free-breathing cardiac cine MRI in patients with a cardiac implantable electronic device. In: Proceedings of 28th Annual Meeting of ISMRM, Virtual, 2020, program number 2241.
- 123. Fan L, Haji-Valizadeh H, Rigsby C, Robinson J, Paige N, **Kim D**. 20-min Pediatric Cardiovascular Magnetic Resonance without Contrast or Anesthesia: Initial Evaluation in Kids with Congenital Heart Disease. In: Proceedings of 28th Annual Meeting of ISMRM, Virtual, 2020, program number 4601.
- 124. Gunasekaran S, Elbaz, MSM, Lee D, Markl M, Passman R, **Kim D**. 3D left atrial LGE MRI at 1.5 Tesla: calibration of fibrosis cut point and initial evaluation in patients with and without atrial fibrillation. . In: Proceedings of 28th Annual Meeting of ISMRM, Virtual, 2020, program number 2060.
- 125. Gunasekaran S, Haji-Valizadeh H, Allen B, Avery R, **Kim D**. Accelerated, free-breathing, contrast-enhanced thoracic MR angiography with XD-GRASP reconstruction. In: Proceedings of 28th Annual Meeting of ISMRM, Virtual, 2020, program number 2136.
- 126. Cheung E, Han HC, Hornsey E, Churilov L, Allen B, Avery R, **Kim D.** Arrhythmia Insensitive Rapid versus modified Look Locker Inversion Recovery T1 mapping in mitral valve prolapse patients. In: Proceedings of 28th Annual Meeting of ISMRM, Virtual, 2020, program number 2076.
- 127. Shen D, Pathrose A, Baraboo J, Gordan D, Cuttica M, Carr J, Markl M, **Kim D.** Automated Segmentation for Myocardial Tissue Phase Mapping Images using Deep Learning. In: Proceedings of 28th Annual Meeting of ISMRM, Virtual, 2020, program number 3522.
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- 129. Pathrose A, Haji-Valizadeh H, Sarnari R, Carr J, **Kim D**. Cardiac magnetic resonance feature-tracking for myocardial strain assessment in real-time cardiac cine MRI. In: Proceedings of 28th Annual Meeting of ISMRM, Virtual, 2020, program number 2172.
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- 131. Hong S, Hong K, Hsu LY, Lee D, **Kim D**. The importance of myocardial SNR in myocardial blood flow quantification derived from first-pass cardiac perfusion CMR. In: Proceedings of 28th Annual Meeting of ISMRM, Virtual, 2020, program number 2092.

### MEDIA COVERAGE AND APPEARANCES

Guidance: Include news coverage of your work, your appearances in the media (e.g., print, TV, or radio interviews), websites you maintain related to your academic career, and social media involvement for the medical/scientific community (e.g., maintaining a blog, running a Twitter feed, podcasting, etc.)

# **TEACHING** (optional section)

Note: This section is optional because it is duplicative of the Documentation of Teaching Form, which is required for most promotion candidates.

### **TRAINEES** (optional section)

Note: This section is optional because it is duplicative of the Documentation of Teaching Form, which is required for most promotion candidates.