JOON YUL CHOI, PHD

EDUCATION

PhD: Electrical and Computer Engineering, Seoul National University, 2019

POST-GRADUATE TRAINING

Institution: CUNY School of Medicine, City University of New York
Position: Senior Research Associate (Scientist)
Dates: 2022-2023

Institution: Epilepsy Center, Neurological Institute, Cleveland Clinic Foundation
Position: Post-doctoral Research Fellow
Dates: 2019-2022

PROFESSIONAL APPOINTMENTS

Position/Rank: Assistant Professor
Institution/Institute/Department: Department of Biomedical Engineering, Yonsei University
Dates: 2023 – Present

Position/Rank: Senior Research Associate (Scientist)
Institution/Institute/Department: CUNY School of Medicine, City University of New York
Dates: 2022 – 2023

Position/Rank: Post-doctoral Research Fellow
Institution/Institute/Department: Epilepsy Center, Neurological Institute, Cleveland Clinic
Dates: 2019 – 2022

Position/Rank: Research Specialist
Institution/Institute/Department: MRI Physics Group, Department of Radiology, University of Pennsylvania
Dates: 2013 – 2015

HONORS AND AWARDS

Travel Award in MRI Phase and Contrast & Quantitative Susceptibility Mapping, 2014
Magna Cum Laude Award in International Society for Magnetic Resonance in Medicine, 2016
Magna Cum Laude Award in International Society for Magnetic Resonance in Medicine, 2017
Stipend Award in International Society for Magnetic Resonance in Medicine, 2017
Best Oral Presentation Award in The Korean Society of Medical & Biological Engineering, 2017
Best Oral Presentation Award in The International Congress on Magnetic Resonance Imaging, 2018
Stipend Award in in International Society for Magnetic Resonance in Medicine, 2018
3rd Place Award at Electro-magnetic Tissue Property Study Group in International Society for Magnetic Resonance in Medicine, 2019
Stipend Award in in International Society for Magnetic Resonance in Medicine, 2019
Grass Foundation Young Investigator Award in American Epilepsy Society, 2021
Contribution Award, International Congress on MRI, 2024

BIBLIOGRAPHY

Peer Reviewed Articles

1. Jang KH, **Choi JY**, Koo JM, Kwon MK, Kim DW: Development of an optical probe for measuring blood flow in dental pulp, **The Transactions of the Korean Institute of Electrical Engineers**, 61:1204-1209, 2012.
2. Kwon MK, **Choi JY**, Kim SK, Yoo TK, Kim DW: Effects of radiation emitted by WCDMA mobile phones on electromagnetic hypersensitive subjects, **Environmental Health**, 11:69, 2012.
3. **Choi JY**, Lee WH, Yoo TK, Park I, Kim DW: A new severity predicting index for hemorrhagic shock using lactate concentration and peripheral perfusion in a rat model, Shock, 38(6):635-641, 2012.
4. Kim SK, Choi JL, Kim MK, **Choi JY**, Kim DW: Effects of 60 Hz magnetic fields on teenagers and adults, **Environmental Health**, 12:42, 2013.
5. Yoo TK, Kim SK, Kim DW, **Choi JY**, Lee WH, Oh E, Park EC: Osteoporosis risk prediction for bone mineral density assessment of postmenopausal women using machine learning, **Yonsei Medical Journal**, 54:1321-

1330, 2013.

6. Kim KA, **Choi JY**, Yoo TK, Kim SK, Chung K, Kim DW: Mortality prediction of rats in acute hemorrhagic shock using machine learning techniques, **Medical & Biological Engineering & Computing**, 51:1059-1067, 2013.
7. Choi SB, **Choi JY**, Park JS, Kim DW: ATLS Hypovolemic Shock Classification by Prediction of Blood Loss in Rats Using Regression Models bleed estimation using linear regression, **Shock**, 46(1):92-98, 2016.
8. Jeong IH, **Choi JY**, Kim SH, Hyun JW, Joung A, Lee J, Kim HJ: Comparison of myelin water fraction values in periventricular white matter lesions between multiple sclerosis and neuromyelitis optica spectrum disorder, **Multiple Sclerosis Journal**, 22(12):1616-1620, 2016.
9. Jeong IH, **Choi JY**, Kim SH, Hyun JW, Joung A, Lee J, Kim HJ: Normal-appearing white matter demyelination in neuromyelitis optica spectrum disorder, **European Journal of Neurology**, 24(4):652-658, 2017.
10. Lee J, Nam Y, **Choi JY**, Kim EY, Oh SH, Kim DH: Mechanisms of T2* anisotropy and gradient echo myelin water imaging, **NMR in Biomedicine**, 30(4):e3513, 2017.
11. **Choi JY**, Yoo TK, Seo JG, Kwak J, Um TT, Rim TH: Multi-categorical deep learning neural network to classify retinal images: A pilot study employing small database, **PLoS One**, 12(11):e0187336, 2017.
12. **Choi JY**, Hart T, Whyte J, Rabinowitz AR, Oh S-H, Lee J, Kim J: Myelin water imaging of moderate to severe diffuse traumatic brain injury, **Neuroimage clinical**, 22:101785, 2019.
13. Yoo TK, **Choi JY**, Seo JG, Ramasubramanian B, Selvaperumal S, Kim DW: The possibility of the combination of OCT and fundus images for improving the diagnostic accuracy of deep learning for age-related macular degeneration: A preliminary experiment, **Medical & Biological Engineering & Computing**, 57(3):677-687, 2019.
14. Shin H-G, Oh S-H, Fukunaga M, Nam Y, Lee D, Jung W, Jo M, **Choi JY**, Lee J: Advanced in gradient echo myelin water imaging at 3T and 7T, **Neuroimage**, 188:835-844, 2019.
15. **Choi JY**, Jeong IH, Oh S-H, Oh C-H, Park NY, Kim HJ, Lee J: Evaluation of normal appearing white matter in multiple sclerosis using ViSTa myelin water imaging and spin echo myelin water imaging, **Journal of Magnetic Resonance Imaging**, 49(4):1091-1098, 2019.
16. **Choi JY**, Lee J, Nam Y, Lee J, Oh S-H: Improvement of reproducibility in quantitative susceptibility mapping (QSM) and transverse relaxation rates (R2*) after physiological noise correction, **Journal of Magnetic Resonance Imaging**, 49(6):1769-1776, 2019.
17. Yoo TK, **Choi JY**, Kim HK, A generative adversarial network approach to predicting postoperative appearance after orbital decompression surgery for thyroid eye disease, **Computers in Biology and Medicine**, 118:103628, 2020.
18. Tahry RE, Santos SF, Vrielynck P, Tourtchaninoff M, Duprez T, Vaz GR, Raftopoulos C, **Choi JY**, Wang Z: Additional clinical value of voxel-based morphometric MRI post-processing for MRI-negative Epilepsies: a prospective study, **Epileptic Disorders**, 22(2):156-164, 2020.
19. **Choi JY**, Wang ZI: Merging magnetoencephalography into epilepsy presurgical work-up under the framework of multimodal Integration, **Neuroimaging Clinics of North America**, 30(2):249-259, 2020.
20. Jung W, Yoon J, Ji S, **Choi JY**, Kim JM, Nam Y, Kim EY, Lee J: Exploring linearity of deep neural network trained QSM: QSMnet, **Neuroimage**, 211:116619, 2020.
21. Lee J, Lee D, **Choi JY**, Shin D, Shin H-G, Lee J: Artificial neural network for myelin water imaging, **Magnetic Resonance in Medicine**, 83(5):1875-1883, 2020.
22. Yoo TK, **Choi JY**, Kim HK: CycleGAN-based deep learning technique for artifact reduction in fundus photography, **Graefe's Archive for Clinical and Experimental Ophthalmology**, 258(8):1631-1637, 2020.
23. Yoo TK, **Choi JY**, Jang Y, Oh E, Ryu IH: Toward automated severe pharyngitis detection with smartphone camera using deep learning networks, **Computers in Biology and Medicine**, 125:103980, 2020.
24. Yoo TK, **Choi JY**: Outcomes of Adversarial Attacks on Deep Learning Models for Ophthalmology Imaging Domains, **JAMA Ophthalmology**, 138(11):1213-1215, 2020.
25. Yoo TK, Ryu IH, Kim JK, Lee IS, Kim JS, Kim HK, **Choi JY**: Deep learning can generate traditional retinal fundus photographs using ultra-widefield images via generative adversarial networks, **Computer Methods and Programs in Biomedicine**, 197:105761, 2020.
26. Lee S, Oh S-H, Park SW, Shin C, Kim J, Rhim JH, Lee JY, **Choi JY**: Screening patients with early stage parkinson's disease using a machine learning technique: measuring the amount of iron in the basal ganglia, **Applied Sciences**, 10(23):8732, 2020.
27. Lee S, **Choi JY**, Yoon J-H, Lee W: Effect of severe external airborne agents' exposure on dementia, **Journal of Clinical Medicine**, 9(12):4069, 2020.
28. Lee J, **Choi JY**, Shin D, Kim EY, Oh S-H, Lee J: Exploring generalization capacity of artificial neural network for myelin water imaging, **Investigative Magnetic Resonance Imaging**, 24:207-213, 2020.
29. Yoo TK, **Choi JY**, Kim HK: Feasibility study to improve deep learning in OCT diagnosis of rare retinal diseases with few-shot classification, **Medical & Biological Engineering & Computing**, 59(2):401-415, 2021

30. Lee S, **Choi JY**, Lee W: The impact of long working hours on cognitive function: a follow-up study with gender stratification, **Journal of Alzheimer's Disease**, 80(2):1-8, 2021.
31. Kaestner E, Reyes A, Chen A, Rao J, Macari AC, **Choi JY**, Qiu D, Hewitt K, Wang ZI, Drane DL, Hermann B, Busch RM, Punia V, McDonald CR, Alzheimer's Disease Neuroimaging Initiative: Atrophy and cognitive profiles in older adults with temporal lobe epilepsy are similar to mild cognitive impairment, **Brain**, 144(1):236-250, 2021.
32. Tang Y, Wang ZI, Sarwar S, **Choi JY**, Wang S, Zhang X, Parikh S, Moosa AN, Pestana-Knight E: Brain morphological abnormalities in children with cyclin-dependent kinase-like 5 deficiency disorder, **European Journal of Paediatric Neurology**, 31:46-53, 2021.
33. Yoo TK, **Choi JY**, Kim HK, Ryu IH, Kim JK: Adopting low-shot deep learning for the detection of conjunctival melanoma using ocular surface images, **Computer Methods and Programs in Biomedicine**, 205:106086, 2021.
34. **Choi JY**, Lee S, Lee W: The impact of hearing loss on clinical dementia and preclinical cognitive impairment in later life, **Journal of Alzheimer's Disease**, 81(3):963-972, 2021.
35. Tang Y, **Choi JY**, Alexopoulos A, Murakami H, Daifu-Kobayashi M, Zhou Q, Najm I, Jones S, Wang ZI: Individual localization value of resting-state functional MRI in epilepsy presurgical evaluation: a combined study with stereo-EEG, **Clinical Neurophysiology**, 132(12):3197-3206,2021.
36. Jin L, **Choi JY**, Bulacio J, Alexopoulos A, Burgess R, Murakami H, Bingman W, Najm I, Wang ZI: Multimodal image integration for epilepsy presurgical evaluation: A clinical workflow, **Frontiers in Neurology**, 12:709400, 2021.
37. **Choi JY**, Krishnan B, Hu S, Martinez D, Tang Y, Wang X, Sakaie K, Jones S, Murakami H, Blümcke I, Najm I, Ma D, Wang ZI: Using magnetic resonance fingerprinting to characterize periventricular nodular heterotopia in pharmacoresistant epilepsy, **Epilepsia**, 63:1225-1237, 2022.
38. Tang Y, Blümcke I, Su T, **Choi JY**, Krishnan B, Murakami H, Alexopoulos A, Najm I, Jones S, Wang ZI: Black line sign in focal cortical dysplasia IIB: A 7T MRI and electro-clinico-pathologic study, **Neurology**, 99(6):e616-e626, 2022.
39. Tang Y, Su T, **Choi JY**, Hu S, Wang X, Sakaie K, Murakami H, Alexopoulos A, Griswold M, Jones S, Najm I, Ma D, Wang ZI: Characterizing Thalamic and basal ganglia nuclei in medically intractable focal epilepsy by MR Fingerprinting, **Epilepsia**, 63(8):1998-2010, 2022.
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41. Ting YS, Tang Y, **Choi JY**, Hu S, Sakaie Ken, Murakami H, Jones S, Blumcke I, Najm I, Ma D, Wang ZI: Evaluating Whole-brain Tissue Property Changes in MRI-negative Pharmacoresistant Focal Epilepsies using MR Fingerprinting, **Epilepsia**, 64(2):430-442, 2023.
42. Brennan DJ, Duda J, Ware JB, Whyte J, **Choi JY**, Gugger J, Focht K, Walter AE, Bushnik T, Gee JC, Diaz-Arrastia R, Kim JJ: Spatiotemporal profile of atrophy in the first year following moderate-severe traumatic brain injury, **Human Brain Mapping**, 13:4692-4709, 2023.
43. **Choi JY**, Yoo TK, New era after ChatGPT in ophthalmology: advances from data-based decision support to patient-centered generative artificial intelligence, **Annuals of Translational Medicine**, 11:337, 2023.
44. **Choi JY**, Kim H, Kim JK, Lee IS, Ryu IH, Kim JS, Yoo TK, Deep learning prediction of steep and flat corneal curvature using fundus photography in post-COVID telemedicine era, **Medical & Biological Engineering & Computing,** 62(2):449-463, 2024.
45. Choi EY, Han SH, Ryu IH, Kim JK, Lee IS, Han E, Kim H, **Choi JY**, Yoo TK, Automated detection of crystalline retinopathy via fundus photography using multistage generative adversarial networks, **Biocybernetics and Biomedical Engineering**, 43(4):725-735, 2023.
46. Kim CW, Kim Y, Kim H-H, **Choi JY**, The aspect of structural connectivity in relation to age-related gait performance, **Psychoradiology**, 3, kkad028, 2023.
47. **Choi JY**, Ryu IH, Kim JK, Lee IS, Yoo TK, Development of a generative deep learning model to improve epiretinal membrane detection in fundus photography, **BMC Medical Informatics and Decision Making**, 24(1):25, 2024.
48. **Choi JY**, Han E, Yoo TK, Application of ChatGPT-4 to oculomics: a cost-effective osteoporosis risk assessment to enhance management as a proof-of-principles model in 3PM, **EPMA Journal**, 15(4):659-676, 2024.
49. Ding Z, Hu S, Su T-Y, **Choi JY**, Morris S, Wang X, Sakaie K, Murakami H, Huppertz H-J, Blümcke I, Jones SE, Najm I, Ma D, Wang ZI, Combining magnetic resonance fingerprinting with voxel-based morphometric analysis to reduce false positives for focal cortical dysplasia detection, **Epilepsia**, 65(6):1631-1643, 2024.
50. Kim HK, Ryu IH, **Choi JY**, Yoo TK, A feasibility study on the adoption of a generative denoising diffusion model for the synthesis of fundus photographs using a small dataset, **Discover Applied Sciences**, 6:188, 2024.
51. Su T-Y, **Choi JY**, Hu S, Wang X, Blümcke I, Chiprean K, Krishnan B, Ding Z, Sakaie K, Murakami H,

Alexopoulos AV, Najm I Jones SE, Ma D, Wang ZI, Multiparametric Characterization of Focal Cortical Dysplasia Using 3D MR Fingerprinting, **Annals of Neurology**, 96(5):944-957, 2024.

52. Kim Hh, Jang W, Kim C-W, **Choi JY**, Longitudinal investigation of optic chiasm in patients with traumatic brain injury, **BMC Ophthalmology**, 24(1):422, 2024.
53. Ryu SY, **Choi JY**, Yoo TK, Automated detection of retinal artery occlusion in fundus photography via self-supervised deep learning and multimodal interpretability using a multimodal AI chatbot, **Medical & Biological Engineering & Computing**, 2025 (published online)
54. **Choi JY**, Ryu SY, Yoo TK, Epidemiological insights into complication and outcomes in corneal refractive surgery population: findings from KNHANES 2010–2012, **BMC Ophthalmology**, 25(1):154, 2025.
55. **Choi JY**, Kim S, Lee Y, Kim D, Lee W, Association Between Shift Working and Brain Morphometric Changes in Workers: A Voxel-wise Comparison, **Safety and Health at Work**, 16(2):236-242, 2025.
56. **Choi JY,** Kim DE, Kim SJ, Choi H, Yoo TK, Application of multimodal large language models for safety indicator calculation and contraindication prediction in laser vision correction, **NPJ Digital Med**, 8(1):82, 2025.
57. Choi EY, **Choi JY**, Yoo TK, Automated and code-free development of a risk calculator using ChatGPT-4 for predicting diabetic retinopathy and macular edema without retinal imaging, **Int J Retina Vitreous**, 11(1):11, 2025.
58. **Choi JY**, Yoo TK, Development of a novel scoring system for glaucoma risk based on demographic and laboratory factors using ChatGPT-4, **Medical & Biological Engineering & Computing**, 63(1):75-87, 2025.
59. Jang W, Kim S, Kim YJ, Lee S, **Choi JY**, Lee W, Overwork and Changes of Brain Structure: A pilot study, **Occupational & Environmental Medicine**, 82(3):105-111, 2025 (BMJ press selected)
60. Ding Z, Morris S, Hu S, Su, T-Y, **Choi JY**, Blumcke I, Wang X, Sakaie K, Murakami H, Alexopoulos A, Jones SE, Najm IM, Ma D, Wang ZI, Automated Whole-brain Focal Cortical Dysplasia Detection Using MR Fingerprinting with Deep Learning, **Neurology**, 104(11):e213691, 2025 (published online).
61. Kim BR, **Choi JY**, Yoo TK, Multimodal large languate models as assistance for evaluation of thyroid-associated ophthalmopathy, **Computers in Biology and Medicine**, 192:110301, 2025.
62. Oh E, Jun JH, **Choi JY**, Yoo TK, Systemic inflammation at the oral–ocular interface: a 3P medicine perspective on the relationship between periodontitis and eye diseases, **EPMA Journal**, 2025 (published online).

Abstracts

1. Kwon MK, Lee DS, **Choi JY**, Nam KC, Kim DW: Effects of RF fields emitted from smart phones on physiological changes: A preliminary provocation study, 33th Bioelectromagnetics Society, Halifax, June 12 - 17, 2011
2. Jang KH, Yoo TK, **Choi JY**, Nam KC, Choi JL, Kwon MK, Kim DW: Comparison of survival prediction for rats with hemorrhagic shocks using an artificial neural network and support vector machine, Conf Proc. 33rd IEEE Engineering in Medicine and Biology Society, Boston, Aug. 30 - Sep. 3, 2011.
3. Kwon MK, **Choi JY**, Kim SK, Yoo TK, Kim DW: Perception of RF Fields Emitted from Smart Phones, 34th Bioelectromagnetics Society, Brisbane, June 17 - 22, 2012.
4. **Choi JY**, Kim SK, Lee WH, Yoo TK, Kim DW: A survival prediction model of rats in hemorrhagic shock using the random forest classifier, Conf Proc. 34th IEEE Engineering in Medicine and Biology Society, San Diego, Aug. 28 - Sep. 1, 2012.
5. Kwon MK, Kim SK, Koo JM, **Choi JY**, Kim DW: EHS subjects do not perceive RF EMF emitted from smart phones better than non-EHS subjects, Conf Proc. 34th IEEE Engineering in Medicine and Biology Society, San Diego, Aug. 28 - Sep. 1, 2012.
6. Oh S-H, Oh SS, **Choi JY**, Park J-Y, Lee J: Three dimensional quantitative myelin water imaging using direct visualization of short transverse relaxation time component (ViSTa), International Society for Magnetic Resonance in Medicine, 22th Annual Meeting and Exhibition, Milan, May 10 - 16, 2014.
7. Lee HM, Kim D, Oh SS, **Choi JY**, Oh S-H, Lee J: The phase and magnetization transfer characteristics of a novel myelin water imaging method (ViSTa), International Society for Magnetic Resonance in Medicine, 22th Annual Meeting and Exhibition, Milan, May 10 - 16, 2014.
8. Oh SS, **Choi JY**, Lee J: Myelin water imaging using direct visualization of short transverse relaxation time component (ViSTa) at 7T, International Society for Magnetic Resonance in Medicine, 22nd Annual Meeting and Exhibition, Milan, May 10 - 16, 2014.
9. Oh S-H, **Choi JY**, Im Y, Prasloski T, Lee J: Myelin water fraction of the whole brain: 3D GRASE MWI Vs. 3D ViSTa MWI, International Society for Magnetic Resonance in Medicine, 22nd Annual Meeting and Exhibition, Milan, May 10 - 16, 2014.
10. **(*Platform Presentation; Received travel award) Choi JY**, Nam Y, Lee J: Robust estimation of myelin water fraction in spin echo and gradient echo: a Monte-Carlo simulation, the 3rd International Workshop on MRI Phase Contrast & Quantitative Susceptibility Mapping (QSM), Durham, Oct. 6 - 8, 2014.
11. **Choi JY**, Kim JH, Nam Y, Lee J, Lee J: The effects of respiration compensation on reproducibility in quantitative susceptibility mapping (QSM) and R2* maps, The 3rd International Congress on Magnetic

Resonance Imaging, Seoul, March 27 - 28, 2015.

12. **Choi JY**, Nam Y, Lee J, Lee J: Reproducibility of quantitative susceptibility mapping (QSM) and R2* in the human brain, International Society for Magnetic Resonance in Medicine, 23rd Annual Meeting and Exhibition, Toronto, May 30 - June 5, 2015.
13. **Choi JY**, Jung W, Lee J: Non-invasive in-vivo measurement of myelin in the human brain using a new MRI myelin imaging method, ViSTa, for neuroplasticity studies, Brain Conference 2015, September 11-12, Daegu, South Korea, 2015.
14. **(Received Magna Cum Laude Award) Choi JY**, Jeong IH, Oh S-H, OH C-H, Kim HJ, Lee J: A quantitative evaluation of normal appearing white matter in multiple sclerosis: ViSTa MWI and SE MWI, International Society for Magnetic Resonance in Medicine, 24th Annual Meeting and Exhibition, Singapore, May 7 - 13, 2016.
15. **(*Platform Presentation) Choi JY**, Jeong IH, Kim HJ, Lee J: Utility of ViSTa MWI in MS and NMO, International Society for Magnetic Resonance in Medicine, White matter workshop, February 07-10, Vancouver, Canada, 2017.
16. Hwang T, Lee J, **Choi JY**, Kim S, Jang G, Lee J: Importance of reference in QSM and a new differential ROI reference method, International Society for Magnetic Resonance in Medicine, 25th Annual Meeting and Exhibition, Hawaii, April 22 - 27, 2017.
17. Lee S, **Choi JY**, Kim J, Park SW, Lee J: Machine learning based diagnosis of early Parkinson's disease using QSM, International Society for Magnetic Resonance in Medicine, 25th Annual Meeting and Exhibition, Hawaii, April 22 - 27, 2017.
18. Lee J, Nam Y, **Choi JY**, Shin H-G, Hwang T, Lee J: Separating positive and negative susceptibility sources in QSM, International Society for Magnetic Resonance in Medicine, 25th Annual Meeting and Exhibition, Hawaii, April 22 - 27, 2017. (Top 5 abstracts out of 6780 submitted)
19. **(*Platform Presentation; received Magna Cum Laude Award and stipend award)** Choi JY, Baek J, Lee J, Kim J: Evaluation of diffuse axonal injury, International Society for Magnetic Resonance in Medicine, 25th Annual Meeting and Exhibition, Hawaii, April 22 - 27, 2017.
20. **Choi JY**, Baek JW, Lee J, Kim J: Evaluation of myelin damage in diffuse traumatic brain injury using ViSTa-MWI, Human Brain Mapping, Vancouver, Canada, June 25-29, 2017
21. **(*Platform Presentation; received Best Oral Presentation Award) Choi JY**, Lee D, Lee J, Kim J, Lee J: Change in myelin water signal in diffuse axonal injury, The Korean Society of Medical & Biological Engineering, Junju, November 10 - 11, 2017.
22. **(*Platform Presentation; received Best Oral Presentation Award) Choi JY**, Eun H, Lee J, Shin H-G, Lee J, Oh S-H: A robust inflow blood signal suppression for ViSTa myelin water weighted imaging: Simulation and in-vivo results, The 6th International Congress on Magnetic Resonance Imaging, Seoul, March 29 - 31, 2018.
23. Hwang T, Lee J, Shin H-G, Lee D, **Choi JY**, Eun H, Nam Y, Lee J: Magnetic susceptibility source separation using multi-echo GRE data only, International Society for Magnetic Resonance in Medicine, 26th Annual Meeting and Exhibition, Paris, June 16 - 21, 2018.
24. **(*Platform Presentation; received 3rd place award at electro-magnetic tissue property study group) Choi JY**, Lee J, Nam Y, Jung W, Lee J, Oh S-H: Improvement of reproducibility in QSM and R2* after physiological noise correction, International Society for Magnetic Resonance in Medicine, 27th Annual Meeting and Exhibition, Montreal, Canada, May 11 - 16, 2019.
25. Lee J, Lee D, **Choi JY**, Shin D, Shin H-G, Lee J: Real-time processing of myelin water imaging using artificial neural network, International Society for Magnetic Resonance in Medicine, 27th Annual Meeting and Exhibition, Montreal, Canada, May 11 - 16, 2019.
26. Shin H-G, Oh S-H, **Choi JY**, Min K, Eun H, Lee J: Analysis of gradient echo myelin water imaging (GRE-MWI) for water exchange and scan parameters, International Society for Magnetic Resonance in Medicine, 27th Annual Meeting and Exhibition, Montreal, Canada, May 11 - 16, 2019.
27. Jung W, Yoon J, **Choi JY**, Kim E-Y, Lee J: On the linearity of deep neural network trained QSM, International Society for Magnetic Resonance in Medicine, 27th Annual Meeting and Exhibition, Montreal, Canada, May 11 - 16, 2019.
28. **Choi JY**, Boyacioglu R, Jones S, Sakaie K, Blumcke I, Najm I, Griswold M, Ma D, Wang Z: Development of high-resolution 3D MR Fingerprinting for characterization of focal cortical dysplasia, American Epilepsy Society Annual Meeting, Baltimore, December 6 -10, 2019.
29. Lee J, **Choi JY**, Shin D, Oh-SH, Lee J: Exploring generalization capacity of artificial neural network for myelin water imaging, International Society for Magnetic Resonance in Medicine, 28th Annual Meeting and Exhibition, August 8-14, 2020.
30. **(*Platform Presentation) Choi JY**, Whyte J, Rabinowitz AR, Chow VL, Oh S-H, Lee J, Kim JJ: Longitudinal changes of myelin water fraction during the first year after moderate to severe diffuse traumatic brain injury, International Society for Magnetic Resonance in Medicine, 28th Annual Meeting and Exhibition, August 8-14, 2020.

31. **(*Platform Presentation) Choi JY**, Boyacioglu R, Jones S, Sakaie K, Blumcke I, Najm I, Griswold M, Ma D, Wang Z: Using high-resolution 3D MR fingerprinting for characterization of focal cortical dysplasia, International Society for Magnetic Resonance in Medicine, 28th Annual Meeting and Exhibition, August 8-14, 2020.
32. **Choi JY**, Krishnan B, Najm I, Jones SE, Sakaie K, Griswold M, Ma D, Wang Z: Magnetic resonance fingerprinting for periventricular nodular heterotopia in patients with pharmacoresistant epilepsy, American Epilepsy Society Annual Meeting, December 4-8, 2020.
33. **Choi JY**, Hu S, Su T, Tang Y, Sakaie K, Blumcke I, Najm I, Jones S, Griswold M, Ma D, Wang ZI: Exploring cyto-architecture of the brain with high-resolution 3D MR Fingerprinting, International Society for Magnetic Resonance in Medicine, 29th Annual Meeting and Exhibition, May 15-20, 2021.
34. **(*Platform Presentation; received Grass foundation Young Investigator Award) Choi JY**, Su T, Hu S, Zhao W, Tang Y, Sakaie K, Wang X, Blumcke I, Jones SE, Najm I, Ma D, Wang ZI: MR fingerprinting radiomics for characterization of focal cortical dysplasia, American Epilepsy Society Annual Meeting, Chicago, December 3 -7, 2021