Dr Craig K Jones

Contact Information

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(Starting March 30, 2026)

Research Interests

My research focuses on advancing artificial intelligence and deep learning methods for medical imaging, with a particular interest in developing automated systems that enhance disease diagnosis, monitoring, and clinical decision support. I am dedicated to designing explainable AI approaches that quantify uncertainty and provide interpretable, clinically meaningful results, and my work spans unsupervised image analysis, shape analysis, longitudinal modeling, artifact detection, and multi-modal imaging pipelines. By fostering collaborations between technical and clinical experts, I aim to translate innovative AI-based image analysis techniques into impactful solutions that address real-world healthcare challenges. In addition to my research, I am deeply committed to mentoring students at various levels of training, as I believe that supporting and inspiring the next generation of scientists is essential to ensuring the continued advancement of research in medical AI.

Positions

Assistant Research Professor Apr 2022 - Current

Department of Computer Science, Johns Hopkins University

Joint Appointments:

- Department of Ophthalmology, Wilmer Eye Institute, Johns Hopkins Medical Institutes
- Department of Radiology and Radiological Sciences, Johns Hopkins Medical Institutes
- Division of Gastroenterology , Johns Hopkins Medical Institutes
- The Malone Center for Engineering in Healthcare, Johns Hopkins University
- External Advisor to the Gills AI Center at the Wilmer Eye Institute

I currently have four PhD students and several MSc students working on projects with collaborators in several JHMI departments. I am the co-director of the Radiology AI Lab and a member of the I-STAR (Imaging for Surgery, Therapy, and Radiology) in BME.

Director April 2025 - Current

Center for the Advancement of Medical AI

CAMAI is a not-for-profit initiative spun out of Axle Informatics that emphasizes collaborative research in medical imaging and large language model (LLM) applications, working closely with physicians and fellow researchers. Within the Center, I also lead an Imaging AI Lab dedicated to advancing these efforts.

Assistant Director of Clinical Imaging Nov 2024 - Current
Axle Informatics
The Data Science Unit at Axle is dedicated to advancing data science, real-world evidence, and related areas, with a strong emphasis on medical applications and the development of clinical pipelines. My role centers on clinical imaging, where I leverage my expertise to enhance the unit's impact in this domain, while also maintaining the flexibility to continue my academic work at Johns Hopkins University.

Research Scientist Nov 2019 - Apr 2022
Malone Center for Engineering in Healthcare, Johns Hopkins University

Senior Systems Software Engineer Mar 2016 - Nov 2019
Space Telescope Science Institute

Data Scientist Aug 2014 - Mar 2016
Webb Mason Analytics (previously Spry, Inc)

Research Associate (Faculty) Jul 2009 - Aug 2014
F.M. Kirby Center for Functional Brain Imaging, Kennedy Krieger Institute
Joint Appointments:
Research Associate, Department of Radiology, Johns Hopkins Medical Institutes

Research Scientist Jun 2006–Jun 2009
Centre for Functional and Metabolic Imaging, Robarts Research Institute
Robarts Research Institute, London, ON

Research Associate - Postdoctoral Fellowship Oct 2003 - Jun 2006
F.M. Kirby Center for Functional Brain Imaging, Kennedy Krieger Institute

Education

Doctor of Philosophy Sep 1999–Aug 2003
Department of Physics, University of British Columbia
Thesis Title: T2 Decay Curve Acquisition and Analysis in MRI: Noise Considerations, Short T2 , and B1 Field Encoding
Supervisors: Dr Alex Mackay, Dr San Xiang

Master of Science Sep 1994–Sep 1997
Department of Medical Biophysics, University of Western Ontario
Thesis Title: Quantitative Multi-Component Analysis Using Fast Spin-Echo MRI
Supervisor: Dr Brian Rutt

Bachelor of Science Sep 1988–Dec 1992
Departments of Computing Science and Mathematics, Simon Fraser University
Honours Bachelor of Science degree in Mathematics and Computing Science
First Class Standing

Publications

I have over 95 peer reviewed publications. Further, I am an inventor on 3 patents or patent applications in various stages of the process. A detailed list is available towards the end of this document and on my Google Scholar.

Publication Awards

2001	Scientific Topic Plenary Highlight, Annual Meeting of the American Academy of Neurology, "Atrophy Measurements in Multiple Sclerosis"
2001-2002	University Graduate Fellowship, University of British Columbia ($16,000)
2002	Honourable Mention, SPIE: Image Processing, "Convex Geometry for Rapid Tissue Classification in MRI"
2002-2003	University Graduate Fellowship, University of British Columbia ($16,000)
2006	First Place Poster (Data Processing), ISMRM, "MRI Detection of Glycogen (GlycoCEST)"
2006	Poster Award, ISMRM, "Quantitative MRI Assessment of Sensory and Motor Tracts in Cervical Spinal Cord"
2020	Cum Laude Winner, SPIE Medical Imaging, "Data-driven detection and registration of spine surgery instrumentation in intraoperative images"
2022	Most Innovative Paper Award, CT Meeting, "DL-Recon: Combining 3D Deep Learning Image Synthesis and Model Uncertainty with Physics-Based Image Reconstruction."
2022	Poster Award, JHU Radiology Research Day, "Deep Labeling of fMRI Brain Networks"
2025	Presentation Award, American Neurology Association, "Multiview Transformer for Brain Age Prediction"

Funding

Research Extramural Funding - Current

1/1/23 - 1/1/26 Automated Segmentation and Multi-Parametric MRI Quantification to Assess the Effect of Treatment of Venous Malformations
HT94252310032
Department of Defence
$363,000
Role: PI: 8.33%

1/1/23 - 12/1/25 Artificial Intelligence (AI)-based computer-aided early detection of pancreas cancer using endoscopic ultrasonography
Sol Goodman Foundation
$50,000
PI: Akshintala V

Role: Co-PI: 10%

5/1/23 - 4/30/27 Edited Magnetic Resonance Spectroscopy of the Pediatric Brain
R01EB032788
NIH
$4,171,231
PI: Edden R
Role: Co-I: 10%

Research Extramural Funding – Pending

Submitted 3/1/25 Longitudinal AI Model Uncertainty Quantification and Drift Detection for SaMD
FDA
$3,750,000
PI: Jones, CK
Role: PI: 20%

Submitted 3/5/25 Fast, automated radiomic feature fingerprinting in congenital venous malformations: A new biomarker of therapeutic response
NIH R01
$3,300,000
PI: Jones, CK and Weiss C
Role: Corresponding PI: 20%

Other Extramural Funding - Previous

6/1/20 - 5/31/24 Imaging, Guidance, and QA For Emerging High-Precision Neurosurgical Techniques
UO1
NIH/NINDS
$3,443,360
PI: Siewerdsen JH
Role: Co-I, 40%

1/1/24 - 1/1/25 Artificial Intelligence (AI)-based computer-aided early detection of pancreas cancer using endoscopic ultrasonography
Sol Goodman Foundation
$50,000
PI: Akshintala, V
Role: Co-I: 10%

7/1/22 - 12/31/22 Sequential Learning Implementation in Microsoft Azure ML Studio
Gift from Health AI Microsoft
$20,800
Role: PI: 0%, money was for a MSc student project

INTRAMURAL Funding
Research Intramural Funding
Previous

1/1/24 - 1/1/25 Automated Grading of Optical Coherence Tomography Angiography Images"
Wilmer Pooled Professor Lutty Grant
$50,000
Role: PI: 20%

1/1/23 - 1/1/24 Automated Grading of Optical Coherence Tomography Angiography Images"
Wilmer Pooled Professor Lutty Grant
$50,000
Role: PI: 20%

1/1/18 - 12/32/19 Automated Hubble Image Discovery Using Deep Learning
Internal
Space Telescope Science Institute
$50,488
Role: MPI: 20%

9/1/20 - 8/31/22 Automated Detection of Proliferative Sickle Cell Retinopathy
Malone Center for Engineering in Healthcare
$27,913
PI: Scott A
Role: Co-I: 10%

9/1/20 - 8/31/22 Comparison of 2D and 3D Neural Networks for Establishing Structure-Function Correlations in Age-Related Macular Degeneration using Optical Coherence Tomography Images
Malone Center For Engineering in Healthcare
$50,000
PI: Liu TYA
Role: Co-I: 10%

11/1/21 - 11/1/22 Fully Automated Segmentation Algorithm for Low Flow Vascular Malformations
Malone Center for Engineering in Healthcare
$48,638
Role: PI: 10%

Mentoring

Doctoral Advisees

2024-present Yukun Yan, MSc Computer Science, Johns Hopkins University
2024-present Yicheng Hu, MSc Computer Science, Johns Hopkins University

2024-present Steven Kan, MSc Computer Science, Johns Hopkins University
2023-present Samuel Lefcourt, MSc Computer Science, Johns Hopkins University

Pre-doctoral Advisees
2020-2022 Sohaib Naim, MSc BME, (currently a PhD Student UCLA)
2021-2023 Yuxuan Liu, MSc BME, (currently a PhD Student at Texas A&M)
2022-2023 Prabha Mandaleeka, MSc BME, (currently Data Scientist, Montefiore Health)
2022-2023 Hrishikesh Kambli, MSc BME, (currently a Data Analyst, Johns Hopkins University)
2022-2024 Rohit Ganji, MSc Computer Science, Johns Hopkins University
2022-2024 Ammar Latheef, MSc Computer Science, Johns Hopkins University
2023-2024 Yukun Yan, MSc Computer Science, Johns Hopkins University
2019-2020 Sophia Doerr, MSc, BME, Johns Hopkins University
2020-2021 Yifan Gao, MSc, BME, Johns Hopkins University
2020-2021 Mitsuki Ota, Undergraduate BME, Johns Hopkins University
2020-present Yixuan Hang, MSc BME, Johns Hopkins University
2021-2022 Sejal Ghate, MSc BME, Johns Hopkins University
2021-2024 Ruxiao Duan, MSc Data Science, (currently a PhD Student Yale)
2022-2023 Hrishikesh Kambli, MSc BME, Johns Hopkins University
2022-2023 Yihong Guo, MSc Applied Mathematics, Johns Hopkins University
2022-2023 Zhipeng Hui, MSc Computer Science, Johns Hopkins University
2022-2023 Martin Pineda, MSc Computer Science, Johns Hopkins University
2022-2023 Amy Feng, MSc, BME, Johns Hopkins University (currently PhD student JHU)
2022-2024 Vibha Addala, High School Student, Texas
2022-2024 Aamina Dhar, MSc, BME, Johns Hopkins University & Haverford College
2022-2023 Saicharan Balamurali, MSc Robotics, Johns Hopkins University
2022-present Edmund Sumpena, Undergraduate, Computer Science, Johns Hopkins University
(***Received Provost's Undergraduate Research Award for VANTAGE Project 2025***)
2022-2024 Mengxian He, MSc Computer Science, JHU (currently PhD student CUHK Hong Kong)
2024-2025 Suizhi Ma, BSc, Computer Science, Johns Hopkins University
2024-present Hana Kim, BSc, Computer Science, Johns Hopkins University

Post-doctoral Advisees /Mentees
2023-present Aaron Gundmundson, PhD, Postdoctoral Fellow (co with Richard Edden, Radiology)

Thesis Committees / Reader
2025 Ayush Gupta, PhD, Computer Science, Johns Hopkins University
2024 Tawsifur Rahman, PhD, Computer Science, Johns Hopkins University
2023 Valentina D'souza, MSc, Biomedical Engineering, Johns Hopkins University
2023 Siyi Chen, MSc, Biomedical Engineering, Johns Hopkins University

Teaching

Introductory Computer Science
Simon Fraser University, Burnaby, BC
1991-1992 - Instructor

Introduction to Medical imaging
University of British Columbia, Vancouver, BC
2003 - Guest Lecturer

Radiology for Engineers [EN.580.425]
Johns Hopkins University - Biomedical Engineering, Baltimore MD
2020-2021 Instructor for MRI, post-graduate
2021-2022 Instructor for MRI and Medical Imaging, post-graduate
From 7 replies:
Quality and relevance of background materials: 4.9 / 5
Interest level of the lecture: 4.9 / 5
Amount that I learned from the lecture: 4.7 / 5
Relevance to understanding of clinical fundamentals and challenges: 4.9 / 5
Student Quote: *My favorite lecture so far! The pacing was great and the content was presented in a way that made it easy to understand.*

Deep Learning for Medical Imaging [EN.580.627]
Biomedical Engineering, Johns Hopkins University, Baltimore MD
2022 Instructor for two classes

Seminar Topics in Medical Image Processing [EN.601.862]
Computer Science, Johns Hopkins University, Baltimore MD
2022 Course Creator & Instructor, post-graduate, 11 students

Computer Vision [EN.601.461]
Department of Computer Science, Johns Hopkins University
2023 Instructor, post-graduate, 80 students

Sprint AI Training for African Medical Imaging Knowledge Translation (SPARK) Academy
Endorsed by the Medical Image Computing and Computer Assisted Interventions (MICCAI) Society.
2024 Instructor, 200+ students and medical doctors across Africa, south east Asia and Nepal
Taught four session including Fundamentals of Image Processing,
AI Data Exploration and Pre-Processing, How to Write a Paper
Voted the "Best Lecturer in 2024"

2025 Instructor, 200+ students and medical doctors across Africa, south east Asia and Nepal
Taught four session including Fundamentals of Image Processing,
AI Data Exploration and Pre-Processing, U-Net Segmentation, How to Write a Paper

Journal Peer Reviewer
1997 Magnetic Resonance in Medicine
2020 Journal of Medical Imaging

2020 NeurIPS
2022 European Radiology; ACM Transactions on Computing for Healthcare; Medical Physics; Physics in Medicine and Biology
2023 British Journal of Ophthalmology; Applied Artificial Intelligence; Physics Medicine and Biology; Applied Artificial Intelligence
2024 British Journal of Ophthalmology; Computers in Medicine, Physics and Biology; Artificial Intelligence in Medicine; Engineering; JAMA Ophthalmology; PlosOne; Physica Scripta
2025 British Journal of Ophthalmology; Computer Methods and Programs in Biomedicine; Artificial Intelligence in Medicine; Engineering; JAMA Ophthalmology; PlosOne; Physica Scripta, Ophthalmology Retina; Medical Image Analysis; MICCAI

Professional Societies

1993-2014 Member of the International Society of Magnetic Resonance in Medicine
2022-present Society for Imaging Informatics in Medicine (SIIM)
2022-present Member of the International Society for Optics and Photonics (SPIE)

Invited Talks

Local

9/24/18 "Hubble Image Discovery using Transfer Learning", Astronomy X, Space Telescope Science Institute, Baltimore MD
12/8/21 "Neural Networks in Radiology" JHU Neuroradiology Divisional Fellows. Baltimore MD
11/8/22 "AI Applications in Radiology", JHU Radiology Research Day, Baltimore MD

International

08/20/03 "MS and Beyond...", Robarts Imaging, Robarts Research Institute, London, ON
03/18/03 "Quantitative T2 and MS", Institute of Neurology, Queen's Square, University College of London, London, England.
03/20/03 "Quantitative T2 and MS", Institute of Psychiatry, Kings College London, London, England.
4/14/03 "Quantitative T2 and Image Processing", F.M. Kirby Center, Kennedy Krieger Institute, Baltimore, MD
11/7/03 "T2 Decay Curve Acquisition and Analysis in MRI", Vanderbilt University Institute of Imaging Science, Nashville, TN.
01/20/05 "Spine MT at 3T", Philips Medical Systems: Neuro Council, Eindhoven, The Netherlands
1/21/05 "Vascular Space Occupancy (VASO) Imaging of Blood Volume Changes Without Contrast Agent", Philips Medical Systems: Neuro Council, Eindhoven, The Netherlands,
11/11/08 "Connections and Chemicals: Imaging at 3T", Robarts Research Institute
2/12/09 "Tales of Two Contrasts: PARACEST Acquisitions and Myelin Imaging", F.M. Kirby Center, Kennedy Krieger Institute, Baltimore MD
22/2/11 "Frequency Mapping Without Phase Wraps", ISMRM International Workshop on Ultra-High Field Systems & Applications; Lake Louise, AB, Canada.
8/21/11 "CEST MRI of White Matter", International Workshop on Advanced White Matter Imaging, Hilton Reykjavik, Reykjavik Iceland.

10/19/23 “Medical AI: Uncertainty and Artifacts”, L’institut de chirurgie guidée par l’image de Strasbourg (IHU Strasbourg, France)
13/02/24 “Medical AI: Uncertainty and Artifacts”, Children’s Hospital of Philadelphia.
07/05/24 “Artificial Intelligence in Retinal Image Analysis”, USA - China Networking Forum session at the 2024 ARVO Annual Meeting.
05/04/25 ”CAPS Consortium AI Project”, DDW Conference, San Diego CA (video talk).
05/20/25 “Pixels to Prognosis: AI in Medical Imaging”, Department of Computer Science, Dalhousie University, Halifax NS.
09/03/25 “Pixels to Prognosis: AI in Medical Imaging”, Department of Radiology, University of Alberta, Edmonton AB.
12/02/25 “Pixels to Prognosis: Leveraging Priors in AI-Driven Medical Imaging”, Department of Electrical and Computer Engineering, University of Alberta, Edmonton AB.

External Scientific / Teaching Advisor

2025-present African Medical Imaging Knowledge Translation (SPARK) Academy as part of CAMERA

Institutional Administrative Appointments / Judge

2018-2019 Video Working Group, Space Telescope Science Institute
2019 DDRF Grant Review Committee, Space Telescope Science Institute
2022 Science Fair Judge, HopHacks 2022 at Johns Hopkins University
2024 Science Fair Judge, HopHacks 2024 at Johns Hopkins University
2019-2025 Member, Data Science Sub-Committee, Precision Medicine Analytics Platform, JHMI
2019-2025 Member, Imaging Sub-Committee, Precision Medicine Analytics Platform, JHMI

Inventions, Patents, Copyrights

7/21/06 Co-Author [Peter C. M. Van Zijl]. Non-invasive MRI measurement of tissue glycogen. US7683617B2, awarded 03/23/10
5/21/13 Co-Author [Stefan E. Fischer, Melanie Suzanne KOTYS]. Multi-echo presto. EP2852320A1, awarded 3/27/19
08/15/22 Co-Author[Patrick A. Helm,Jeffrey H. Siewerdsen,Ali Uneri,Yixuan HUANG, Xiaoxuan Zhang]. System and Method for Identifying Feature in an Image of a Subject. US20230169676A1

Publications

Original Research [OR]

1. Mitchell JR, **Jones C**, Karlik SJ, Lee D.H, Rutt B, Fenster A. ”Magnetic Resonance Multispectral Analysis of Multiple Sclerosis Lesions”, J Magn Reson Imag 1997; 7 (3).
2. **Jones CK**, MacKay A, Rutt B. ”Bi-Exponential T2 Response in Dairy Cream”, Magn Reson Imag 1998;16(1):83-85.
3. Whittall KP, MacKay AL, Li DKB, Vavasour IM, **Jones CK**, Paty DW. ”Normal-Appearing White Matter in Multiple Sclerosis has Heterogeneous, Diffusely Prolonged T2 ”, Magn Reson Med 2002;47(2):408-413.

4. **Jones CK**, Whittall KP, MacKay AL. ”Robust Myelin Water Quantification: Averaging vs Spatial Filtering”, Magn Reson Med 2003;50(1):206-209.
5. **Jones CK**, Xiang QS, Whittall KP, MacKay AL. ”Short T2 Selection From Linear Combination of Images”, Magn Reson Med 2004;51(3):495-502.
6. Smith SA, Golay X, Fatemi A, **Jones CK**, Raymond GV, Moser HW, van Zijl PCM. ”Magnetization Transfer Weighted Imaging in the Upper Cervical Spinal Cord Using Cerebrospinal Fluid as Intersubject Normalization Reference (MTCSF Imaging)”, Magn Reson Med 2005;54:201-206.
7. Smith SA, Farrell JAD, **Jones CK**, Reich DS, Calabresi PA, van Zijl CM. ”Pulsed Magnetization Transfer Imaging with Body Coil Transmission at 3 Tesla: Feasibility and Application”, Magn Reson Med. 2006 Oct;56(4):866-75.
8. Donahue MJ, Lu H, **Jones CK,** Pekar JJ, van Zijl PCM. ”An Account of the Discrepancy between MRI and PET Cerebral Blood Flow Measures. A High-field MRI Investigation”. NMR in Biomed, Aug 31, 2006.
9. **Jones CK**, Schlosser MJ, van Zijl PCM, Pomper MG, Golay XX, Zhou J. ”Amide Proton Transfer Imaging of Human Brain Tumors at 3T”, Magn Reson Med. 2006 Sep;56(3):585-92.
10. Donahue MJ, Lu H, **Jones CK,** Edden RA, Pekar JJ, van Zijl PC. ”Theoretical and experimental investigation of the VASO contrast mechanism.” Magn Reson Med. 2006 Dec;56(6):1261-73.
11. Reich DS, Smith SA, **Jones CK**, Zackowski KM, van Zijl PC, Calabresi PA, Mori S. ”Quantitative characterization of the corticospinal tract at 3T.” AJNR Am J Neuroradiol. 2006 Nov-Dec;27(10):2168-78.
12. Kirwan, CB, **Jones CK**, Miller M, Stark CEL. ”High-Resolution fMRI Investigation of the Medial Temporal Lobe”, Human Brain Mapping. 2007 Oct; 28(10):959-966.
13. van Zijl PC, **Jones CK**, Ren J, Malloy CR, Sherry AD. ”MRI detection of glycogen in vivo by using chemical exchange saturation transfer imaging (glycoCEST)”, Proc Natl Acad Sci U S A., Mar 13;104(11):4359-64. Epub 2007 Mar 5.
14. Landman BA, Farrell JAD, **Jones CK**, Smith SA, Prince JL, Mori S. ”Effects of diffusion weighting schemes on the reproducibility of DTI-derived fractional anisotropy, mean diffusivity, and principal eigenvector measurements at 1.5T”, Neuroimage. 2007 Jul 15;36(4):1123-38.
15. Farrell JAD, Landman BA, **Jones CK**, Prince JL, Mori S. ”Effects of signal-to-noise ratio on the accuracy and reproducibility of diffusion tensor imaging-derived fractional anisotropy, mean diffusivity, and principal eigenvector measurements at 1.5 T.”, J Magn Reson Imaging. 2007 Sep;26(3):756-67.
16. Reich DS, Smith SA, Zackowski K, Gordon-Lipkin EM, **Jones CK**, Farrell JA, Mori S, van Zijl PCM, Calabresi PA. ”Multiparametric magnetic resonance imaging analysis of the corticospinal tract in multiple sclerosis.”, Neuroimage. 2007 Aug 15; [Epub ahead of print].
17. Hua J, **Jones CK**, Sun PZ, van Zijl PCM, Salhotra A, Lal B, Laterra J, Zhou J. ”Quantitative Description of the Asymmetry in Magnetization Transfer Effects Around the Water Resonance in the Human Brain ”, Magn Reson Med. 2007 Sep;58(4):786-793.
18. Li AX, Wojciechowski F, Suchy M, **Jones CK**, Hudson RHE, Menon RS, Bartha R. “A Sensitive PARACEST Contrast Agent for Temperature MRI: Eu3+-DOTAM-Gly-Phe”, Magn Reson Med. 2008 Feb;59(2):374-381.
19. Li AX, Hudson RHE, Barrett JW, **Jones CK**, Pasternak SH, Bartha R. “Four-Pool Modeling of Proton Exchange Processes in Biological Systems in the Presence of MRI-PARACEST Agents”, Magn Reson Med. 2008 Nov;60(5):1197-1206.
20. Li AX, Suchy M, **Jones CK**, Hudson RH, Menon RS, Bartha R. “Optimized MRI contrast for on-resonance proton exchange processes of PARACEST agents in biological systems.”, Magn Reson Med. 2009 Nov;62(5):1282-91.

21. Smith SA, **Jones CK**, Gifford A, Belegu V, Chodkowski B, Farrell JAD, Landman BA, Reich DS, Calabresi PA, McDonald JW, van Zijl PCM. "Reproducibility of Tract-specific Magnetization Transfer and Diffusion Tensor Imaging in the Cervical Spinal Cord at 3 Tesla", NMR in Biomedicine. 2010 Feb;23(2):207-217.
22. **Jones CK**, Li A, Suchy M, Hudson R, Menon RS, Bartha R. "In Vivo Detection of PARACEST Agents with Relaxation Correction", Magn Reson Med. 2010 May;63(5):1184-92.
23. Hutchison RM, Mirsattari S, **Jones CK**, Gati J, Leung LW. " Functional networks in the anesthetized rat brain revealed by independent component analysis of resting-state fMRI", J Neurophysiol. 2010 Apr 21. [Epub ahead of print].
24. Zhu H, **Jones CK**, van Zijl PC, Barker PB, Zhou J. "Fast 3D chemical exchange saturation transfer (CEST) imaging of the human brain", Magn Reson Med. 2010 Sep;64(3):638-44.
25. Prasloski T, Madler B, Xiang QS,, MacKay AL, **Jones CK**. "Applications of stimulated echo correction to multicomponent T2 analysis", Magn Reson Med. 2011 online 19 Oct.
26. **Jones CK**, Polders D, Hua J, Zhu H, Hoogduin H, Zhou J, Luijten P, van Zijl PCM. "In Vivo Three Dimensional Whole-Brain Pulsed Steady-State Chemical Exchange Saturation Transfer at 7T", Magn Reson Med. 2012 Jun;67(6):1579-89.
27. Li X, Vikram DS, Lim IA, **Jones CK,** Farrell JA, van Zijl PC. "Mapping magnetic susceptibility anisotropies of white matter in vivo in the human brain at 7T.", Neuroimage. 2012 Apr 28. [Epub ahead of print].
28. Wood ET, Ronen I, Techawiboonwong A, **Jones CK**, Barker PB, Calabresi P, Harrison D, Reich DS. "Investigating Axonal Damage in Multiple Sclerosis by Diffusion Tensor Spectroscopy", J Neurosci. 2012 May 9;32(19):6665-6669.
29. Hua J, **Jones CK**, Qin Q, van Zijl PCM. "Implementation of vascular-space-occupancy MRI at 7T", Magn Reson Med. 2013 Apr;69(4):1003-13.
30. Yadav NN, **Jones CK**, Xu J, Bar-Shir A, Gilad AA, McMahon MT, van Zijl PCM. "Detection of rapidly exchanging compounds using onresonance frequency labeled exchange (FLEX) transfer", Magn Reson Med 2012. Accepted.
31. Oh J, Zackowski K, Chen M, Newsome S, Saidha S, Smith SA, Diener-West M, Prince J, **Jones CK**, van Zijl PC, Calabresi PA, Reich DS. "Multiparametric MRI correlates of sensorimotor function in the spinal cord in multiple sclerosis.", Mult Scler. 2012 Aug 13.
32. Oh J, Saidha S, Chen M, Smith SA, Prince J, **Jones CK,** Diener-West M, van Zijl PC, Reich DS, Calabresi PA. "Spinal cord quantitative MRI discriminates between disability levels in multiple sclerosis", Neurology. 2013 Jan 16. [Epub ahead of print].
33. Yadav NN, **Jones CK**, Hua J, Xu J, van Zijl PC. "Imaging of endogenous exchangeable proton signals in the human brain using frequency labeled exchange transfer imaging.", Magn Reson Med. 2013 Apr;69(4):966-73.
34. **Jones CK**, Huang A, Xu J, Edden RA, Schär M, Hua J, Oskolkov N, Zacà D, Zhou J, McMahon MT, Pillai JJ, van Zijl PC. "Nuclear Overhauser Enhancement (NOE) Imaging in the Human Brain at 7T", Neuroimage. 2013 Apr 5.
35. Lim IAL, Li X, **Jones CK,** Farrell JAD, Vikram DS, van Zijl PCM. "Quantitative magnetic susceptibility mapping without phase unwrapping using WASSR", NeuroImage 86, 265-279.
36. Xu J, Yadav NN, Bar‐Shir A, **Jones CK**, Chan KWY, Zhang J, Walczak P. "Variable delay multi‐pulse train for fast chemical exchange saturation transfer and relayed‐nuclear overhauser enhancement MRI", Magnetic Resonance in Medicine 71 (5), 1798-1812.
37. Leal SL, Tighe SK, **Jones CK**, Yassa MA. "Pattern separation of emotional information in hippocampal dentate and CA3", Hippocampus 24 (9), 1146-1155.
38. Hua J, Qin Q, van Zijl PCM, Pekar JJ, **Jones CK**. "Whole-brain three-dimensional T2-weighted BOLD functional magnetic resonance imaging at 7 Tesla", Magnetic Resonance in Medicine 72 (6), 1530-1540. DOI: https://doi.org/10.1002/mrm.25055.

39. Leal SL, Tighe SK, **Jones CK**, Yassa MA. “Pattern separation of emotional information in hippocampal dentate and CA3”, Hippocampus. 2014 Sep;24(9):1146-55. doi: 10.1002/hipo.22298. Epub 2014 May 30.
40. Harrison DM, Oh J, Roy S, Wood ET, Whetstone A, Seigo MA, **Jones CK**, Pham D, van Zijl P, Reich DS, Calabresi PA. “Thalamic lesions in multiple sclerosis by 7T MRI: Clinical implications and relationship to cortical pathology”, Mult Scler. 2015 Aug;21(9):1139-50. doi: 10.1177/1352458514558134. Epub 2015 Jan 12.
41. Li X, Harrison DM, Liu H, **Jones CK**, Oh J, Calabresi PA, van Zijl PC. “Magnetic susceptibility contrast variations in multiple sclerosis lesions.”, J Magn Reson Imaging. 2015 Jun 14. doi: 10.1002/jmri.24976.
42. Harrison DM, Roy S, Oh J, Izbudak I, Pham D, Courtney S, Caffo B, **Jones CK**, van Zijl PCM, Calabresi PA,.“Association of Cortical Lesion Burden on 7-T Magnetic Resonance Imaging With Cognition and Disability in Multiple Sclerosis”, JAMA Neurol. 2015 Jul 20. doi: 10.1001/jamaneurol.2015.1241.
43. Xu X, Yadav NN, Zeng H, **Jones CK,** Zhou J, van Zijl PCM, Xu J. “Magnetization transfer contrast–suppressed imaging of amide proton transfer and relayed nuclear overhauser enhancement chemical exchange saturation transfer effects in the human brain at 7T”, Magn Reson Med. 2015 Oct 7. doi: 10.1002/mrm.25990.
44. Choe AS, **Jones CK**, Joel SE, Muschelli J, Belegu V, Caffo BS, Lindquist MA, van Zijl PC, Pekar JJ, “Reproducibility and Temporal Structure in Weekly Resting-State fMRI over a Period of 3.5 Years”, PLoS One. 2015 Oct 30;10(10):e0140134. doi: 10.1371/journal.pone.0140134. PMID: 25583851
45. Harrison DM, Oh J, Roy S, Wood ET, Whetstone A, Seigo MA, **Jones CK**, Pham D, van Zijl P, Reich DS, Calabresi PA, “Thalamic lesions in multiple sclerosis by 7T MRI: Clinical implications and relationship to cortical pathology.” Mult Scler. 2015 Aug;21(9):1139-50. doi: 10.1177/1352458514558134. Epub 2015 Jan 12.
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38. Akhlaq A, Kherani SA, **Jones CK**, Campochiaro PA, Liu TYA. "Artificial Intelligence Algorithm to Predict Best-Corrected Visual Acuity from Optical Coherence Tomography in Patients with Neovascular Age-Related Macular Degeneration". ARVO Annual Meeting 2021. (#3546218)
39. Wu P, Sisniega A, Uneri A, Han R, **Jones CK**, Vagdargi P, Zhang X, Luciano M, Anderson WS, Siewerdsen JH. "Using Uncertainty in Deep Learning Reconstruction for Cone-Beam CT of the Brain". Fully3D 2021, ID:186
    Poster Award
40. Zhang X, Wu P, Huang Y, Uneri A, **Jones CK**, Helm PA, Zbijewski W, Siewerdsen JH. "Intraoperative Cone-Beam CT Image Quality and Dose with a Slot Collimator on the O-arm™," AAPM 63rd Annual Meeting (Virtual, July 25-29, 2021). Paper No. 56969 (accepted for oral presentation).
41. Huang Y, Uneri A, **Jones CK**, Zhang X, Ketcha MD, Aygun N, Helm PA, Siewerdsen JH. "Ortho2D: An Accurate, Memory-Efficient Framework for 3D Vertebrae Labeling," AAPM 63rd Annual Meeting (Virtual, July 25-29, 2021). Paper No. 58600. (accepted for an interactive poster presentation).
42. Yi PH, **Jones CK**, Tsehay Y, Soong J, Kim TK, Hostetter J, Marsh E, Hui FK, Sair HI. "Deep Learning Detection of Large Vessel Occlusion on CTA Head Using Small Datasets: Comparison of 2D and 3D Neural Network Approaches." Scientific Poster, Radiological Society of North America 107th Scientific Assembly and Annual Meeting, Chicago, IL. 2021
43. Han R, **Jones CK**, Wu P, Vagdargi P, Zhang X, Uneri A, Lee J, Luciano M., Anderson WS, Helm PA, Siewerdsen JH. "Deformable Registration of MRI to Intraoperative Cone-Beam CT of the Brain Using a Joint Synthesis and Registration Network." SPIE Medical Imaging, 2022. SPIE Medical Imaging 2022, MI104-12034 (accepted for oral presentation).
44. Huang Y, **Jones CK**, Zhang X, Johnston A, Aygun A, Witham TF, Helm PA, Siewerdsen JH, Uneri A. "Automatic Labeling of Vertebrae in Long-Length Interventional Images with a Multi-Appearance, Region-Based CNN," SPIE Medical Imaging 2022 (San Diego, 20 - 24 February 2022). Paper No. MI104-75.
45. Vagdargi P, Uneri A, **Jones CK**, Wu P, Han R, Luciano M, Anderson WS, Helm PA, Hager GD, Siewerdsen JH. "Robot-Assisted Neuroendoscopy for Real-Time 3D Guidance of

Transventricular Approach to Deep-Brain Targets" SPIE Medical Imaging, 2022. SPIE Medical Imaging 2022, MI104-12034-13 (accepted for oral presentation).

46. Gao Y, Chen H, Caballero C, Cai S, **Jones CK**, Scott A, Unberath M. "An interpretable approach to identifying sea fan neovascularization in ultra-widefield color fundus photographs of patients with sickle cell hemoglobinopathy." SPIE Medical Imaging, 2022. SPIE Medical Imaging 2022, MI104-12033-95 (accepted for poster presentation).
47. Zhang X, Wu P, Zbijewski WB, Sisniega A, Han R, **Jones CK**, Vagdargi P, Uneri A, Helm PA, Anderson WS, Siewerdsen JH. "DL-Recon: Combining 3D Deep Learning Image Synthesis and Model Uncertainty with Physics-Based Image Reconstruction. " CT Meeting 2022 (Oral Presentation)
    Most Innovative Paper Award
48. Scott A, **Jones C,** Unberath M. "Development of an Interpretable Deep Learning Algorithm for Detection of Proliferative Sickle Cell Retinopathy." 45th Annual Macula Society Meeting, Berlin, Germany. Deep Learning & Artificial Intelligence Session on June 09, 2022 at 7:00 AM - 7:09 AM.
49. Khalil A, Laguna A, Gowda P, Gong A, Garg T, Weinstein R, Hamam O, Ring N, England R, **Jones C**, Weiss C. "MRI Radiomics Correlate with Clinical Outcomes of Peripheral Venous Malformations Following Percutaneous Sclerotherapy". 2022 Society of Advanced Body Imaging (SABI) Annual Scientific Meeting.
50. Huang Y, Zhang X, Johnston A, **Jones CK**, Siewerdsen JH, Zbijewski W, Helm PA, Judy B, Sacino A, Bydon A, Witham TF, Uneri A. "Multi-Modality Registration of Preoperative MR and Intraoperative Long-Length Tomosynthesis Using GAN Synthesis and 3D-2D Registration," SPIE Medical Imaging 2023 (San Diego, 19 - 23 February 2023). Paper No. 12466-48.
51. Cornelio A, Jones CK, Kashani AH, "Automated Pipeline for OCTA Image Denoising", Invest. Ophthalmol. Vis. Sci.. 2023; 64(8):2366.
52. Cornelio A, **Jones C**, Kashani AH, "Volume Alignment and Secondary Analysis of OCT and OCTA", Invest. Ophthalmol. Vis. Sci.. 2024; 65(7):5937.
53. Sumpena E, Kashani, AH, **Jones C**, "Unsupervised Artifact Detection in 3D OCTA Microvascular Imaging based on Generative Adversarial Networks", Invest. Ophthalmol. Vis. Sci.. 2024; 65(7):1582.
54. Yan Y, Melki D, Mandaleeka PS, Diwan EA, Goggins M, Vedula SS, Canto M, **Jones C**, Akshintala V, "Machine Learning Analysis of Endoscopic Ultrasonography Texture and Clinical Information Predicts Pancreatic Neoplastic Progression in High-Risk Individuals within 18 Months", Digestive Disease Week (DDW) 2024, Washington DC, May 18, 2024, #90.
55. Kan S, **Jones C**, Oishi K, "Multiview Transformer for Brain Age Prediction", 150th Annual Meeting of the American Neurological Association (ANA2025), September 13-16, 2025, Baltimore, MD. (***Presentation During Plenary Session - ANA Emerging Scholars Program***)

<u>Poster Presentations</u>

1. **Jones CK**, Rutt BK. "Quantitative Accurate T2 Comparison Between Multi-Echo 3D FSE and CSE Imaging". Presented at the Annual Meeting of the Society of Magnetic Resonance. Nice, France, August 19-25, (1995). Page 1065.
2. **Jones CK**, Li DKB, Whittall KP, Paty DW, "Automatic Registration of Volumes with Large MS Lesion Load Change". Proceedings of the International Society of Magnetic Resonance in Medicine. Denver, CO, April 1-8, (2000). Page 1750.
3. **Jones CK**, Whittall KP, Li DKB, Paty DW. "Underdetermined Problems of Tissue Fraction Quantification in MS Patients". Proceedings of the International Society of Magnetic Resonance in Medicine. Denver, CO, April 1-8, (2000). Page 1759.

4. **Jones CK**, Whittall KP, MacKay AL, ”Validation of Anisotropic Filtering for Myelin Water Maps”. Proceedings of the International Society of Magnetic Resonance in Medicine. Glasgow, Scotland, April 21-27, (2001). Page 820.
5. Whittall KP, MacKay AL, Li DKB, Vavasour I, **Jones CK**, Paty DW. ”MS Normal Appearing White Matter has Heterogeneous Diffusely Prolonged T2 ”. Proceedings of the International Society of Magnetic Resonance in Medicine. Glasgow, Scotland, April 1-8, (2001). Page 1413.
6. **Jones CK,** Li DKB, Zhao GJ, Paty DW. ”Atrophy Measurements in Multiple Sclerosis”. Proceedings of the International Society of Magnetic Resonance in Medicine. Glasgow, Scotland, April 1-8, (2001). Page 1414.
7. **Jones CK**, Wong EB. ”A Multi-Scale Application of the N3 Method for Intensity Correction of MR Images”, Proceedings of SPIE: Image Processing 4684:1123-1129, 2002.
8. Wong EB, **Jones CK**. ”Convex Geometry for Rapid Tissue Classification in MRI”, Proceedings of SPIE: Image Processing 4684:1524-1530, 2002.
   Poster: Honorable Mention
9. **Jones CK,** Xiang QS, Whittall KP, MacKay AL. ”Multi-Echo Linear Combination for Myelin Water Imaging”. Proceedings of the International Society of Magnetic Resonance in Medicine. Honolulu, HI, May 18-24, (2002). Page 2289
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11. Reich DS, Smith SA, **Jones CK**, Dube P, Zackowski KM, Mori S, Calabresi PA. ”Abnormalities in white matter fiber tracts in MS revealed by diffusion tensor imaging: effects at and distant from demyelinating lesions” Proceedings of the American Academy of Neurology. South Miami Beach, April 9-16, (2005).
12. Reich DS, Wakana S, Smith SA, **Jones CK**, Calabresi PA, Mori S, ”Differences between the right and left corticospinal tracts in normal adults, revealed by quantitative MRI” American Society of Neuroradiology. Toronto, ON. May 21-27, (2005).
13. Mutihac R, Schafer JG, **Jones CK**, Gillen JS, Mostofsky SH, Boyce AC, Goldberg MC, Denckla MB, Courtney SM, Kraut MA, Calhoun VD, Adali T, Pekar JJ. ”Listening to the Scanner: Modulation of Auditory Perception During Visuo-Motor fMRI”. Proceedings of the International Society of Magnetic Resonance in Medicine. Miami Beach, FL, May 7-13, (2005). Page 2682.
14. **Jones CK**, Schlosser MJ, van Zijl PC, Pomper MG, Golay X, Zhou J. ”Amide Proton Transfer Imaging of Human Brain at 3T”. Proceedings of the International Society of Magnetic Resonance in Medicine. Miami Beach, FL, May 7-13, (2005). Page 1256.
15. **Jones CK**, Serences JT, Yantis S, Mori S, Pekar JJ, van Zijl PC, ”Retinotopic Connectivity Revealed by DTI”. Proceedings of the International Society of Magnetic Resonance in Medicine. Miami Beach, FL, May 7-13, (2005). Page 1518.
16. Donahue MJ, **Jones CK**, Lu H, van Zijl PC. ”A Proposed Solution for Reconciling the Cerebral Blood Flow Discrepancy Between PET and MRI”. Proceedings of the International Society of Magnetic Resonance in Medicine. Miami Beach, FL, May 7-13, (2005). Page 1147.
17. Kirwan B, Flanery MA, **Jones CK**, Pekar JJ, Stark CCE. ”High-Resolution fMRI Investigation of the Medial Temporal Lobe”, 35th Annual Meeting of the Society for Neuroscience, Washington DC, Nov 12-16, (2005). Program No. 315.11.
18. Smith SA, Reich DS, **Jones CK**, van Zijl PCM, Calabresi PA. ”High resolution magnetization transfer MRI at 3T demonstrates tract-specific MS pathology in the cervical spinal cord”. American Academy of Neurology for 2006 annual meeting.
19. **Jones CK**, Schlosser MJ, van Zijl PCM, Pomper MG, Zhou J, ”Amide Proton Transfer Imaging of Human Brain Tumors Distinguishes Tumor from Brain Tissue at the Periphery”. Proceedings of the International Society of Magnetic Resonance in Medicine. May 6-12 (2006). pg 428.

20. **Jones CK**, Ren J, Malloy C, Sherry AD, van Zijl PCM. ”MRI Detection of Glycogen (GlycoCEST)”. Proceedings of the International Society of Magnetic Resonance in Medicine. May 6-12 (2006). pg 2482.
    Poster Award: First Place (Data Processing)
21. **Jones CK**, Smith SA, McDonald JW, Farrell JA, Calabresi PA, Mori S, van Zijl PCM. ”Myelation and Axonal Integrity of Spinal Cord Sensory and Motor Pathways Revealed by Diffusion Tensory MRI”. Proceedings of the International Society of Magnetic Resonance in Medicine. May 6-12 (2006). pg 2718.
22. **Jones CK**, Smith SA, McDonald JW, Farrell JAD, Calabresi PA, Mori S, van Zijl PCM. ”Quantitative MRI Assessment of Sensory and Motor Tracts in Cervical Spinal Cord”. Imaging Myelin Workshop – International Society of Magnetic Resonance in Medicine, 2006.
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23. Zhou J, Blakeley J, **Jones CK**, Laterra J, van Zijl PCM. ”Amide Proton Transfer (APT) Contrast and Conventional MT Contrast for Imaging Human Brain Tumors”. Gordon Research Conference – In Vivo Magnetic Resonance, 2006.
24. Courtney S, Zhou F, Sayala S, **Jones CK**. Frontal-extrastriate Neural Pathways for Spatial and Non-spatial Working Memory: A DTI and fMRI Study in Normal and MS Subjects”. Society for Neuroscience, 2006. Page 569.7.
25. Li AX, **Jones CK**, Wojciechowski F, Suchy M, Hudson RHE, Menon RS, Bartha R. ”Temperature Imaging with a MRI-PARACEST Contrast Agent: Eu-DOTAM-Gly-Phe”,Proceedings of the International Society of Magnetic Resonance in Medicine. Berlin, Germany, May 19-25 (2007). pg 3402.
26. **Jones CK**, Bartha R., Menon RS. ”Sub-Millimolar PARACEST Detection Using EPI-CEST”,Proceedings of the International Society of Magnetic Resonance in Medicine. Berlin, Germany, May 19-25 (2007). pg 1163.
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29. Li AX, **Jones CK**, Suchy M, Menon RS, Hundson RHE, Bartha R. ”Optimized Contrast for On-Resonance Proton Exchange Processes of MRI-PARACEST Agents in Biological Systems”,Proceedings of the International Society of Magnetic Resonance in Medicine. Toronto, Canada, May 3-9 (2008). pg 1440.
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31. Curtis AT, Anand CK, **Jones CK**, Klassen LM, Menon RS. “Numerical Optimization of Minimum Phase RF Pulses for UTE Imaging”, Proceedings of the International Society of Magnetic Resonance in Medicine. Honolulu, HI, Apr 18-24 (2009). pg 2578.
32. **Jones CK**, Li AX, Menon RS, Bartha R. “Increased CNR in On-Resonance PARACEST Imaging”, Proceedings of the International Society of Magnetic Resonance in Medicine. Honolulu, HI, Apr 18-24 (2009). pg 909.
33. Oduneye SO, **Jones CK**, Menon RS. “4-Channel Transceive Surface Coil Array for Reduction of EPI-Induced Artifacts Using SENSE and GRAPPA”, Proceedings of the International Society of Magnetic Resonance in Medicine. Honolulu, HI, Apr 18-24 (2009). pg 2990.

34. Culham JC, Roebroeck A, Pullens WLPM., **Jones CK**, Khan SA, Dutton GN, Goodale MA, Goebel R. “Anatomical and functional connectivity in a patient with preserved motion awareness and visuomotor functions despite large bilateral occipitotemporal lesions.” Society for Neuroscience, Chicago, IL. Accepted.
35. Burneo JG, Bartha R, **Jones C**,.“ Multimodality Imaging in Patients with Epilepsy and Malformations of Cortical Development (MCD): FMRI, MRS and DTI”, Annual Epilepsy Society. Accepted
36. Campbell A, Li A, **Jones C**, Bartha R. “Optimized PARACEST Signal Detection by Echo-Planar Imaging”, Proceedings of the International Society of Magnetic Resonance in Medicine. Stockholm, SE, May 1-7 (2010). pg 2989.
37. Zhu H, **Jones C**, Hua J, Ouwerkerk R, van Zijl P, Barker P, Zhou J. “Highly Accelerated 3D Amide Proton Transfer (APT) Imaging of the Whole Brain at 3T Using a 32-Channel Phased-Array Coil”, Proceedings of the International Society of Magnetic Resonance in Medicine. Stockholm, SE, May 1-7 (2010). pg 5140.
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39. Lim IA, Farrell JA, **Jones CK**, Vikram DS, Renjifo CA, Li X, van Zijl PCM. “Frequency Mapping without Phase Wraps”, Proceedings of the International Society of Magnetic Resonance in Medicine. Montreal, Canada, May 7-13 (2011). pg 4531.
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41. **Jones CK,** Huang A, van Zijl PCM., “Exchange-Relayed Nuclear Overhauser Effect MRI”, Proceedings of the International Society of Magnetic Resonance in Medicine. Montreal, Canada, May 7-13 (2011). pg 2735.
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46. Doerr SA, Uneri A, Zhang X, Ketcha MD, Helm PA, **Jones CK**, Siewerdsen JH. “Data-driven detection and registration of spine surgery instrumentation in intraoperative images”. SPIE Medical Imaging. February 15-20, 2020. (Cum Laude Winner)
47. Zhang X, Uneri A, Wu P, Ketcha MD, Doerr SA, **Jones CK**, Helm PA, Siewerdsen JH. “Multi-Slot Extended View Imaging on the O-Arm: Image Quality and Application to Intraoperative Assessment of Spinal Morphology,” SPIE Medical Imaging Conference & Exhibition (Houston, February 15-20, 2020). Paper #11315-76. https://doi.org/10.1117/12.2549876
48. Wu P, Sisniega A, Uneri A, Ketcha A, **Jones CK**, Zhang X, Vagdargi P, Luciano M, Anderson WS, Siewerdsen JH. "An Accelerated Artifacts Correction Pipeline for High-Quality

Intraoperative Cone-Beam CT in Neuro-Navigation." RSNA Annual Meeting, 2020. (Accepted, Poster PH-1A-48)

49. **Jones CK**, Yi PH, Sair HI. “Vascular Tensor Imaging: Artery Direction Maps for Improved Visualization and Processing of CT Angiography Images”. RSNA Annual Meeting 2020.
50. Raman AG, Khalil A, **Jones CK**, Weiss CR. Machine Learning for the Radiologist: A How to Guide on Image Segmentation. Society of Interventional Radiology Annual Scientific Meeting 2022. (Poster Presentation)
51. Raman AG, Weiss CR, **Jones CK**. Federated Learning in Interventional Radiology: A Brief Review. Society of Interventional Radiology Annual Scientific Meeting 2022. (Poster Presentation)
52. Dhar A, Lee K, Sair H, **Jones C.** Automating Tortuosity Calculations in Cerebral Blood Vessels. Johns Hopkins Neuroscience and NeuroHIV Comorbidities Scholars Programs Symposium 2022. (Poster Presentation)
53. Mandaleeka PS, Diwan EA, Akshintala V, Vedula S, **Jones C**, Canto MI. “Endoscopic Ultrasound Texture Features Predict
54. Raman AG, Khalil A, Weiss CR, **Jones C**, “Automated Neural Network Segmentation of Venous Malformations”, JHU Radiology Research Day, 2022.
55. Khalil A, Laguna AR, Mehta T, Gowda P, Gong A, Garg T, Weinstein R, Ring N, England R, Gullotti D, **Jones C**, Weiss CR. “Quantitative MRI-based Radiomic Analysis of Percutaneous Sclerotherapy Outcomes in Peripheral Extremity Venous Malformations”, JHU Radiology Research Day, 2022.
56. Balamurali S, Dhar A, Lee K, Sair H, Yedavalli V, **Jones C.** “Automating Tortuosity Calculations in Cerebral Blood Vessels”, JHU Radiology Research Day, 2022.
57. Ghate S, Latheef A, Hui Z, Santamaria-Pang A, Tarapov I, **Jones C**, Sair H, “Deep Labeling of fMRI Brain Networks”, JHU Radiology Research Day, 2022.
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58. Guo Y, Caffo B, Santamaria-Pang A, Tarapov I, Sair H, **Jones C**. “Sequential Learning in Radiology for Incrementally Available Datasets”, JHU Radiology Research Day, 2022.
59. Kambli H, Santamaria-Pang A, Tarapov I, Sair H, **Jones C.** “ Atlas Based Functional Labeling of Resting State fMRI”, JHU Radiology Research Day, 2022.
60. Wang F, Ghate S, **Jones C**, Agarwal S, Gujar S, Sair H. “Static and dynamic functional connectivity of language task fMRI using graph theory”, JHU Radiology Research Day, 2022.
61. Cornelio A, **Jones C**, Kashani AH, “Volume Alignment and Secondary Analysis of OCT and OCTA”, Annual ARVO Meeting in Seattle WA, Poster B0538, May 9, 2024.
62. Sumpena E, Kashani, AH, **Jones C**, “Unsupervised Artifact Detection in 3D OCTA Microvascular Imaging based on Generative Adversarial Networks”, Annual ARVO meeting in Seattle WA, Poster A0216, May 6, 2024.
63. Duan R, Kim A, Khalil A, Weiss CR, **Jones C**, “Fully Automated Segmentation of Venous Malformations in Multiple Body Regions Based on a Large-Scale Magnetic Resonance Imaging Dataset”, Society of Interventional Radiology, Annual Scientific Meeting, Salt Lake City UT, Mar 23, 2024 - Mar 27, 2024.
64. Lefcourt S, Kim AJ, Weiss CR, **Jones C**, “Automated Phlebolith and Fluid-Fluid Level Biomarker Detection in Venous Malformations”, Society of Interventional Radiology, Annual Scientific Meeting, Nashville TN, Mar 29, 2025 - Apr 02, 2025, Poster #38.
65. Sumpena E, Cornelio A, Seshadri S, Beiser A, Wang DJJ, Ringman JM, Kashani AH, **Jones C**, “Spatial Diffusion: A Self-Supervised Deep Learning Algorithm for Artifact-Resilient 3D OCTA Registration”, Annual ARVO meeting in Salt Lake City UT, Poster A0103, May 5, 2025.
66. **Jones C**, Sumpena E, Cornelio A, Seshadri S, Beiser A, Kashani AH, “Quantitative Study on the Generalizability of 3D OCTA Artifact Detection with OCTA-GAN”, Annual ARVO meeting in Salt Lake City UT, Poster A107, May 5, 2025.

67. Kim A, Lefcourt S, Khalil A, Ma S, **Jones C**, Weiss C. Comprehensive radiomic analysis of treatment-induced changes in MRI features predict symptomatic improvement in patients with venous malformations following serial sclerotherapy. Presented at: CIRSE 2025 Annual Congress; 2025; Barcelona, Spain. Paper No. 628.
68. Kim A, Lefcourt S, Khalil A, Ma S, **Jones C,** Weiss C. Machine learning–based radiomic analysis of pre-treatment MRI predicts single vs multiple sclerotherapy sessions in patients with venous malformations. Presented at: CIRSE 2025 Annual Congress; 2025; Barcelona, Spain. Paper No. 629.
69. Kim A, Lefcourt S, Khalil A, Ma S, **Jones C,** Weiss C. Machine learning–based radiomic analysis of pre-treatment MRI predicts single vs multiple sclerotherapy sessions in patients with venous malformations. Presented at: CIRSE 2025 Annual Congress; 2025; Barcelona, Spain. Paper No. 55978.
70. Kan S, **Jones C**, Oishi K, "Multiview Transformer for Brain Age Prediction", 150th Annual Meeting of the American Neurological Association (ANA2025), September 13-16, 2025, Baltimore, MD. (***Poster Award [link]***)

Community Services

2004-Present Volunteer Firefighter/EMT in Baltimore County MD (highest position: Assistant Chief)
2018-Present Foster Dogs through the Maryland SPCA