CURRICULUM VITAE

Jinsong Ouyang, PhD

Education

09/1982-08/1986 BS, Physics, Nanjing University, Nanjing, Jiangsu, China
09/1987-08/1992 Ph.D., Physics, University of Colorado, Boulder, CO

Career/Academic Appointments

09/1992-08/1995 Postdoctoral Fellow, Department of Physics, Boston University, MA
10/1996-12/1999 Research Associate, TRIUMF (Canada's particle accelerator center), Vancouver, BC, Canada
01/2000-08/2003 Senior Physicist, Digital Scintigraphics, Inc., Waltham, MA
09/2003-04/2008 Assistant Physicist, Department of Radiology, Brigham and Women's Hospital, Boston, MA
09/2003-03/2004 Research Associat, Department of Radiology, Harvard Medical School, Boston, MA
05/2008-01/2024 Research Staff, Department of Radiology, Massachusetts General Hospital, Boston, MA
04/2004-02/2010 Instructor, Department of Radiology, Harvard Medical School, Boston, MA
03/2010-03/2015 Assistant Professor, Department of Radiology, Harvard Medical School, Boston, MA
04/2015-01/2024 Associate Professor, Department of Radiology, Harvard Medical School, Boston, MA
07/2024-present Associate Professor, Department of Radiology and Biomedical Imaging, Yale, New Haven, CT

Professional Honors & Recognition

International/National/Regional

1987: CUSPEA Scholarship, Created by Nobel Laureate TD Lee and Chinese physics community
2008: Eleanor and Miles Shore 50th Anniversary Fellowship Program for Scholars in Medicine, Harvard Medical School
2016: Excellence in Innovation, Partners Healthcare
2026: Individually named as one of 102 Brookhaven Muon $g-2$ Collaboration members awarded the 2026 Breakthrough Prize in Fundamental Physics (https://breakthroughprize.org/Laureates/1/L4024)

Invited Speaking Engagements, Presentations, Symposia & Workshops Not Affiliated with Yale

International/National

1. "Quasi-free Pion Charge Exchange at 500 MeV." Department of Physics, Indiana University, IN, 1992.
2. "Quasi-free Pion Charge Exchange." Department of Physics, Kent State University, OH, 1992.
3. "Quasi-free Pion Charge Exchange." Department of Physics, Boston University, MA, 1992.
4. "Muon $g-2$ Experiment." Department of Physics, Carleton University, ON, Canada, 1996.
5. "Muon $g-2$ Experiment." TRIUMF, Vancouver, BC, Canada, 1996.
6. "Light Quark Sea Flavour Asymmetry and Structure Function Ratios from the HERMES Experiment." The 6th International Workshop on Deep Inelastic Scattering and QCD, Brussels, Belgium, 1998.
7. "Recent Results from the HERMES Experiment." Western Regional Nuclear and Particle Physics Conference, Lake Louise, AB, Canada, 1998.
8. "Development of brain SPECT/PET camera." Gamma Medica, Northridge, CA, 2003.
9. "Annular Single-Crystal SPECT Systems." GE Global Research Center, Albany, NY, 2003.

10. ”Development of A novel SPECT Camera for Imaging Breast Cancer.” Brigham and Women’s Hospital, Boston, MA, 2003.
11. ”A Unique and Novel Collimator for Annular Brain SPECT Camera.” American Association of Physicists in Medicine, New England Chapter, Concord, MA, 2004.
12. ”Fast Monte Carlo Based Joint Iterative Reconstruction for SPECT Imaging.” American Association of Physicists in Medicine, New England Chapter, Boston, MA, 2008.
13. ”^{90}Y Imaging.” Sirtex Workshop, New York City, NY, 2013.
14. ”Training a neural network to detect lesions.” World Medical Innovation Forum, Boston, MA, 2019.
15. ”Quantitative PET: Evolution from Traditional Corrections to Deep Learning Approaches.” Department of Radiology and Biomedical Imaging, Yale University, CT, 2024 (before joining Yale).
16. ”PET Denoising Using Domain Generalization.” Named Lecture (The Robert N. Beck and Paul V. Harper Lecture), University of Chicago, IL, August, 2025.
17. ”Enhancing PET Quantification using AI.” Department of Biomedical Engineering, University of Florida, FL, 2025.
18. ”AI-based Quantitative PET.” Invited Medical Physics Seminar, Department of Radiology, School of Medicine, Johns Hopkins University, MD, 2025.
19. ”Learning Priors for Robust PET Quantitation: Reconstruction, Denoising, and Uncertainty Estimation.” Department of Radiology, University of California, Davis, CA, 2025.
20. ”Posterior Estimation of Kinetic Parameters in Dynamic Brain PET Using Generative Deep Learning Models.” Brain and Mind Centre, The University of Sydney, Australia, 2025.
21. ”Posterior Estimation of Kinetic Parameters in Dynamic Brain PET Using Generative Deep Learning Models.” Named Lecture (The Robert N. Beck and Paul V. Harper Lecture), University of Chicago, IL, November, 2025.
22. ”AI-driven Lesion Detection and Localization in Nuclear Medicine Imaging.”, Invited Seminar, Advanced Institute of Convergence Knowledge (So-Go-Chi) Informatics, Tohoku University, Japan, 2026.

Peer-Reviewed Presentations & Symposia Given at Meetings Not Affiliated with Yale

International/National

1. **J. Ouyang**, S. Hoibraten, R. J. Peterson. Mass Dependence of Quark-free Pion Single Charge Exchange at 500 MeV. American Physical Society Conference, Washington, DC, 1990.
2. **J. Ouyang**, S. Hoibraten, R. J. Peterson. Effective Number of Protons for Quasi-free Pion Single Charge Exchange. American Physical Society Conference, Washington, DC, 1992.
3. J. D. Bowman, D. Fitzgerald, M. J. Leitch, **J. Ouyang**, S. Hoibraten, R. J. Peterson, D. Prout, and M. E. Sadler. Monitoring Protons in a High Energy π^+ Beam Using a Sampling Grid Scintillator. American Physical Society, Washington, DC, 1992.
4. Muon $g-2$ collaboration. Status of the BNL muon ($g-2$) experiment. AIP Conference Proceedings, Volume 412, Issue 1, Pages 792-900, 1997.
5. S Sedykh, B Bunker, PT Debevec, DW Hertzog, T Jones, RM Carey, W Earle, M Hare, ES Hazen, JP Miller, **J Ouyang**, O Rind, P Cushman, S Giron, J Kindem, D Miller, C Timmermans, D Zimmerman, D Winn, Y Semertzidis, FJM Farley, M Grosse-Perdekamp, D Kawall, V Druzhinin. Performance of the calorimeters for the muon ($g-2$) experiment at the AGS. Calorimetry in High Energy Physics, Proceedings of the Seventh International Conference, Pages 588, 1997.

6. **Jinsong Ouyang**, S.C. Moore, Mi-Ae Park, G. El Fakhri. Fast Monte Carlo Estimation of Patient and Detector Scatter and Crosstalk Contamination in SPECT Imaging. IEEE Nuclear Science Symposium and Medical Imaging Conference, Puerto Rico, 2005.

7. **Jinsong Ouyang**, Georges El Fakhri, Robert E. Zimmerman, Stephen C. Moore. Compensation for Patient and Detector Scatter and Crosstalk Contamination in ^{111}In SPECT Using Fast Monte Carlo-Based Iterative Reconstruction. IEEE Nuclear Science Symposium and Medical Imaging Conference, San Diego, CA, 2006.

8. Georges El Fakhri, Ashfaq Mahmood, **Jinsong Ouyang**, Stephen Moore, Naengnoi Limpa-Amara, Robert Zimmerman. Quantitative simultaneous dual isotope micro-SPECT in the small animal. Journal of Nuclear Medicine May 1, 2006, 47 (suppl 1) 231P.

9. **Jinsong Ouyang**, Georges El Fakhri, Stephen C. Moore, Marie F. Kijewski. Fast Monte Carlo Simulation Based Joint Iterative Reconstruction for Simultaneous ^{99m}Tc/^{123}I Brain SPECT imaging. IEEE Nuclear Science Symposium and Medical Imaging Conference, San Diego, CA, 2006.

10. Arkadiusz Sitek, Georges El Fakhri, **Jinsong Ouyang**, Jonathan S. Maltz. Fast analytical modeling of Compton scatter using point clouds and graphics processing unit (GPU). IEEE Nuclear Science Symposium and Medical Imaging Conference, Honolulu, HI, 2007.

11. Stephen Moore, **Jinsong Ouyang**, Marie Kijewski. Effects of energy-window selection on detection and estimation performance in ^{111}In imaging. Journal of Nuclear Medicine May 1, 2007, 48 (supplement 2) 92P.

12. Georges El Fakhri, **Jinsong Ouyang**, Philippe Maksud, Cathryn Trott, Marie-Odile Habert. Improved discrimination between parkinsonian syndromes using Monte-Carlo joint iterative reconstruction (MC-JOSEM). Journal of Nuclear Medicine May 1, 2008, 49 (supplement 1) 152P.

13. **Jinsong Ouyang**, Terrence Toole, Ali Bonab, Xuping Zhu, Tom Brady, G El Fakhri. Performance measurements of NeuroPET based on NEMA standard. Journal of Nuclear Medicine May 1, 2009, 50 (supplement 2) 1544.

14. Ciprian Catana, Andre van der Kouwe, Thomas Benner, Larry Byars, Christian Michel, Michael Hamm, Bastien Guerin, **Jinsong Ouyang**, G El Fakhri, Gregory Sorensen. Rigid-body MR-assisted PET motion correction. Journal of Nuclear Medicine May 1, 2009, 50 (supplement 2) 592.

15. Se Young Chun, Bastien Guerin, Sanghee Cho, Timothy Reese, Xuping Zhu, **Jinsong Ouyang**, Ciprian Catana, Georges El Fakhri. Assessment of motion correction strategies in simultaneous PET/MR. Journal of Nuclear Medicine May 1, 2010, 51 (supplement 2) 359.

16. Ruth Lim, **Jinsong Ouyang**, Matthew D Schmitz, Michael S Gee, Ranu Shailam, Raul N Uppot, Georges El Fakhri. Performance of Generalized Factor Analysis of Dynamic Sequence (GFADS) in the Automated Characterization of Renal Function and Tissue Enhancement in Dynamic Magnetic Resonance Imaging (MRI). ISMRM, ESMRMB, Joint Annual Meeting, Stockholm, Sweden, 2010.

17. Se Young Chun, Sanghee Cho, Tim G. Reese, Bastien Guerin, Xuping Zhu, **Jinsong Ouyang**, Ciprian Catana, Georges El Fakhri. Compensation for Nonrigid Motion Using B-Spline Image Registration in Simultaneous MR-PET. ISMRM-ESMRMB, Joint Annual Meeting, 2010.

18. Timothy Gordon Reese, Bastien Gurin, Sanghee Cho, Se Young Chun, **Jinsong Ouyang**, Xuping Zhu, Ciprian Catana, Georges El Fakhri. Respiratory Motion Correction of PET Using Simultaneously Acquired Tagged MRI. ISMRM-ESMRMB, Joint Annual Meeting, Stockholm, Sweden, 2010.

19. Chun, Se Young, **Ouyang, J**, Fakhri, GE, Benner, T, Catana, C. MR-based attenuation correction using clinical whole-body MR and PET/CT. IEEE Nuclear Science Symposium and Medical Imaging Conference, Knoxville, TN, 2010.

20. **Jinsong Ouyang**, Se Young Chun, Thomas Brady, Georges El Fakhri. MR-based attenuation correction for whole-body PET/MR. Journal of Nuclear Medicine May, 2010, 51 (supplement 2) 1381.
21. Se Young Chun, Timothy Reese, Bastien Guerin, Xuping Zhu, Sanghee Cho, **Jinsong Ouyang**, Ciprian Catana, Georges El Fakhri. 4D tagged MR-based motion correction in simultaneous PET/MR. Journal of Nuclear Medicine May 1, 2010, 51 (supplement 2) 80.
22. **Jinsong Ouyang**, Se Young Chun, Georges El Fakhri. MR-based attenuation correction for whole-body PET/MR. Journal of Nuclear Medicine May 1, 2011, 52 (supplement 1) 260.
23. Chun, SY, **Ouyang, J**, Reese, T, Moussallem, E, Alpert, NM, Fakhri, GE, Catana, C. Effect of MR-based non-rigid motion correction on lesion detection in simultaneous PET/MR. IEEE Nuclear Science Symposium and Medical Imaging Conference, 2011.
24. **Jinsong Ouyang**, Matthew Keeler, Ali Bonab, Xuping Zhu, Thomas Brady, Georges El Fakhri. Performance Measurements of a Novel Mobile NeuroPET/CT. Journal of Nuclear Medicine May 1, 2012, 53 (supplement 1) 435.
25. Yothin Rakvongthai, **Jinsong Ouyang**, Quanzheng Li, Bastien Guerin, Nathaniel Alpert, Georges El Fakhri. Direct PET parametric reconstruction using a novel preconditioned conjugate gradient (PCG) approach. Journal of Nuclear Medicine May 1, 2012, 53 (supplement 1) 611.
26. Quanzheng Li, **Jinsong Ouyang**, Yoann Petibon, Xuping Zhu, Bing Bai, Richard Leahy, Georges El Fakhri. Maximum a posteriori reconstruction of Biograph mMR scanner using point spread function. Journal of Nuclear Medicine May 1, 2012, 53 (supplement 1) 2339.
27. Joseph Dagher, Georges El Fakhri, Yothin Rakvongthai, Quanzheng Li, **Jinsong Ouyang**. Minimum variance unbiased estimation performance of TOF PET: Impact of timing resolution. Journal of Nuclear Medicine May 2012, 53 (supplement 1) 162.
28. Yoann Petibon, **Jinsong Ouyang**, Xuping Zhu, Timothy Reese, Joseph Dagher, Ciprian Catana, Georges El Fakhri. MR-based motion compensation in simultaneous cardiac PET/MR. Journal of Nuclear Medicine May 1, 2012, 53 (supplement 1) 108.
29. Chuan Huang, Jerome Ackerman, Yoann Petibon, Thomas Brady, Georges El Fakhri, **Jinsong Ouyang**. Real-time 3D motion tracking using MR micro-coils for PET imaging. Journal of Nuclear Medicine May 2013, 54 (supplement 2) 44.
30. Yoann Petibon, Chuan Huang, Timothy Reese, **Jinsong Ouyang**, Ciprian Catana, Quanzheng Li, Georges El Fakhri. MR-based motion correction in simultaneous PET/MR liver imaging. Journal of Nuclear Medicine May 1, 2013, 54 (supplement 2) 68.
31. Yothin Rakvongthai, Georges El Fakhri, Xuping Zhu, **Jinsong Ouyang**. ^{90}Y Imaging using both SPECT and PET. Journal of Nuclear Medicine May 2013, 54 (supplement 2) 2151.
32. Eugene Mananga, Georges El Fakhri, Ali Bonab, **Jinsong Ouyang**. Assessment of myocardial defect detectability with PET/CT. Journal of Nuclear Medicine May 2013, 54 (supplement 2) 98.
33. Yothin Rakvongthai, Georges El Fakhri, Ruth Lim, Ali Bonab and **Jinsong Ouyang**. Simultaneous ^{99m}Tc-MDP/^{123}I-MIBG tumor imaging using SPECT/CT: Phantom studies. Journal of Nuclear Medicine May 2013, 54 (supplement 2) 2096.
34. Yoann Petibon, Reza Nezafat, Nicholas Johnson, Georges El Fakhri, **Jinsong Ouyang**. Coronary plaque imaging using PET/MR. Journal of Nuclear Medicine May 2013, 54 (supplement 2) 1672.

35. Auranuch Lorsakul, Georges El Fakhri, **Jinsong Ouyang**, William Worstell, Yothin Rakvongthai, Andrew Laine, Quanzheng Li. Numerical observer for objective assessment on carotid plaque using spectral CT. IEEE Nuclear Science Symposium and Medical Imaging Conference, 2014.

36. **Jinsong Ouyang**, Terry Toole, Matthew Keeler, Kira Grogg, Xuping Zhu, Quanzheng Li, Yoann Petibon, Marc Normandin, Nathaniel Alpert, Georges El Fakhri. Performance comparison between NeuroPET/CT and Siemens ECAT HR+: NEMA and patient studies. Journal of Nuclear Medicine May 2014, 55 (supplement 1) 2162.

37. Yoann Petibon, **Jinsong Ouyang**, Chuan Huang, Marc Normandin, Aleksandra Kolnick, Quanzheng Li, Georges El Fakhri. Improved image quality and accuracy with resolution modeling in whole-body PET/MR: Validation in oncologic and cardiac studies. Journal of Nuclear Medicine May 1, 2014, 55 (supplement 1) 2099.

38. Yothin Rakvongthai, Korn Borvorntanajanya, Frederic Fahey, Georges El Fakhri, **Jinsong Ouyang**. Joint ictal/interictal SPECT reconstruction for improved epileptic foci localization. Journal of Nuclear Medicine May 2014, 55 (supplement 1) 309.

39. Chuan Huang, Jerome L Ackerman, Yoann Petibon, Marc D Normandin, Georges El Fakhri, **Jinsong Ouyang**. Wireless MR active marker based PET motion correction in simultaneous brain MR-PET. ISMRM-ESMRMB, Milan, Italy, 2014.

40. Chuan Huang, Yoann Petibon, **Jinsong Ouyang**, Georges El Fakhri. Fast tagged MR acquisition for PET motion correction in simultaneous cardiac PET/MR. Journal of Nuclear Medicine May 1, 2014, 55 (supplement 1) 47.

41. Chuan Huang, Yoann Petibon, **Jinsong Ouyang**, Quanzheng Li, Georges El Fakhri. Accuracy of PET list-mode data-driven respiratory gating with respect to internal organ motion. Journal of Nuclear Medicine May 1, 2014, 55 (supplement 1) 2107.

42. Chuan Huang, Yoann Petibon, Timothy G Reese, **Jinsong Ouyang**, Georges El Fakhri. A navigated bSSFP sequence for volumetric liver respiratory motion measurement. ISMRM-ESMRMB Joint Annual Meeting, Milan, Italy, 2014.

43. Yoann Petibon, Chuan Huang, **Jinsong Ouyang**, Timothy Reese, Aleksandra Kolnick, Yen-Lin Chen, Georges El Fakhri. Cardiac, respiratory motion and point spread function (PSF) compensation in simultaneous PET/MR: A cardiac sarcoma study. Journal of Nuclear Medicine May 1, 2014, 55 (supplement 1) 647.

44. Andria Hadjipanteli, William Worstell, Yothin Rakvonthai, **Jinsong Ouyang**, Junguo Bian, Auranuch Lorsakul, Georges El Fakhri. Contrast-to-noise noise estimation and optimization of a novel multi-energy CT system for a clinical dual-energy imaging task. IEEE Nuclear Science Symposium and Medical Imaging Conference, 2014.

45. Xiaomeng Zhang, Yoann Petibon, Arkadiusz Sitek, Kazue Takahashi, Nathaniel Alpert, Georges El Fakhri, Nicolas Guehl, Aleksandra Kolnick, Seyed Mohammadreza Hosseini, **Jinsong Ouyang**. In-vivo Simultaneous DCE-MRI/^{15}O-water-PET. Journal of Nuclear Medicine May 2015, 56 (supplement 3) 644.

46. Yicheng Chen, Di Cui, Yingmao Chen, **Jinsong Ouyang**, Georges El Fakhri, Kui Ying. MR-based PET Attenuation Correction for Brain PET/MR Using Support Vector Machines. ISMRM, 23rd Annual Meeting, Toronto, Ontario, Canada, 2015.

47. Chuan Huang, **Jinsong Ouyang**, Timothy Reese, Yaotang Wu, Georges El Fakhri, Jerome Ackerman. Accurate measurement of bone attenuation in PET/MR. Journal of Nuclear Medicine May 1, 2015, 56 (supplement 3) 258.

48. Chuan Huang, Yoann Petibon, Marc Normandin, Quanzheng Li, Georges El Fakhri, **Jinsong Ouyang**. Fast head motion detection using PET list-mode data. Journal of Nuclear Medicine May 2015, 56 (supplement 3) 1827.

49. Chuan Huang, **Jinsong Ouyang**, Timothy Reese, Yaotang Wu, Georges El Fakhri, Jerome Ackerman. Continuous Bone Density Measurement for Simultaneous MR-PET Attenuation Correction using Water- and Fat-Suppressed Projection Imaging (WASPI). ISMRM, Toronto, ON, Canada, 2015.

50. Yoann Petibon, Behzad Ebrahimi, Timothy Reese, Nicolas Guehl, Marc Normandin, Nathaniel Alpert, Georges El Fakhri, **Jinsong Ouyang**. Impact of MR-based PET motion correction on the quantification of PET kinetic parameters in simultaneous cardiac PET/MR. Journal of Nuclear Medicine May 2016, 57 (supplement 2) 64.
51. Yoann Petibon, Yothin Rakvongthai, Georges El Fakhri, **Jinsong Ouyang**. Direct reconstruction of parametric images in cardiac PET imaging: in-vivo studies. Journal of Nuclear Medicine May 2016, 57 (supplement 2) 150.
52. Moses Wilks, Xiaomeng Zhang, **Jinsong Ouyang**, Georges El Fakhri, Nathaniel Alpert, Quanzheng Li. True Blood Flow Imaging in Tumors Using Spatially Constrained PET/MRI Modeling. Journal of Nuclear Medicine May 1, 2016, 57 (supplement 2) 436.
53. Yothin Rakvongthai, Frederic Fahey, Georges El Fakhri, Korn Borvorntanajanya, Supatporn Tepmongkol, Usanee Vutrapongwatana, Katherine Zukotynski, **Jinsong Ouyang**. Improved epileptic foci localization using joint SPECT reconstruction: Phantom and patient studies. Journal of Nuclear Medicine May 2016, 57 (supplement 2) 1988.
54. Yoann Petibon, Behzad Ebrahimi, Timothy G Reese, Nicolas Guehl, Marc D Normandin, Nathaniel M Alpert, Georges El Fakhri, **Jinsong Ouyang**. Impact of MR-based PET motion correction on the quantification of myocardial blood flow: an in-vivo simultaneous MR/PET study. ISMRM, 24th Annual Meeting, 2016.
55. Yixin Ma, Yoann Petibon, Joyita Dutta, Xucheng Zhu, Rong Guo, Georges El Fakhri, Kui Ying, **Jinsong Ouyang**. Low rank and sparsity on MR-based PET motion correction using simultaneous PET/MRI: a patient study. ISMRM, 24th Annual Meeting, Singapore, 2016.
56. Jonghye Woo, Marc Normandin, Nicolas Guehl, Dustin Wooten, Thomas Brady, Remi Baghdady, Timothy Shoup, **Jinsong Ouyang**, Georges El Fakhri, Nathaniel Alpert. 4D Multimodal Atlas of the Swine Heart from PET/CT Images. Journal of Nuclear Medicine May 1, 2016, 57 (supplement 2) 1898.
57. Rong Guo, Yicheng Chen, **Jinsong Ouyang**, Georges El Fakhri, Kui Ying. Joint Reconstruction of PET and MRI with Attenuation Correction Incorporating TOF Information. ISMRM, 2016, Singapore.
58. Rong Guo, Yoann Petibon, Yixin Ma, Kui Ying, **Jinsong Ouyang**. The Effect of MR-based Motion Correction on PET Kinetic Parameters Estimation. ISMRM, 2016, Singapore.
59. Rong Guo, Pei Han, Yicheng Chen, **Jinsong Ouyang**, Georges El Fakhri, Kui Ying. Simultaneous Reconstruction of Activity and Attenuation Involving MRI Information as a Prior. ISMRM, 2016, Singapore.
60. Yoann Petibon, Georges El Fakhri, **Jinsong Ouyang**. Bias-variance tradeoff of indirect versus direct parametric reconstruction for PET myocardial perfusion imaging. Journal of Nuclear Medicine May 1, 2017, 58 (supplement 1) 702.
61. Y Petibon, M Q Wilks, C Ma, C Huang, M T Lu, M K Zanni, S K Grinspoon, **J Ouyang**, G El Fakhri. MR-Based Motion Correction in Coronary 18F-Fluoride PET Imaging Using Simultaneous PET/MR, 59th AAPM Annual Meeting, Denver, CO, 2017.
62. Chang Gao, Chao Ma, Yibo Zhao, Kui Ying, Yoann Petibon, Jerome L. Ackerman, Chuan Huang, Georges El Fakhri, **Jinsong Ouyang**. Unified Rigid Motion Compensation Using Wireless MR Active Markers for Simultaneous PET/MR Imaging of the Brain. ISMRM, 25th Annual Meeting, Honolulu, HI, 2017.
63. Yibo Zhao, Chao Ma, Chang Gao, Kui Ying, **Jinsong Ouyang**, Georges El Fakhri. Rigid Motion Correction in MRSI Using Wireless Active Markers. ISMRM, 25th Annual Meeting, Honolulu, HI, 2017.
64. Paul Han, Debra Horng, Xiaochun Lai, Georges El Fakhri, **Jinsong Ouyang**, Chao Ma. PET/MR Attenuation Correction using 3D Multi-Echo Dixon-Based UTE Sequence. Journal of Nuclear Medicine May 1, 2018, 59 (supplement 1) 652.

65. Elena Maria Zannoni, Jiajin Zhang, Chao Ma, **Jinsong Ouyang**, Scott Metzler, Ling-Jian Meng. Design study for MRC-SPECT-C: A MR-compatible cardiac SPECT system for simultaneous SPECT/MR cardiac imaging. Journal of Nuclear Medicine May 1, 2018, 59 (supplement 1) 357.

66. Alvin Ihsani, Joyita Dutta, J. Alex Becker, Keith Alan Johnson, **Jinsong Ouyang**, Georges El Fakhri. A Novel Penalized Joint Image Reconstruction Method for Tau-PET Imaging. Journal of Nuclear Medicine May 1, 2018, 59 (supplement 1) 99.

67. Yoann Petibon, Nathaniel Alpert, **Jinsong Ouyang**, Joey Cheung, Min Su Kang, Jacob Hooker, Diego Pizzagalli, Cristina Cusin, Maurizio Fava, Georges El Fakhri, Marc Normandin. Direct Parametric Reconstruction for Improved Characterization of Neurotransmitter Release using Dynamic PET. Journal of Nuclear Medicine May 1, 2018, 59 (supplement 1) 497.

68. Alvin Ihsani, Arkadiusz Sitek, Yoann Petibon, Chao Ma, Paul Han, Georges El Fakhri, **Jinsong Ouyang**. Markov Chain Monte Carlo Estimation of Non-stationary PET Kinetic Parameters Compartment Models: A Flow Phantom Study. Journal of Nuclear Medicine May 2018, 59 (supplement 1) 1721.

69. Amal Tiss, Yoann Petibon, **Jinsong Ouyang**, Alvin Ihsani, Aurélie Kas, Marie-Odile Habert, Keith Johnson, Georges El Fakhri. Joint reconstruction method for longitudinal Tau-PET imaging. 13th Human Amyloid Imaging Conference, Miami, FL, 2019.

70. Tao Sun, Yoann Petibon, Paul Han, Chao Ma, Sally Kim, Nathaniel Alpert, Georges El Fakhri, **Jinsong Ouyang**. Bulk motion detection and correction using list-mode data for cardiac PET imaging. Proceedings Volume 11072, 15th International Meeting on Fully Three-Dimensional Image Reconstruction in Radiology and Nuclear Medicine; 110722F, 2019, https://doi.org/10.1117/12.2534701.

71. Paul K. Han, Debra E. Horng, Thibault Marin, Yoann Petibon, **Jinsong Ouyang**, Georges El Fakhri, Chao Ma. Free-Breathing Three-Dimensional T1 Mapping of the Heart Using Subspace-Based Data Acquisition and Image Reconstruction. 41st Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), 2019.

72. Yanis Chemli, Paul Han, Chao Ma, Georges El Fakhri, **Jinsong Ouyang**, Yoann Petibon. Super-resolution 3-D PET reconstruction for simultaneous PET/MR. Journal of Nuclear Medicine May 1, 2019, 60 (supplement 1) 1367.

73. Tao Sun, Yoann Petibon, Paul Han, Chao Ma, **Jinsong Ouyang**, Georges El Fakhri. Dynamic PET Imaging of Myocardial Glucose Consumption Using MR-based Cardiac/Respiratory Correction: Human studies. Journal of Nuclear Medicine May 1, 2019, 60 (supplement 1) 177.

74. Paul Han, Debra Horng, Kuang Gong, Yoann Petibon, Keith Johnson, **Jinsong Ouyang**, Georges El Fakhri, Chao Ma. MR-Based PET Attenuation Correction using 3D UTE/Multi-Echo Dixon: In Vivo Results. Journal of Nuclear Medicine May 1, 2019, 60 (supplement 1) 172.

75. Frederic Fahey, **Jinsong Ouyang**, Xinhua Cao, Zakhar Levin, Briana Sexton-Stallone, Anthony Falone, Katherine Zukotynski, Neha Kwatra, Ruth Lim, Zvi Bar-Sever, S Ted Treves, Georges El Fakhri. Use of Iterative Reconstruction for Dose Optimisation of Paediatric ^{99m}Tc MDP Bone SPECT. European Association of Nuclear Medicine (EANM) Annual Congress 2019.

76. Paul Han, Yanis Djebra, Yoann Petibon, Thibault Marin, **Jinsong Ouyang**, Georges El Fakhri, Chao Ma. Accelerated MR-Based Motion Field Measurement for PET Motion Correction in PET/MR. Journal of Nuclear Medicine May 1, 2019, 60 (supplement 1) 176.

77. Emilie Gaudin, Maxime Toussaint, Christian Thibaudeau, Rejean Fontaine, Marc Normandin, Yoann Petibon, **Jinsong Ouyang**, Georges El Fakhri, Roger Lecomte. Simulation Studies of the SAVANT High Resolution Dedicated Brain PET Scanner Using Individually Coupled APD Detectors and DOI Encoding. Journal of Nuclear Medicine May 1, 2019, 60 (supplement 1) 531.

78. Paul Kyu Han, Debra E. Horng, Yoann Petibon, **Jinsong Ouyang**, Nathaniel Alpert, Georges El Fakhri, Chao Ma. Free-Breathing 3D T1 Mapping of the Whole-Heart Using Low-Rank Tensor Modeling. ISMRM, 27th Annual Meeting, Montreal, QC, Canada, 2019.

79. Thibault Marin, **Jinsong Ouyang**, Georges El Fakhri, Marc D. Normandin, Yoann Petibon. Joint Direct Parametric Reconstruction for Pet Receptor Occupancy Mapping. IEEE Nuclear Science Symposium and Medical Imaging Conference, 2020.

80. Thibault Marin, Yanis Djebra, Paul Han, Isabelle Bloch, Georges El Fakhri, **Jinsong Ouyang**, Yoann Petibon, Chao Ma. PET motion correction using real-time subspace-based MR imaging. Journal of Nuclear Medicine May 1, 2020, 61 (supplement 1) 373.

81. Tao Sun, J. Alex Becker, Cristina Lois, Keith Johnson, Georges El Fakhri, **Jinsong Ouyang**. Time-of-flight List-mode based motion correction for ^{18}F-MK6240 PET imaging. Journal of Nuclear Medicine May 2020, 61 (supplement 1) 1466.

82. Y Chemli, M-A Tétrault, T Marin, M Toussaint, Isabelle Bloch, G El Fakhri, M Normandin, **J Ouyang**, Y Petibon. Motion Correction for Brain PET Using a Real Time Motion Capture System. IEEE Nuclear Science Symposium and Medical Imaging Conference (MIC), 2020.

83. Yoann Petibon, Frederic Fahey, Xinhua Cao, Zakhar Levin, Briana Sexton-Stallone, Anthony Falone, Katherine Zukotynski, Neha Kwatra, Ruth Lim, Zvi Bar-Sever, S. Ted Treves, Georges El Fakhri, **Jinsong Ouyang**. Deep learning-based detection of bone lesions in ^{99m}Tc-MDP SPECT: comparison with human observers. Journal of Nuclear Medicine May 2020, 61 (supplement 1) 510.

84. Dufan Wu, Kuang Gong, Kyungsang Kim, Xiaomeng Zhang, **Jinsong Ouyang**, Quanzheng Li. Deep Denoising of O-15 Water Dynamic PET Images without Training Data. Journal of Nuclear Medicine May 1, 2020, 61 (supplement 1) 433.

85. Yanis Djebra, Thibault Marin, **Jinsong Ouyang**, Georges El Fakhri, Chao Ma, Paul Kyu Han. Compartmental Low-Rank Denoising for Multi-Delay ASL. ISMRM, 2020.

86. Y Djebra, T Marin, P Han, Y Chemli, Isabelle Bloch, G El Fakhri, **J Ouyang**, Y Petibon, C Ma. MR based PET motion correction for irregular respiratory motion. IEEE Nuclear Science Symposium and Medical Imaging Conference, 2020.

87. Paul Kyu Han, Yanis Djebra, Thibault Marin, Georges El Fakhri, **Jinsong Ouyang**, Chao Ma. Low-Rank Reconstruction for Multi-Delay Arterial Spin Labeling. ISMRM, 2020.

88. Paul Han, Thibault Marin, Yanis Djebra, Georges El Fakhri, **Jinsong Ouyang**, Chao Ma. Free-breathing Renal Perfusion Imaging with Multi-Delay Arterial Spin Labeling Using Subspace-Based Fast MR. ISMRM, 2021.

89. Yanis Chemli, Marc-Andre Tetrault, Marc Normandin, Thibault Marin, Isabelle Bloch, Georges El Fakhri, **Jinsong Ouyang**, Yoann Petibon. Super-resolution in brain PET Using a Real Time Motion Capture System. Journal of Nuclear Medicine May 1, 2021, 62 (supplement 1) 34.

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109. Yanis Djebra, **Jinsong Ouyang**, Chao Ma. Bayesian posterior estimation for MR spectral quantification using diffusion probabilistic model. ISMRM & ISMRT Annual Meeting, 2025.

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Professional Service

Peer Review Groups/Grant Study Sections/Committee:

2010-2011	Master Thesis Committee, co-advisor (Jose Perez-Gutierrez, MIT)
2011-2015	PhD Thesis Committee, co-advisor (Yoann Petibon, Paris-Sorbonne University, France)
2014	Reviewer, ATIP - Avenir Grant
2018-2019	PhD Thesis Committee, co-advisor (Amal Tiss, Paris-Sorbonne University, France)
2019-2023	PhD Thesis Committee, co-advisor (Yanis Chemli, Telecom Paris, France)
2022	Reviewer, MGH Fund for Medical Discovery (FMD) Research Fellowship Awards
2023	Reviewer, MGH Scientific Advisory Committee (SAC) Abstracts
2023-Present	Ad hoc reviewer, NIH Scientific Review Groups (Study Sections: Special Emphasis Panel ZRG1 ISBN(03), ZRG1 NV-E(90))

2026	Technical Program Committee reviewer for IEEE International Symposium on Biomedical Imaging (ISBI)
2025-Present	Member, Program Committee of the SPIE Physics of Medical Imaging
2026	IEEE Senior Member Application Review Panel
2026	Abstract reviewer for the SPIE conference.

Journals:

Editorial Leadership

2026-present	Lead Guest Editor for Special Issue on ”Foundation, Multimodal, and World Models in Medical Imaging,” Journal of Medical Imaging (Responsible for defining scope, recruiting contributors, and coordinating peer review.)

Editorial Boards

2005-2006	Editorial Board, Computerized Medical Imaging and Graphics
2025-present	Associate Editor, European Journal of Nuclear Medicine and Molecular Imaging Physics
2025-present	Associate Editor, Medical Physics
2026-present	Editorial Board, Scientific Reports

Reviewer

IEEE Transactions on Medical Imaging

Medical Physics

IEEE Transactions on Medical Imaging

Physics in Medicine and Biology

IEEE Transactions on Biomedical Engineering

IEEE Transactions on Radiation and Plasma Medical Sciences

Journal of Nuclear Medicine

European Journal of Nuclear Medicine and Molecular Imaging Physics

Professional Organizations:

2014-2015:	Member, International Society for Computational Biology
2015-2016:	Member, International Society for Magnetic Resonance in Medicine
2005-present:	Senior Member IEEE/IEEE Nuclear and Plasma Sciences
2011-present:	Member, Society of Nuclear Medicine and Molecular Imaging
2026-present:	Member, SPIE
2026-present:	Member, Radiological Society of North America (RSNA)

Yale University/Hospital System:

2025-present	Member, Yale Biomedical Imaging Institute
2025	Reviewer, Yale Biomedical Imaging Institute Fund for Exploratory Studies (YBII-FES)
2025-present	Member, Yale Biomedical Imaging Institute Seminar Committee
2025-present	Member, Yale Center for Brain and Mind Health
2026-present	Member, Yale Institute for Global Health
2026-present	PhD Thesis Committee (Lieffrig, Eléonore)
2026-present	Research Faculty Compensation Guideline Committee, Department of Radiology and Biomedical Imaging, Yale School of Medicine
2026	Reviewer, Yale Center for Brain and Mind Health (CBMH): Pilot Awards Program

Patents

2014 "System and Method for Motion Correction in Positron Emission Tomography Imaging." Georges El Fakhri, Chuan Huang, **Jinsong Ouyang**, Quanzheng Li, Yoann Petibon, Joyita Dutta. Patent Number: US-9495771-B2.

2016 "Attenuation Correction of Positron Emission Tomography Data Using Magnetic Resonance Images Depicting Bone Density Variations." Chuan Huang, Jerome L. Ackerman, **Jinsong Ouyang**, Patent number: US-20160066874-A1.

2016 "System and Method for Correcting PET Imaging Data for Motion Using MR Imaging Data and Tracking Coils." **Jinsong Ouyang**, Jerome L Ackerman, Chuan Huang, Yoann Petibon, Georges El Fakhri. Document/Patent number: US-20160073993-A1.

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