CURRICULUM VITAE

Chao Zhou, PhD

Education

09/2001 -Ph.D. in Physics, Aug. 2007; MSc, May 2003

Thesis: In-Vivo Optical Imaging and Spectroscopy of Cerebral Hemodynamics 08/2007

Advisor: Arjun G. Yodh

Department of Physics and Astronomy

University of Pennsylvania, Philadelphia, PA, USA

09/1997 -Bachelor of Science 06/2001 Department of Physics

Peking University, Beijing, P.R. China

Positions and Employments

06/2012 -Assistant Professor (P. C. Rossin Assistant Professor from 2015) Department of Electrical and Computer Engineering and Bioengineering Program Lehigh University, PA, USA

Postdoctoral Associate with Prof. James G. Fujimoto 08/2007 -

05/2012 Department of Electrical Engineering and Computer Science and Research Laboratory of

Electronics

Massachusetts Institute of Technology, Cambridge, MA, USA

05/2002 -Research Assistant with Prof. Arjun G. Yodh

Department of Physics and Astronomy 08/2007

University of Pennsylvania, Philadelphia, PA, USA

Awards and Honors

2015	Awarded P. C. Rossin Assistant Professorship by Lehigh University
2013, 2014	Winner (2014), and finalist (2013), the QED Proof-of-Concept Commercialization
	Program, University City Science Center, Philadelphia, PA
2013, 2014	Recipient of the Eugene Mercy, Jr. President and Provost's Fund for Faculty Development,
	Lehigh University
2012	Recognition for Extraordinary Leadership by the Peking University Alumni Association of
	New England (PKUAA-NE)
2011	Pathway to Independence Award, National Institutes of Health/National Institute of
	Biomedical Imaging and Bioengineering (NIH/NIBIB)
2007	Young Bursary winner for Brain07 Conference, International Society for Cerebral Blood
	Flow and Metabolism (ISCBFM)
2007	Organization for Human Brain Mapping (OHBM) Travel Award
2004, 2006	GSAC Travel Award, University of Pennsylvania
2004	Student Travel grant for Optical Society of America topical meeting
2000	Third Class Prize in the 8th Challenge Cup of Extracurricular Scientific and Technological
	Works Competition, Peking University

1998 Young Eagle Scholarship for Outstanding Academic Performance in the Honor Science

Program, Peking University

1998 PanDeng Scholarship for Undergraduate Research, Chinese Academy of Sciences and

Peking University

1997 Outstanding Freshmen Scholarship, Peking University

1996 Second Class Prize in the 13th Chinese Physics Olympiad, Chinese Physical Society

Current Grant Support

"Space-division multiplexing optical coherence tomography for large-scale, millisecond resolution imaging of neural activity"

09/2015 - 08/2017, National Institute of Health, 1R21EY026380-01

Role: Principal Investigator (Co-PI: Yevgeny Berdichevsky)

"Novel optical imaging and pacing platform for developmental cardiology"

09/2015 - 08/2018, National Institute of Health, 1R15EB019704-01A1

Role: Principal Investigator

"IDBR: Type A: Ultrahigh-Speed Space-Division Multiplexing Optical Coherence Tomography for Label-free and Non-destructive Biological Imaging,"

05/2015 - 04/2018, National Science Foundation, 1455613

Role: Principal Investigator

"Ultrahigh Speed Ophthalmic Optical Coherence Tomography (OCT),"

01/2015 - 12/2015, University City Science Center, Philadelphia, PA (QED Proof-of-Concept Commercialization Award, S1304)

Role: Principal Investigator

Peer-reviewed Journal publications

(In reverse chronological order; Total citations: >2600; h-index = 29 according to Google Scholar)

- 1. A. Alex, A. Li, R.E. Tanzi, <u>C. Zhou</u>, Optogenetic pacing in Drosophila melanogaster, Science Advances, 1:e1500639, 2015.
- 2. A. Alex, A. Li, X. Zeng, R. E. Tate, M. L. McKee, D. E. Capen, Z. Zhang, R. E. Tanzi, and <u>C. Zhou</u>, A circadian clock gene, Cry, affects heart morphogenesis and function in Drosophila as revealed by optical coherence microscopy, PLOS ONE, 10(9): e0137236, 2015.
- 3. F. Li, Y. Song, A. Dryer, W. Cogguillo, Y. Berdichevsky and <u>C. Zhou</u>, Nondestructive evaluation of progressive neuronal changes in organotypic rat hippocampal slice cultures using ultrahigh-resolution optical coherence microscopy, Neurophotonics, 1(2), 025002, 2014.
- 4. A. Alex, M. Noti, E.D. Tait Wojno, D. Artis, and <u>C. Zhou</u>, Characterization of eosinophilic esophagitis murine models using optical coherence tomography, Biomed. Opt. Express, 5(2), 609-620, 2014.
- 5. F. Li, T. Xu, D.-H.T. Nguyen, X.L. Huang, C.S. Chen and <u>C. Zhou</u>, Label-free evaluation of angiogenic sprouting in micro-engineered devices using ultra-high resolution optical coherence microscopy, J. Biomed. Opt., 19(1), 016006, 2014.
- 6. <u>C. Zhou</u>, A. Alex, J. Rasakanthan, and Y. Ma, Space-division multiplexing optical coherence tomography, Opt. Express, 21(16), 19219-19227, 2013.
- M. Noti, E. D. Tait Wojno, B. S. Kim, M. C. Siracusa, P. R. Giacomin, M. G. Nair, A. J. Benitez, K. R. Ruymann, A. B. Muir, D. A. Hill, K. R. Chikwava, A. E. Moghaddam, Q. J. Sattentau, A. Alex, <u>C. Zhou</u>, J. H. Yearley, P. Menard-Katcher, M. Kubo, K. Obata-Ninomiya, H. Karasuyama, M. R. Comeau, T. Brown-Whitehorn, R. de Waal Malefyt, P. M. Sleiman, H. Hakonarson, A. Cianferoni, G. W. Falk, M.-L. Wang, J. M. Sperge, and D. Artis, Thymic stromal lymphopoietin-elicited basophil

responses can mediate the pathogenesis of eosinophilic esophagitis. Nat. Medicine, 19(8), 1005-1013, 2013.

- 8. A. Li, O.O. Ahsen, J.J. Liu, C. Du, M.L. McKee, W. Wasco, C.H. Newton-Cheh, C.J. O'Donnell, J.G. Fujimoto, <u>C. Zhou</u>,* and R.E. Tanzi,* Silencing Of The Drosophila Ortholog Of SOX5 In Heart Leads To Cardiac Dysfunction As Detected By Optical Coherence Tomography. Hum. Mol. Genet., 22(18):3798-806, 2013, (*: Co-corresponding author).
- 9. R.C. Mesquita, M. Putt, M. Chandra, G. Yu, X. Xing, S.W. Han, G. Lech, Y. Shang, T. Durduran, <u>C. Zhou</u>, A.G. Yodh, and E.R. Mohler III, Diffuse optical characterization of an exercising patient group with peripheral artery disease, J. Biomed. Opt., 18(5):057007, 2013.
- 10. T.-H. Tsai, B. Potsaid, Y.K. Tao, V. Jayaraman, J. Jiang, P.J. S. Heim, M.F. Kraus, <u>C. Zhou</u>, J. Hornegger, H. Mashimo, A.E. Cable, and J.G. Fujimoto, Ultrahigh speed endoscopic optical coherence tomography using micromotor imaging catheter and VCSEL technology, Biomed. Opt. Express, 4(7), 1119-1132, 2013.
- 11. T.-H. Tsai, <u>C. Zhou</u>, Y.K. Tao, H.-C. Lee, O.O. Ahsen, M. Figueiredo, T. Kirtane, D.C. Adler, J. Schmitt, Q. Huang, J.G. Fujimoto, and H. Mashimo. Structural Markers Observed with Endoscopic Three-dimensional Optical Coherence Tomography Correlating with Barrett's Esophagus Radiofrequency Ablation Treatment Response. Gastrointest. Endosc., 76(6):1104-1112, 2012.
- 12. T.-H. Tsai, <u>C. Zhou</u>, H.-C. Lee, Y.K. Tao, O.O. Ahsen, M. Figueiredo, D.C. Adler, J. Schmitt, Q. Huang, J.G. Fujimoto, and H. Mashimo, Comparison of Tissue Architectural Changes between Radiofrequency Ablation and Cryospray Ablation in Barrett's Esophagus using Endoscopic Three-Dimensional Optical Coherence Tomography. Gastroenterol. Res. Pract., 2012:684832, 2012.
- 13. <u>C. Zhou</u>, T.-H. Tsai, H.-C. Lee, T. Kirtane, M. Figueiredo, Y.K. Tao, O.O. Ahsen, D.C. Adler, J. Schmitt, Q. Huang, J.G. Fujimoto, and H. Mashimo. Characterization of Buried Glands before and after Radiofrequency Ablation using Three-dimensional Optical Coherence Tomography. Gastrointest. Endosc., 76(1):32-40, 2012.
- 14. V. Sebastian, S.-K. Lee, <u>C. Zhou</u>, M.F. Kraus, J.G. Fujimoto, and K.F. Jensen. One-step Continuous Synthesis of Biocompatible Gold Nanorods for Optical Coherence Tomography. Chem. Commun., 48:6654-6656, 2012.
- 15. <u>C. Zhou</u>, T. Kirtane, T.-H. Tsai, H.-C. Lee, D.C. Adler, J.M. Schmitt, Q. Huang, J.G. Fujimoto, and H. Mashimo. Cervical Inlet Patch Optical Coherence Tomography Imaging and Clinical Significance. World J. Gastroenterol., 18(20):2502-2510, 2012.
- H.-C. Lee, <u>C. Zhou</u>, D.W. Cohen, Y. Wang, A. Mondelblatt, T.-H. Tsai, A.D. Aguirre, J.G. Fujimoto, and J.L. Connolly. Integrated Optical Coherence Tomography and Optical Coherence Microscopy Imaging of Human Renal Tissue. J. Urology, 187:691-699, 2012.
- 17. <u>C. Zhou</u>, T. Kirtane, T.-H. Tsai, H.-C. Lee, D.C. Adler, J. Schmitt, Q. Huang, J.G. Fujimoto, and H. Mashimo. Three-Dimensional Endoscopic Optical Coherence Tomography Imaging of Cervical Inlet Patch. Gastrointest. Endosc., 75(3), 675-677, 2012.
- 18. Y. Chen, S.-W. Huang, <u>C. Zhou</u>, B. Potsaid, and J.G. Fujimoto. Improved Detection Sensitivity Line-Scanning Optical Coherence Microscopy (LS-OCM). IEEE J. Sel. Top. Quantum Electron., 18(3): 1094–1099, 2012.
- 19. R.C. Mesquita, T. Durduran, G.Q. Yu, E.M. Buckley, M.N. Kim, <u>C. Zhou</u>, R. Choe, U. Sunar, A.G. Yodh. Direct Measurement of Tissue Blood Flow and Metabolism with Diffuse Optics. Phil. Trans. Royal Soc. A, 369, 4390-4406, 2011.
- 20. T.-H. Tsai, B. Potsaid, M. F. Kraus, <u>C. Zhou</u>, Y.K. Tao, J. Hornegger, and J.G. Fujimoto. Piezoelectric Transducer Based Miniature Catheter for Ultrahigh Speed Endoscopic Optical Coherence Tomography. Biomed. Opt. Express, 2, 2438-2448, 2011.
- 21. A. Li, <u>C. Zhou</u>, J. Moore, P. Zhang, T.-H. Tsai, H.-C. Lee, D.M. Romano, M.L. McKee, D.A. Schoenfeld, M.J. Serra, K. Raygor, H.F. Cantiello, J.G. Fujimoto, and R.E. Tanzi. Changes in the

Expression of the Alzheimer's Disease-Associated Presenilin Gene in Drosophila Heart Leads to Cardiac Dysfunction. Curr. Alzheimer Res., 8(3):313-322, 2011.

- 22. B. Garita, M.W. Jenkins, M. Han, <u>C. Zhou</u>, M. VanAuker, A.M. Rollins, M. Watanabe, J.G. Fujimoto, and K.K. Linask. Blood Flow Dynamics of One Cardiac Cycle and Relationship to Mechanotransduction and Trabeculation during Heart Looping. Amer. J. Physiol. Heart, 300(3): H879-H891, 2011.
- 23. <u>C. Zhou</u>, D.W. Cohen, Y. Wang, H.-C. Lee, A. Mondelblatt, T.-H. Tsai, A.D. Aguirre, J.G. Fujimoto, and J.L. Connolly. Integrated Optical Coherence Tomography and Microscopy for Ex Vivo Multiscale Evaluation of Human Breast Tissues. Cancer Res., 70(24):10071-10079, 2010.
- 24. <u>C. Zhou</u>, Y.H. Wang, A.D. Aguirre, T.-H. Tsai, J.L. Connolly, and J.G. Fujimoto. *Ex vivo* Imaging of Human Thyroid Pathology Using Integrated Optical Coherence Tomography (OCT) and Optical Coherence Microscopy (OCM). J. Biomed. Opt., 15(1):016001, 2010.
- 25. <u>C. Zhou</u>, T.-H. Tsai, D.C. Adler, H-C. Lee, D.W. Cohen, A. Mondelblatt, Y.H. Wang, J.L. Connolly and J.G. Fujimoto. Photothermal Optical Coherence Tomography (OCT) in *ex vivo* Human Breast Tissues Using Gold Nanoshells. Opt. Lett., 35(5):700-702, 2010.
- 26. T. Durduran, <u>C. Zhou</u>, E.M. Buckley, M.N. Kim, G.Q. Yu, R. Choe, W.J. Gaynor, T.L. Spray, S.M. Durning, S.E. Mason, L.M. Montenegro, S.C. Nicolson, R.A. Zimmerman, M.E. Putt, J.J. Wang, J.H. Greenberg, J.A. Detre, A.G. Yodh, and D.J. Licht. Optical measurement of cerebral hemodynamics and oxygen metabolism in neonates with congenital heart defects. J. Biomed. Opt., 15(3):037004, 2010.
- 27. D.C. Adler, <u>C. Zhou</u>, T.-H. Tsai, H.-C. Lee, L. Becker, J.M. Schmitt, Q. Huang, J.G. Fujimoto, and H. Mashimo. Biased assessment of 3D optical coherence tomography in a single post-radiofrequency ablation patient without histological correlation Reply. Endoscopy, 42(2):180-181, 2010.
- 28. A.D. Aguirre, J. Sawinksi, S.-W. Huang, <u>C. Zhou</u>, W. Denk, and J.G. Fujimoto. High Speed Optical Coherence Microscopy with Autofocus Adjustment and a Miniaturized Endoscopic Imaging Probe. Opt. Express, 18(5):4222-4239, 2010.
- 29. B.L. Edlow, M.N. Kim, T. Durduran, <u>C. Zhou</u>, M.E. Putt, A.G. Yodh, J.H. Greenberg, and J.A. Detre. The Effect of Healthy Aging on Cerebral Hemodynamic Responses to Posture Change. Physiol. Meas., 31(4):477-495, 2010.
- 30. M.N. Kim, T. Durduran, S. Frangos, B.L. Edlow, E.M. Buckley, H.E. Moss, <u>C. Zhou</u>, G.Q. Yu, R. Choe, E. Maloney-Wilensky, R.L. Wolf, M.S. Grady, J.H. Greenberg, J.M. Levine, A.G. Yodh, J.A. Detre, and W.A. Kofke. Noninvasive Measurement of Cerebral Blood Flow and Blood Oxygenation Using Near-Infrared and Diffuse Correlation Spectroscopies in Critically Brain-Injured Adults. Neurocrit. Care, 12(2):173-180, 2010.
- 31. <u>C. Zhou</u>, S.A. Eucker, T. Durduran, G.Q. Yu, J. Ralston, S.H. Friess, R.N. Ichord, S.S. Margulies, and A.G. Yodh. Diffuse optical monitoring of hemodynamics in piglet brain with head trauma injury. J. Biomed. Opt., 14 (3):034015, 2009.
- 32. J. Luckl, <u>C. Zhou</u>, T. Durduran, A.G. Yodh, and J.H. Greenberg. Characterization of peri-infarct flow transients with laser speckle and Doppler after middle cerebral artery occlusion in the rat. J. Neurosci. Res., 87(5):1219-1229, 2009.
- 33. D.C. Adler, <u>C. Zhou</u>, T.-H. Tsai, J. Schmitt, Q. Huang, H. Mashimo, and J.G. Fujimoto. Three-dimensional endomicroscopy of the human colon using optical coherence tomography, Opt. Express, 17(2):784-796, 2009.
- 34. <u>C. Zhou</u>, D.C. Adler, L. Becker, Y. Chen, T.-H. Tsai, M. Figueiredo, J.M. Schmitt, J.G. Fujimoto, and H. Mashimo. Effective treatment of chronic radiation proctitis using radiofrequency ablation. Ther. Adv. Gastroenterol., 2(3):149-156, 2009.
- 35. T. Durduran, <u>C. Zhou</u>, B.L. Edlow, G.Q. Yu, R. Choe, B.L. Cucchiara, M. Putt, Q. Shah, S.E. Kasner, J.H. Greenberg, A.G. Yodh, and J.A. Detre. Transcranial Optical Monitoring of Cerebral Blood Flow

and Hemoglobin Concentration in Acute Stroke Patients during Positional Interventions. Opt. Express, 17(5):3884-3902, 2009.

- 36. D.C. Adler, <u>C. Zhou</u>, T.-H. Tsai, H.-Chieh Lee, L. Becker, J.M. Schmitt, Q. Huang, J.G. Fujimoto, and H. Mashimo, Three-dimensional optical coherence tomography examination of non-ablated Barrett's esophagus and buried glands beneath neo-squamous epithelium following radiofrequency ablation. Endoscopy, 41(9):773-776, 2009.
- 37. T.-H. Tsai, <u>C. Zhou</u>, D.C. Adler, and J.G. Fujimoto. Frequency Comb Swept Lasers, Opt. Express, 17(23):21257-21270, 2009.
- 38. E.M. Buckley, N.M. Cook, T. Durduran, M.N. Kim, <u>C. Zhou</u>, R. Choe, G.Q. Yu, S. Shultz, C.M. Sehgal, D.J. Licht, P.H. Arger, M.E. Putt, H. Hurt, and A.G. Yodh. Cerebral hemodynamics in preterm infants during positional intervention measured with diffuse correlation spectroscopy and transcranial Doppler ultrasound. Opt. Express, 17(15):12571-12581, 2009.
- 39. <u>C. Zhou</u>, T. Shimazu, T. Durduran, J. Luckl, D.Y. Kimberg, G.Q. Yu, X.H. Chen, J.A. Detre, A.G. Yodh, and J.H. Greenberg. Acute functional recovery of cerebral blood flow following forebrain ischemia in rat. J. Cereb. Blood Flow Metab., 28(7):1275-1284, 2008.
- 40. <u>C. Zhou</u>, R. Choe, N. Shah, T. Durduran, G.Q. Yu, A. Durkin, D. Hsiang, R. Mehta, J. Butler, A. Cerussi, B.J. Tromberg, and A.G. Yodh. Diffuse optical monitoring of blood flow and oxygenation in human breast cancer during early stages of neoadjuvant chemotherapy. J. Biomed. Opt., 12(5):051903, 2007.
- 41. G. Q. Yu, T. Floyd, T. Durduran, <u>C. Zhou</u>, J. J. Wang, J. A. Detre, and A. G. Yodh. Concurrent diffuse optical and MRI measurements of blood flow in human skeletal muscle. Opt. Express, 15(3):1064-1075, 2007.
- 42. U. Sunar, S. Makonnen, <u>C. Zhou</u>, T. Durduran, G.Q. Yu, H.W. Wang, W.M.F. Lee, and A.G. Yodh. Hemodynamic responses to antivascular therapy and ionizing radiation assessed by diffuse optical spectroscopies. Opt. Express, 15(23):15507-15516, 2007.
- 43. <u>C. Zhou</u>, G.Q. Yu, D. Furuya, J.H. Greenberg, A.G. Yodh, and T. Durduran. Diffuse optical correlation tomography of cerebral blood flow during cortical spreading depression in rat brain. Opt. Express, 14(3):1125-1144, 2006.
- 44. G. Q. Yu, T. Durduran, <u>C. Zhou</u>, T. C. Zhu, J. C. Finlay, T. M. Busch, S. B. Malkowicz, S. M. Hahn, and A. G. Yodh. Real-time in situ monitoring of human prostate photodynamic therapy with diffuse light. Photochem. Photobiol., 82(5):1279-1284, 2006.
- 45. U. Sunar, H. Quon, T. Durduran, J. Zhang, J. Du, <u>C. Zhou</u>, G.Q. Yu, R. Choe, A. Kilger, R. Lustig, L. Loevner, S. Nioka, B. Chance, and A.G. Yodh. Noninvasive diffuse optical measurement of blood flow and blood oxygenation for monitoring radiation therapy in patients with head and neck tumors: a pilot study. J. Biomed. Opt., 11(6):064021, 2006.
- 46. G.Q. Yu, T. Durduran, G. Lech, <u>C. Zhou</u>, B. Chance, R.E. Mohler, and A.G. Yodh. Time-dependent blood flow and oxygenation in human skeletal muscles measured with noninvasive near-infrared diffuse optical spectroscopies. J. Biomed. Opt., 10(2):024027, 2005.
- 47. G.Q. Yu, T. Durduran, <u>C. Zhou</u>, H.W. Wang, M.E. Putt, H.M. Saunders, C.M. Sehgal, E. Glatstein, A.G. Yodh, and T.M. Busch. Noninvasive monitoring of murine tumor blood flow during and after photodynamic therapy provides early assessment of therapeutic efficacy. Clin. Cancer Res., 11(9):3543-3552, 2005.
- 48. T. Durduran, R. Choe, G.Q. Yu, <u>C. Zhou</u>, J.C. Tchou, B.J. Czerniecki, and A.G. Yodh. Diffuse optical measurement of blood flow in breast tumors. Opt. Lett., 30(21):2915-2917, 2005.
- 49. T. Durduran, G.Q. Yu, M.G. Burnett, J.A. Detre, J.H. Greenberg, J. Wang, <u>C. Zhou</u>, and A.G. Yodh. Diffuse optical measurement of blood flow, blood oxygenation, and metabolism in a human brain during sensorimotor cortex activation. Opt. Lett., 29(15):1766-1768, 2004.

50. T. Durduran, M.G. Burnett, G.Q. Yu, <u>C. Zhou</u>, D. Furuya, A.G. Yodh, J.A. Detre, and J.H. Greenberg. Spatiotemporal quantification of cerebral blood flow during functional activation in rat somatosensory cortex using laser-speckle flowmetry. J. Cereb. Blood Flow Metab., 24(5):518-525, 2004.

Book Chapters

- 1. A. Alex, E.D. Tait Wojno, D. Artis, and <u>C. Zhou</u>, Label-free imaging of eosinophilic esophagitis mouse models using optical coherence tomography, in Methods in Molecular Biology, Andrei Ivanov, Eds., Springer, *Submitted*, 2015.
- 2. T. Xu, <u>C. Zhou</u>, X.L. Huang, Model-based Curvilinear Network Extraction toward Quantitative Microscopy, Biomedical Image Segmentation: Advances and Trends, Ayman El-Baz, Eds., CRC Press, *Submitted*, 2015.
- 3. <u>C. Zhou</u>, J.G. Fujimoto, T.-H. Tsai, and H. Mashimo, Endoscopic Optical Coherence Tomography and Clinical Applications, Chapter 68, pp. 2077-2108, in Optical Coherence Tomography: Technology and Applications, 2nd Ed., J.G. Fujimoto and W. Drexler, Eds., Springer-Verlag, Berlin, Heidelberg, 2015.
- 4. A.D. Aguirre, <u>C. Zhou</u>, H.-C. Lee, O.O. Ahsen, and J.G. Fujimoto, Optical Coherence Microscopy, Chapter 28, pp. 865-911, in Optical Coherence Tomography: Technology and Applications, 2nd Ed., J.G. Fujimoto and W. Drexler, Eds., Springer-Verlag, Berlin, Heidelberg, 2015.
- 5. G.Q. Yu, T. Durduran, <u>C. Zhou</u>, R. Cheng, A.G. Yodh. Near-infrared Diffuse Correlation Spectroscopy (DCS) for Assessment of Tissue Blood Flow. Chapter 13 In: D.A. Boas, C. Pitris, N. Ramanujam, editors. Handbook of Biomedical Optics. Oakland: Taylor and Francis, 2011.

Invited Talks

11/2012

03/2015	Sigma Xi Seminar, Lehigh University, 2015
03/2015	NJ Tech Council Medical Event, 2015
02/2015	Neurophotonics Conference, Photonics West, 2015
01/2014	Third Affiliated Hospital of Zhengzhou University, China
06/2014	Light for Health (L4H) seminar series, ICFO-The Institute of Photonic Sciences, Spain
06/2014	Nanoscience Institute of Aragon (INA), University of Zaragoza, Spain
05/2014	Biodynamic Optical Imaging Center (BIOPIC), Peking University
05/2014	Department of Mechanical Engineering, Department of Precision Instrument, Tsinghua
	University
05/2014	ECE department seminar, University of Delaware
11/2013	McGroddy Frontiers in Science Seminar Series, Saint Joseph's University
11/2013	Berks Med Device Group, Ben Franklin Technology Partners
10/2013	IEEE/OSA student Chapter Seminar Series, Lehigh University
06/2013	The Biosystems Dynamics Summer Institute, Lehigh University
05/2013	11th International Conference on Photonics and Imaging in Biology and Medicine,
	Huazhong University of Science and Technology, China
05/2013	Wuhan University of Science and Technology, China
05/2013	Third Affiliated Hospital of Zhengzhou University, China
01/2013	Wuhan National Laboratory for Optoelectronics, Huazhong University of Science and
	Technology, China
01/2013	State Key Lab of Software Engineering, Wuhan University, China
12/2012	LG Electronics, South Korea
12/2012	Department of Biological Sciences, Lehigh University
11/2012	Center for Advanced Materials & Nanotechnology, Lehigh University

Division of Gastroenterology, University of Pennsylvania

10/2012	Department of Cancer Biology, University of Pennsylvania
09/2012	Advances in Biomedical Optics seminar series, Department of Physics and Astronomy and
	Center for Magnetic Resonance and Optical Imaging (CMROI), University of
	Pennsylvania
05/2011	School of Electrical Engineering, Zhengzhou University
02/2011	Department of Physics, University of South Florida
02/2011	Department of Electrical and Computer Engineering, Lehigh University
09/2010	Department of Electrical, Computer, and Biomedical Engineering, University of Rhode
	Island
03/2010	Research Laboratory of Electronics, Massachusetts Institute of Technology
03/2007	The Photon Migration Imaging laboratory at the Athinoula A. Martinos Center for
	Biomedical Imaging, Massachusetts General Hospital
03/2007	Research Laboratory of Electronics, Massachusetts Institute of Technology
04/2007	Physics Colloquium, Richard Stockton College of New Jersey
06/2005	Beckman Laser Institute, University of California at Irvine

Professional Activities

- Peer reviewer for Optics Letters, Optics Express, Biomedical Optics Express, Applied Optics, Journal of Optical Society of America A, Journal of Optical Society of America B, Journal of Biomedical Optics, Light: Science & Applications, PLOS One, Photonics, Medical Physics, Human Brain Mapping, Physics in Medicine and Biology, Physiological Measurement, Transplantation, Journal of Clinical & Experimental Cardiology, Journal of Selected Topics in Quantum Electronics, Journal of Innovative Optical Health Sciences and several conferences.
- Editorial board member for World Journal of Radiology.
- Guest Associate Editor for *Medical Physics*.
- Lead Guest Editor for a special issue, "Optical Imaging in Developmental Biology", in BioMed Research International.
- Session chair, Optical Methods for Developmental Biology, Photonics West conference, 2015, 2016.
- Member of AHA Radiology & Imaging Basic Science Review Committee (Fall 2013 present).
- Ad hoc Reviewer, DoD CDMRP PRMRP RH-2 review panel, Fall 2014.
- Member, NIH CMIP study section, October 2015.

Professional Memberships

International Society for Optical Engineering (SPIE), Optical Society of America (OSA), Institute of Electrical and Electronics Engineers (IEEE), American Heart Association (AHA), International Society for Cerebral Blood flow and Metabolism (ISCBFM)

Teaching

Fall 2015	ENGR 5, Introduction to Engineering Practice: Overview, Lehigh University
Fall 2013 - 2015	ECE 108, Signals and Systems, Lehigh University
Fall 2013	ECE 182, Junior Lab, Lehigh University
Spring 2013 - 2015	ECE 368/468, BioE 368/468, Introduction to Biophotonics / Optical Biomedical
	Imaging, Lehigh University
Fall 2012	ECE 350/450, Principles of Advanced Optical Imaging Technologies, Lehigh
	University

05/2011	Guest lecturer for course 6.634 - Nonlinear Optics, Massachusetts Institute of
	Technology
01/2009	Guest lecturer for the IAP course 6.095 - Introduction to Modern Optoelectronics for
	Undergraduates, Massachusetts Institute of Technology
04/2007	Guest lecturer for an undergraduate course - Medical Physics, Richard Stockton
	College of New Jersey
09/2001 -	Teaching assistant (TA) for PHYS 101 - General Physics; PHYS 150 - Principles I;
05/2002	PHYS 230 - Principles III; and PHYS 361 - Electromagnetism I, Department of
	Physics and Astronomy, University of Pennsylvania

8