

1. Jennifer Kehlet Barton

2. Education: Ph.D. Biomedical Engineering, University of Texas at Austin, 1998

3. Academic experience:

1998-pres. The University of Arizona, Tucson, AZ. Assistant Professor (1998-2003), Associate Professor (2003-2009), Professor (2009-pres.) Biomedical Engineering (primary appointment), Electrical and Computer Engineering Department, College of Optical Sciences, Agriculture and Biosystems Engineering Department, University of Arizona Cancer Center, BIO5 Institute

2006 Visiting Scientist, Beckman Laser Institute, the University of California, Irvine

2007-2009 Director, Division of Biomedical Engineering, the University of Arizona

2007-2011 Chair, Biomedical Engineering Graduate Interdisciplinary Program, the University of Arizona

2009-2012 Head, Department of Biomedical Engineering, the University of Arizona

2009-2012 Assistant Director, BIO5 Institute, the University of Arizona

2012-2015 Associate Vice President for Research, the University of Arizona

2013-2014 Interim Vice President for Research, the University of Arizona

2015-pres. Interim Director, BIO5 Institute, the University of Arizona

4. Non-academic experience:

1988-1994 McDonnell Douglas Aerospace (now Boeing Corp.), Huntington Beach, CA.
Engineer/Scientist Specialist, International Space Station

5. Certifications or professional registrations: None

6. Current membership in professional organizations:

Fellow, SPIE Society of Photo-Optical Instrumentation Engineers
Fellow, American Institute for Medical and Biological Engineering
Fellow, American Society for Lasers in Surgery and Medicine
Member, Biomedical Engineering Society
Member, Optical Society of America

7. Honors and awards:

1997 SPIE D.J. Lovell Scholarship Award

1999 Award for Excellence at the Student Interface, College of Engineering and Mines

2008 Elected Fellow, SPIE

2009 Leading Edge Researcher, the University of Arizona

2009 Elected Fellow, American Institute of Medical and Biological Engineering

2011 The University of Arizona College of Engineering, Da Vinci Fellow

2012 AZBio Michael A. Cusanovich Biosciences Educator of the Year Award

2015 Southern Arizona Research, Science and Engineering Foundation “60 for 60”
STEM Leader Award

8. Service activities

2007- Director, NIH T32 Training Grant – Cardiovascular Biomedical Engineering

2015-pres. Co-Leader Cancer Imaging Program, University of Arizona Cancer Center
2003-2007 Charter member, NIH Biomedical Imaging Technology study section
2011-2015 Charter member, NIH/NHLBI T32 study section
2000-pres. Faculty advisor for the University of Arizona student chapter of the Biomedical Engineering Society (BMES)
2010 Joint Chair of the American Society for Lasers in Medicine and Surgery 30th Annual Meeting, 2010
2004-2007 Board of Directors of the American Society for Laser Medicine and Surgery
2008-11, 15-pres. Board of Directors, SPIE
2013 Strategic Planning Committee SPIE

9. Publications (partial list from last 5 years)

Winkler AM, Rice P, Weichsel J, Watson J, Backer M, Backer J, Barton JK, "In vivo, dual modality OCT/LIF imaging using a novel VEGF receptor targeted NIR fluorescent probe in the AOM-treated mouse model," *Molecular Imaging and Biology*, 13(6):1173-1182, 2011.
Korde V, Liebmann E, Barton JK, "Design of a Handheld Optical Coherence Microscopy Endoscope," *Journal of Biomedical Optics*, 16(6):066018, 2011.
Wall RA, Barton JK, "Fluorescence-based surface magnifying chromoendoscopy and optical coherence tomography endoscope," *Journal of Biomedical Optics*, 17(8):086003, 2012.
Watson J, Rice P, Marion S, Brewer M, Davis JR, Rodriguez JJ, Utzinger U, Hoyer PB, Barton JK, "Analysis of Second Harmonic Generation Microscopy in a Mouse Model of Ovarian Carcinoma," *Journal of Biomedical Optics*, 17(7):076002, 2012
Watson JM, Marion SL, Rice PF, Bentley DL, Besselsen DG, Utzinger U, Hoyer PB, Barton JK, "In vivo time-serial multi-modality optical imaging in a mouse model of ovarian tumorigenesis," *Cancer Biol Ther.* 15(1):42-60. 2014.
Leung, SJ, Rice PS, Barton JK, "In vivo molecular mapping of the tumor microenvironment in an azoxymethane-treated mouse model of colon carcinogenesis," *Lasers Surg Med.* 47(1):40-9, 2015.
Keenan M, Leung SJ, Rice PS, Wall RA, Barton JK, "Dual Optical Modality Endoscopic Imaging of Cancer Development in the Mouse Colon," *Lasers Surg Med.* 47(1):30-9, 2015.
LeGendre-McGhee S, Rice PS, Wall RA, Sprute KJ, Bommireddy R, Luttmann A, Nagle RB, Abl ER, Farrell K, Hsu CH, Roe DJ, Gerner EW, Ignatenko NA, Barton JK, "Time-Serial Assessment of Drug Combination Interventions in a Mouse Model of Colorectal Carcinogenesis Using Optical Coherence Tomography," *Cancer Growth and Metastasis*, 8:63-80, 2015.
Tate T, Baggett B, Rice PS, Watson Koevary J, Orsinger, GV, Nymeyer AC, Welge WA, Saboda K, Roe DJ, Hatch K, Chambers SK, Utzinger U, Barton JK, "Multispectral fluorescence imaging of human ovarian and fallopian tube tissue for early stage cancer detection," *J. Biomed. Opt.* 21(5), 056005, 2016.

10. Professional development: 2004 Invited participant, Japan-America Frontiers of Engineering Symposium (NAE sponsored); 2013-16 Participated on President's cabinet and helped developed strategic plan for the University of Arizona, subsequently helped develop strategic plans for research with the assistance of a leadership advisory, and then developed the strategic plan for BIO5 Institute.