

## Publications

### Refereed Publications

1. Tilbury K, Campagnola, Paul. "Applications of Second Harmonic Generation imaging microscopy in ovarian and breast cancer." *Perspectives in Medicinal Chemistry*. 2015;7:21-32.
2. Chaudhary R, Campbell, KR, Tilbury KB, Vanderby R Jr., Block WF, Kijowski R, Campagnola, PJ. "Articular cartilage zonal differentiation via 3D Second-Harmonic Generation imaging microscopy." *Connect Tissue Res*. 2015; 56(2): 76-86.
3. Tilbury K, Hocker J, Wen BL, Sandbo N, Singh V, Campagnola PJ. "Second harmonic generation microscopy analysis of extracellular matrix changes in human idiopathic pulmonary fibrosis." *Journal of biomedical optics*. 2014;19(8):086014.
4. Hall G, Tilbury KB, Campbell KR, Eliceiri KW, Campagnola PJ. "Experimental and simulation study of the wavelength dependent second harmonic generation of collagen in scattering tissues." *Optic Letter*. 2014;39(7):1897-900.
5. Tilbury K, Lien CH, Chen SJ, Campagnola PJ. "Differentiation of Col I and Col III isoforms in stromal models of ovarian cancer by analysis of second harmonic generation polarization and emission directionality." *Biophysical journal*. 2014;106(2):354-365.
6. Lien CH, Tilbury K, Chen SJ, Campagnola PJ. "Precise, motion-free polarization control in Second Harmonic Generation microscopy using a liquid crystal modulator in the infinity space." *Biomedical optics express*. 2013;4(10):1991-2002.
7. Kapinas K, Lowther KM, Kessler CB, Tilbury K, Lieberman JR, Tirnauer JS, Campagnola P, Delany AM. "Bone matrix osteonectin limits prostate cancer cell growth and survival." *Matrix Biol*. 2012;31(5):299-307.

### Book Chapters

1. Wall, Matthew A., Haester, Tiffany M., Tilbury, Karissa, Choi, Woo June, Roblyer, Darren, Wang, Ruikang, Skala, Melissa, Liu, Jonathan T.C.(In review). Metabolic imaging approaches – optical imaging. In Lewis and Keshari (Eds). *Imaging and Metabolism*. Springer.
2. Schneider, Caroline; Pehlke, Carolyn; Tilbury, Karissa; Sullivan, Ruth; Eliceiri, Kevin; Keely, Patricia (2014). Quantitative Approaches for Studying the Role of Collagen in Breast Cancer Invasion and Progression. In Pavone, Francesco; Campagnola, Paul (Eds). *Second Harmonic Generation Imaging*(373-390). Boca Raton, FL:CRC Press

## Conference Proceedings

1. Campbell, K.; Tilbury, K.; Campagnola, P. "Determination of the spectral dependence of reduced scattering and quantitative second-harmonic generation imaging for detection of fibrillary changes in ovarian cancer." Proc. SPIE 9329, Multiphoton Microscopy in the Biomedical Sciences XV, 93292A (March 5, 2015); doi:10.1117/12.2083962.
2. Tilbury, K., Lien, C., Chen, S. C. Lien, S. Chen, and Campagnola, P., "Polarization Resolved SHG Imaging in Ovarian Cancer," in *Biomedical Optics 2014*, OSA Technical Digest (online) (Optical Society of America, 2014), paper BT3A.8.
3. P. J. Campagnola, K. Tilbury, K. Campbell, G. Hall, C. Lien, and M. Patankar, "SHG Imaging and Optical Scattering Probes of Ovarian Cancer," in *Optics in the Life Sciences*, OSA Technical Digest (online) (Optical Society of America, 2013), paper MT1C.3.

## Oral Presentations

1. Tilbury, K. Campbell, B. Wen, and P. J. Campagnola, "Multi-Wavelength SHG Imaging in Ovarian Cancer," in *Optics in the Life Sciences*, OSA Technical Digest (online) (Optical Society of America, 2015), paper NT4C.3.
2. Tilbury, K. "Probing the ECM of the Human Ovary using Second Harmonic Generation Microscopy", Biomedical Engineering Midwest Speaker Exchange. University of Illinois, Champagne Urbana, April 2015.