

## PEER-REVIEWED PUBLICATIONS

1. Nguyen, K., Pan, H., Haworth, K., Mahoney, E., **Mercado-Shekhar, K. P.**, Lin, C., Zhang, Z., and Park, Y. "Multiple exposure drug release from stable nanodroplets by high-intensity focused ultrasound for a potential degenerative disc disease treatment," *Ultrasound in Medicine and Biology* 45(1):160-169, 2019. <https://doi.org/10.1016/j.ultrasmedbio.2018.09.014>.
2. **Mercado-Shekhar, K.P.**, Kleven, R., Aponte Rivera, H., Lewis, R., Karani, K.B., Vos, H.J., Abruzzo, T.A., Haworth, K.J., and Holland, C.K. "The effect of clot stiffness on rt-PA lytic susceptibility in vitro," *Ultrasound in Medicine and Biology* 44(12): 2710-2727, 2018. <https://doi.org/10.1016/j.ultrasmedbio.2018.08.005>.
3. Abadi, S., Haworth, K.J., **Mercado-Shekhar, K.P.**, and Dowling, D. "Frequency-sum beamforming for passive cavitation imaging," *The Journal Acoustical Society of America*, 144(1): 198-209, 2018. <https://doi.org/10.1121/1.5045328>.
4. **Mercado, K.P.**, Radhakrishnan, K., Stewart, K., Snider, L., Ryan, D., and Haworth, K.J. "Size-isolation of ultrasound-mediated phase transition perfluorocarbon droplets using differential centrifugation," *The Journal Acoustical Society of America*, 139(5): EL142-EL148, 2016. <https://doi.org/10.1121/1.4946831>.
5. Dalecki, D., **Mercado, K.P.**, and Hocking, D.C. "Quantitative ultrasound for nondestructive characterization of engineered tissues and biomaterials," *Annals of Biomedical Engineering*, 44(3): 636-648, 2016. <https://doi.org/10.1007/s10439-015-1515-0>. \*Invited review article
6. **Mercado, K.P.**, Langdon, J., McAleavey S.A., Hocking, D.C., and Dalecki, D. "Scholte wave generation during Single Tracking Location Shear Wave Elasticity Imaging of three-dimensional engineered tissues," *The Journal of the Acoustical Society of America*, 138(2): EL138-EL144, 2015. <https://doi.org/10.1121/1.4927633>.
7. **Mercado, K.P.**, Helguera, M., Hocking, D.C., and Dalecki, D. "Noninvasive quantitative imaging of collagen microstructure in three-dimensional hydrogels using high frequency quantitative ultrasound," *Tissue Engineering Part C, Methods*, 21(7): 671-682, 2015. <https://doi.org/10.1089/ten.TEC.2014.0527>.
8. **Mercado, K.P.**, Helguera, M., Hocking, D.C., and Dalecki, D. "Estimating cell concentration in three-dimensional engineered tissues using high frequency quantitative ultrasound," *Annals of Biomedical Engineering*, 42(6): 1292-1304, 2014. <https://doi.org/10.1007/s10439-014-0994-8>.

### *Manuscripts under revision:*

1. **Mercado-Shekhar, K.P.**, Su, H., Kalaikadal, D.S., Lorenz, J.N., Manglik, R.M., Holland, C.K., Redington, A.N., and Haworth, K.J. "Acoustic droplet vaporization-mediated scavenging of dissolved oxygen in physiological and blood-mimicking fluids." *Ultrasonics Sonochemistry* (2019).