

PUBLICATIONS (peer-reviewed journals)

1. K. R. Lattwein, **H. Shekhar**, W. van Wamel, T. Gonzalez, A. Herr, C. K. Holland, and K. Kooiman, "Sonobactericide as an adjunct therapy for infective endocarditis: An in vitro proof of principle study," *Scientific Reports (Nature Publishing Group)*, 8:3411.
2. **H. Shekhar**, Nathaniel Smith, Jason L. Raymond, and C. K. Holland, "Effect of temperature on the size distribution, shell properties, and stability of Definity[®]," *Ultrasound Med. Biol.* 44, 434 – 436 (2018).
3. **H. Shekhar**, Jeffrey S. Rowan, and Marvin M. Doyley, "Combining subharmonic and ultraharmonic modes for intravascular ultrasound imaging: a preliminary evaluation," *Ultrasound Med. Biol.* 43, 2725 – 2732 (2017).
4. S. Huang, **H. Shekhar**, and C. K. Holland, "Comparative lytic efficacy of rt-PA and ultrasound in porcine versus human clots," *PLOS One*, e0177786 (2017).
5. **H. Shekhar**, K.B. Bader, S. Huang, T. Peng, S. L. Huang, D. D. McPherson, and C. K. Holland, "In vitro assessment of thrombolytic efficacy of echogenic liposomes that co-encapsulate rt-PA and octafluoropropane gas," *Phys. Med. Biol.* 62, 517–538 (2017).
6. K. B. Bader, K. J. Haworth, **H. Shekhar**, A. D. Maxwell, T. Peng, D. D. McPherson, and C. K. Holland, "Effect of histotripsy combined with rt-PA *in vitro*," *Phys Med. Biol.* 61, 5253 – 5274 (2016).
7. M. A. Kanadadai, P. Mukherjee, **H. Shekhar**, G. J. Shaw, I. Papautsky, and C. K. Holland, "Microfluidic manufacture of rt-PA-loaded echogenic liposomes," *Biomed. Microdevices.* 18. 1 – 10 (2016).
8. K. J. Haworth, J. L. Raymond, K. Radhakrishnan, M. R. Moody, S.L. Huang, T. Peng, **H. Shekhar**, M. E. Klegerman, H. Kim, D. D. McPherson, and C. K. Holland, "Trans-stent ultrasound imaging and cavitation detection," *Ultrasound Med. Biol.* 42, 518 – 527 (2016). Erratum to this article was published in *Ultrasound Med. Biol.* vol. 42 pp. 244.
9. S. J. Huntzicker, **H. Shekhar**, and M. M. Doyley, "Contrast-enhanced quantitative intravascular elastography: The impact of microvasculature on stress reconstruction," *Ultrasound Med. Biol.* 42, 1167–1181 (2016).
10. **H. Shekhar**, S.J. Huntzicker, I. Awuor, and M. M. Doyley, "Chirp-coded ultraharmonic imaging with a modified clinical intravascular ultrasound system," *Ultrason. Imaging.* 38, 403-419 (2016).

11. **H. Shekhar**, I. Awuor, K. Thomas, J. J. Rychak, and M. M. Doyley, “The delayed onset of nonlinear emissions from phospholipid-encapsulated microbubble contrast agents: implications for imaging and therapy,” *Ultrasound Med. Biol.* 40, 727 – 738, (2014).
12. **H. Shekhar**, J. J. Rychak, and M. M. Doyley, “Modifying the size distribution of microbubble contrast agents for high-frequency subharmonic imaging,” *Med. Phys.* 40, 082903-1 – 82903-10, (2013).
13. **H. Shekhar** and M. M. Doyley, “The response of phospholipid-encapsulated microbubbles to chirp-coded excitation: Implications for high-frequency nonlinear imaging,” *J. Acoust. Soc. Am.* 133, 3145 – 3158, (2013).
14. **H. Shekhar** and M. M. Doyley, “Improving the sensitivity of subharmonic imaging at high frequencies with coded excitation: A feasibility study,” *Med. Phys.* 39, 2049 – 2060 (2012).

Manuscripts in revision/review/preparation

1. **H. Shekhar**, A. Palaniappan, T. Peng, M. R. Moody, K. J. Haworth, S. L. Huang, D. D. McPherson, and C. K. Holland, “Lipid-shelled microbubbles for ultrasound-triggered delivery of xenon” (in revision).
2. **H. Shekhar**, R. T. Kleven, T. Peng, A. Palaniappan, K. B. Karani, S. L. Huang, D. D. McPherson, and C. K. Holland, “Efficacy of 220-kHz sonothrombolysis with rt-PA and echocontrast agents in vitro (in review).”
3. R. T. Kleven, **H. Shekhar**, K. Karani, N. Gonzalez-Salido, D. Mast, K. J. Haworth, and C. K. Holland, “Effect of 220-kHz insonation scheme on rt-PA thrombolytic efficacy in vitro” (submission anticipated in January 2019).
4. K. R. Lattwein, **H. Shekhar**, J. J. P. Kouijzer, W.J.B. van Wamel, C. K. Holland, and K. Kooiman “Sonobactericide: an emerging theragnostic for bacterial infections” (submission anticipated in January 2019).