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## SARAH A. BENTIL, PH.D.

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## **PUBLICATIONS**

KEY: Postdoctoral scholars Graduate students Undergraduate students

## Poster presentations

- 1. M. Co, K. Ding, Z. Osborn, C. Pack, **SA. Bentil**, and B. Walter (2023). Modeling the Effects of Hydration on Viscoelastic Properties of Nucleus Pulposus Tissue in Shear and Compression using the Fractional Zener Model. In: *Orthopaedic Research Society (ORS) 2023 Annual Meeting*. Dallas, TX USA.
- 2. D. Resendiz and SA. Bentil (2023c). Manufacturing A Transparent Solution To Understanding Blast Trauma On The Ears. In: *Annual McNair Research Symposium*. Ames, IA USA.
- 3. C. Carolan, A. Buchholz, WJ. Jackson, J. Marsh, and SA. Bentil (2020). Impact of Shock Waves on Viability of Brain Cells. In: *Iowa State University Symposium on Undergraduate Research & Creative Expression (SoURCE)*. Ames, IA USA.
- 4. I. Dalton, J. Marsh, WJ. Jackson, and SA. Bentil (2020). Parametric Analysis of External Conditions Affecting Bubble Properties. In: *Iowa State University Symposium on Undergraduate Research & Creative Expression (SoURCE)*. Ames, IA USA.
- 5. J. Holtzleiter, S. Hansen, C. Carolan, and **SA. Bentil** (2020). The Influence of Brain Tissue Hydration on Airbrush Speckle Adhesion. In: *Iowa State University Symposium on Undergraduate Research & Creative Expression (SoURCE)*. Ames, IA USA.
- 6. S. Hansen, J. Holtzleiter, C. Carolan, and **SA. Bentil** (2020). Speckling Soft Materials Using an Airbrush Attachment for Digital Image Correlation Experiments. In: *Iowa State University Honors Poster Session for Undergraduate Students*. Ames, IA USA.
- 7. AK. McCarty, L. Zhang, S. Hansen, WJ. Jackson, and SA. Bentil (2019b). Viscoelastic Response of Shock Wave Impacted Brain Tissue. In: *Summer Biomechanics, Bioengineering and Biotransport* (SB3C) Conference. Seven Springs, PA USA.
- 8. J. Marsh and **SA. Bentil** (2019). Simulating Brain Swelling as a Function of Constitutive Model. In: *11th Annual Neuroscience Research Day*. Ames, IA USA.
- 9. L. Zhang, M. Manzo, and **SA. Bentil** (2019). Analysis of a poly(ethylene glycol) diacrylate (PEGDA) optical sensor-based whispering gallery mode shift subjected to shock wave impact. In: *Summer Biomechanics, Bioengineering and Biotransport (SB3C) Conference*. Seven Springs, PA USA.
- 10. A. Libbesmeier, LC. McPherren, and **SA. Bentil** (2019). Establishing A Single Camera Multi-angle Imaging Technique for Observing Tissue Impact Events. In: *Iowa State University Honors Poster Session for Undergraduate Students*. Ames, IA USA.
- 11. LC. McPherren, S. Hansen, and **SA. Bentil** (2019a). A 3D Printed Airbrush Nozzle Attachment for Investigating Shape Changes of Soft Biological Tissue. In: *Iowa State University Symposium on Undergraduate Research & Creative Expression (SoURCE)*. Ames, IA USA.
- 12. LC. McPherren, S. Hansen, and **SA. Bentil** (2019b). Effect of Airbrush Attachment Geometry on Speckle Pattern Characteristics for Application with Digital Image Correlation. In: *National Conference on Undergraduate Research (NCUR)*. Kennesaw, GA USA.
- 13. WJ. Jackson and **SA. Bentil** (2018). Quantifying the Brain's Deformation due to Shock Wave Impact. In: 8th Annual Traumatic Brain Injury Conference. Washington, DC USA.
- 14. D. Sirivolu and SA. Bentil (2018). Dynamic Characterization of Soft Materials using an inverse-Finite Element Method. In: *Iowa State Research Day*. Ames, IA USA.

- 15. TJ. Beavers and SA. Bentil (2017). Controlled experimentation of blunt impact to simulated soft tissue materials. In: *Iowa State University Graduate and Professional Students' Research Conference*. Ames, IA USA.
- 16. S. Hansen and **SA. Bentil** (2017b). Producing High-Contrast Images of Speckled Brain Tissue for Non-Contact Optical Measurements. In: *Iowa State University Honors Poster Session for Undergraduate Students*. Ames, IA USA.
- 17. **SA. Bentil**, T. Reed, JS. Allen III, and YL. Yan (2006). Modeling aspects of vocal fold oscillations with validation to clinical data. In: *152*<sup>nd</sup> *Meeting of The Acoustical Society of America*. Vol. 120. 5. Honolulu, HI USA, pp.3351.
- 18. **SA. Bentil** and YL. Yan (2005[a]). Characterization of voice pathologies from acoustic signals using wavelet analysis. In: 149<sup>th</sup> Meeting of The Acoustical Society of America. Vol. 117. 4. Vancouver, BC CANADA, pp.2544.
- 19. **SA. Bentil**, D. Mager, NM. Soldatov, and E. Kobrinsky (2004). Defining regions of interest in FRET microscopy via statistical analysis. In: *FASEB Meeting on Experimental Biology: Translating the Genome*. Vol. 18. 4. Washington, DC USA.