Recent Publications
Sherry Voytik-Harbin

Journal Articles:

[1] S.L. Voytik-Harbin, B.A. Roeder, J.E. Sturgis, K. Kokini, and J.P. Robinson, "Simultaneous Mechanical Loading and Confocal Reflection Microscopy for 3D Micro-biomechanical Analysis of Biomaterials and Tissue Constructs," *Microscopy and Microanalysis*, 9:74-85, 2003.

[2] J. Wu, B. Rajwa, D.L. Filmer, C.M. Hoffmann, B. Yuan, C.-S. Chiang, J. Sturgis, S.L. Voytik-Harbin, and J.P. Robinson, "Automated Quantification and Reconstruction of Collagen matrix from 3D Confocal Datasets," *Microscopy and Microanalysis*, 2003 (in press).

Publications: Abstracts and Presentations:

[1] A.M. Pizzo, K. Kokini, and S.L. Voytik-Harbin, "Cell-matrix Adhesions as Sensors of Three-dimensional Extracellular Matrix Microstructure and Composition," Sigma Xi Graduate Student Research Poster Competition, Purdue University, February 2003.

[2] B.A. Roeder, B. Waisner, J.E. Sturgis, K. Kokini, J.P. Robinson, and S.L. Voytik-Harbin, "Extracellular Matrix (ECM) Microstructure Determines Cell-extracellular Matrix Strain Transfer in 3D Model Tissues," Oral Presentation (BAR), American Society of Mechanical Engineers, Summer Bioengineering Conference, Key Biscayne, FL, June 2003.

[3] A.M. Pizzo, B.Z. Waisner, J.E. Sturgis, K. Kokini, J.P. Robinson, and S.L. Voytik-Harbin, "Cell-matrix Adhesions as Sensors of Three-dimensional Extracellular Matrix Microstructure and Composition," Oral Presentation (AMP), American Society of Mechanical Engineers, Summer Bioengineering Conference, Key Biscayne, FL, June, 2003.

[4] A.M. Pizzo, B.A. Roeder, B.Z. Waisner, J.E. Sturgis, K. Kokini, J.P. Robinson, and S.L. Voytik-Harbin, "The Effect of Local Strain on Cell-matrix Adhesions in Three-dimensional Tissue Constructs," Oral Presentation (AMP), Biomedical Engineering Society Annual Fall Meeting: Research, Education and Industry in Biomedical Engineering: Closing the Loop, Nashville, TN, October, 2003.

[5] B.A. Roeder, K. Kokini, J.P. Robinson, and S.L. Voytik-Harbin, "Collagen Extracellular Matrix Mechanics: Implications of True and Engineering Stress-strain Analysis," Poster Presentation (BAR), Biomedical Engineering Society Annual Fall Meeting: Research, Education and Industry in Biomedical Engineering: Closing the Loop, Nashville, TN, October, 2003.

[6] S.L. Voytik-Harbin, A.M. Pizzo, B.A. Roeder, B.Z. Waisner, J.E. Sturgis, K. Kokini, and J.P. Robinson, "Cell Biomechanics in Context," Invited Oral Presentation (SLVH), Biomedical Engineering Society Annual Fall Meeting: Research, Education and Industry in Biomedical Engineering: Closing the Loop, Nashville, TN, October 1, 2003.