

2017 Editors' Choice Papers

As part of the Annual Special Issue, the JBME Associate Editors selected the top papers published in the journal during 2017. Those Editors' Choice papers, listed below in chronological order, exemplified both the high quality and the breadth of papers published in the journal. Congratulations to these authors and to all authors whose work appeared in JBME over the past year!

Dumas, L., El Bouti, T., and Lucor, D., 2017, "A Robust and Subject-Specific Hemodynamic Model of the Lower Limb Based on Noninvasive Arterial Measurements," *ASME J. Biomech. Eng.*, **139**(1), p. 011002.

Urevc, J., Žun, I., Brumen, M., and Štok, B., 2017, "Modeling the Effect of Red Blood Cells Deformability on Blood Flow Conditions in Human Carotid Artery Bifurcation," *ASME J. Biomech. Eng.*, **139**(1), p. 011011.

Lintz, M., Muñoz, A., and Reinhart-King, C. A., 2017, "The Mechanics of Single Cell and Collective Migration of Tumor Cells," *ASME J. Biomech. Eng.*, **139**(2), p. 021005.

Badachhape, A. A., Okamoto, R. J., Durham, R. S., Efron, B. D., Nadell, S. J., Johnson, C. L., and Bayly, P. V., 2017, "The Relationship of Three-Dimensional Human Skull Motion to Brain Tissue Deformation in Magnetic Resonance Elastography Studies," *ASME J. Biomech. Eng.*, **139**(5), p. 051002.

Witzenburg, C. M., Dhume, R. Y., Shah, S. B., Korenczuk, C. E., Wagner, H. P., Alford, P. W., and Barocas, V. H., 2017, "Failure of the Porcine Ascending Aorta: Multidirectional

Experiments and a Unifying Microstructural Model," *ASME J. Biomech. Eng.*, **139**(3), p. 031005.

Abueidda, D. W., Sabet, F. A., and Jasiul, I. M., 2017, "Modeling of Stiffness and Strength of Bone at Nanoscale," *ASME J. Biomech. Eng.*, **139**(5), p. 051006.

Pstras, L., Thomaseth, K., Waniewski, J., Balzani, I., and Bellavere, F., 2017, "Modeling Pathological Hemodynamic Responses to the Valsalva Maneuver," *ASME J. Biomech. Eng.*, **139**(6), p. 061001.

George, S. M., and Domire, Z. J., 2017, "Simulations, Imaging, and Modeling: A Unique Theme for an Undergraduate Research Program in Biomechanics," *ASME J. Biomech. Eng.*, **139**(7), p. 071002.

Steucke, K. E., Win, Z., Stemler, T. R., Walsh, E. E., Hall, J. L., and Alford, P. W., 2017, "Empirically Determined Vascular Smooth Muscle Cell Mechano-Adaptation Law," *ASME J. Biomech. Eng.*, **139**(7), p. 071005.

Werbner, B., Zhou, M., and O'Connell, G., 2017, "A Novel Method for Repeatable Failure Testing of Annulus Fibrosus," *ASME J. Biomech. Eng.*, **139**(11), p. 111001.

de Bakker, C. M. J., Tseng, W.-J., Li, Y., Zhao, H., Altman-Singles, A. R., Jeong, Y., Robberts, J., Han, L., Kim, D.-G., and Liu, X. S., 2017, "Reproduction Differentially Affects Trabecular Bone Depending on Its Mechanical Versus Metabolic Role," *ASME J. Biomech. Eng.*, **139**(11), p. 111006.