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Stephanie Siskey
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Professional Profile

Ms. Stephanie Siskey is an Associate in Exponent's Biomedical Engineering practice. Her primary focus is medical device consulting projects in the area of finite element analysis for orthopedic product research and development. Ms. Siskey has experience in the computational evaluation of total hip, total knee, and unicompartmental knee arthroplasties, and total disc replacement device performance. She has also conducted computational structural and material performance evaluations of a variety of commercial products.

Ms. Siskey has experience in bench-top biomechanical testing of medical devices in ovine and cadaveric specimen models, as well as micro-CT based analyses on a variety of medical devices. She has made significant contributions to the development of the Philadelphia office Cadaveric Tissue Lab, as well as the management of an IRB approved spinal fusion explant retrieval program in conjunction with local institutions, with whom she has conducted research.

Academic Credentials and Professional Honors

B.S., Biomedical Engineering, Drexel University (*cum laude*), 2006

Best Paper Second Prize Award at the BORS/BOTA session at the British Orthopaedic Association Annual Congress, 2008; A.J. Drexel Scholarship, 2001–2006

Publications

Villarraga M, Cripton PA, Teti (Siskey) S, Steffey DL, Krisnamuthy S, Albert T, Hilibrand A, Vaccaro A. Wear and corrosion in retrieved thoracolumbar posterior internal fixation. Spine 2006; 31(21):2454–2462.

Presentations and Published Abstracts

Ong K, Siskey S, Bastian A, Hozack W, Puri L, Merrill P, Nogler M, Kreuzer S, Lovell T. Influence of length and medial-lateral geometry on femoral stem biomechanics. Poster No. 2411. 55th Annual Meeting of the Orthopaedic Research Society, Las Vegas, NV, February 22–25, 2009.

Latif AMH, Ong K, Siskey S, Field RE. A combined finite element and radiological analysis of the proximal femur following hip resurfacing arthroplasty. BOA Annual Congress, Liverpool, UK, September 16–19, 2008.

Latif AMH, Ong KL, Siskey S, Field R. A combined finite element and radiological analysis of the proximal femur following hip resurfacing arthroplasty. Paper No. F400, 9th EFORT Congress, Nice, France, May 29–June 1, 2008.

Latif AMH, Ong KL, Siskey S, Field R. Bone remodelling in the proximal femur post hip resurfacing arthroplasty. Paper No. O-026, 17th Annual Meeting of the European Orthopaedic Research Society, Madrid, Spain, April 24–26, 2008.

Latif AMH, Ong KL, Siskey S, Field R. A combined finite element and radiological analysis of the proximal femur following hip resurfacing arthroplasty. Paper No. O-005, 17th Annual Meeting of the European Orthopaedic Research Society, Madrid, Spain, April 24–26, 2008.

Ong K, Latif A, Siskey S, Field R. A combined finite element and radiological analysis of the proximal femur following hip resurfacing arthroplasty. Poster No. 1825. 54th Annual Meeting of the Orthopaedic Research Society, San Francisco, CA, March 2–5, 2008.

Villarraga ML, Teti (Siskey) S, Kane W, Steffey D, Campbell P, Hilibrand A, Albert T, Vaccaro A. What is the impact of wear and corrosion seen on retrieved spine implants? Philadelphia Spine Research Symposium, Philadelphia, PA, October 9, 2007.

Villarraga ML, Teti (Siskey) S, Kane W, Steffey D, Campbell P, Hilibrand A, Albert T, Vaccaro A. What is the impact of wear and corrosion seen on retrieved spine implants? Poster No. 1068. 53rd Annual Meeting of the Orthopaedic Research Society, San Diego, CA, February 11–14, 2007.

Day J, Villarraga ML, Teti (Siskey) S, Graber MA, Schwardt J. Does MicroCT provide clinically relevant information on vertebral compression fractures? E-Poster P136. Proceedings, North American Spine Society, Seattle, WA, September 26–30, 2006.

Day J, Villarraga ML, Teti (Siskey) S, Graber MA, Schwardt J. Does the resolution of MicroCT provide any clinically relevant information on vertebral compression fractures? Philadelphia Spine Research Symposium, Philadelphia, PA, September 27, 2005.

Ong K, Villarraga ML, Teti (Siskey) S, Sankaran M, Turner A, Seim H, Schwardt J. Vertebral augmentation with calcium phosphate cements: bioceramic integration characteristics and compressive strength in ovine vertebral bodies. Paper No. 272. 51st Annual Meeting of the Orthopaedic Research Society, Washington, DC, February 20–23, 2005.