

CURRICULUM VITAE

Cynthia M. Smith, Ph.D.

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EDUCATION:

Ph.D., Biomedical Engineering, The University of Arizona, Tucson, AZ, 2005.

M.S., Computer Science, Virginia Polytechnic Institute and State University, Blacksburg, VA, 1998.

B.S., Computer Science (minor in Mathematical Sciences), Clemson University, Clemson, SC, 1996.

PROFESSIONAL EXPERIENCE:

2014-present	Lecturer	Department of Bioengineering, Clemson University
2006-2009	Biomedical Engineer II	nScript, Inc.
2003-2005	NIH NRSA Training Grant Appointee	Department of Biomedical Engineering, University of Arizona
2001-2003	Graduate Research Assistant	Department of Biomedical Engineering, University of Arizona
2000-2001	Software Engineer	IBM, Corp., Tucson, AZ
1998-2000	Software Engineer	VTLS, Inc.
1997-1998	Graduate Research Assistant	VTLS, Inc., and Virginia Tech
1997-1997	Graduate Teaching Assistant	Computer Science Department, Virginia Tech
1995-1996	Co-op	Mount Vernon Mills, Inc., Greenville, SC
1993-1994	Co-op	IBM, Corp., Charlotte, NC

ACTIVITIES AND AFFILIATIONS:

2002-2006	Biomedical Engineering Society
2003-2006	Materials Research Society
2002-2005	Vice President of Society for Biomaterials Student Chapter
2003-2004	Student Liaison for Program Committee in the Division of Biomedical Engineering
2002-2003	Student Liaison for Student Recruitment in the Division of Biomedical Engineering
2003-2004	Cardiovascular Journal Club Organizer

HONORS AND AWARDS

- July 2005 American Heart Association Predoctoral Grant
* *Declined due to graduation date of Fall 2005*
- July 2002 Whitaker Foundation Travel Grant for Gordon Research Conference on Lasers in Medicine and Biology

PUBLICATIONS AND PRESENTATIONS:

Journal Publications:

Smith, CM, Bhalkikar, A, Roy, TD, Li, B, Hickman, JJ, Church, KH: 2010. Engineering a Titanium and Polycaprolactone Construct for a Biocompatible Interface Between the Body and Artificial Limb, *Tissue Engineering*, 16(2): 717-724.

Smith CM, Christian J, Warren WL, Williams SK: 2007. Characterizing environmental factors that impact the viability of tissue-engineered constructs fabricated by a direct-write bioassembly tool. *Tissue Engineering*, 13(2): 373-383.

Smith CM, Smith JC, Williams SK, Hoying JB, and Rodriguez JJ: 2007. Automatic thresholding of three-dimensional microvascular structures from confocal microscopy images. *Journal of Microscopy*, 225 (Pt 3): 243-256.

Gossage KW, Smith CM, Kanter EM, Hariri LP, Stone AL, Rodriguez JJ, Williams SK, and Barton JK: 2006. Texture Analysis of Speckle in Optical Coherence Tomography Images of Tissue Phantoms. *Physics and Medicine in Biology*, 51(6): 1563-1575.

Smith CM, Stone AL, Parkhill RL, Stewart RL, Simpkins MW, Kachurin AM, Warren WL, and Williams SK: 2004. Three-Dimensional BioAssembly Tool for Generating Viable Tissue-Engineered Constructs. *Tissue Engineering*, 10(9-10):1566-1576.

Shepherd BR, Chen HY, Smith CM, Gruionu G, Williams SK, and Hoying JB: 2004. Rapid Perfusion and Vessel Remodeling in a Microvascular Construct Following Implantation. *Arteriosclerosis, Thrombosis, and Vascular Biology*, 24(5): 898-904.

Conference Publications:

Smith CM, Stone K, and Church KH. Fabricating Novel Stretchable Scaffold for artificial limbs. Materials Research Society. Conference Publication April 2009.

Li, B, Dutta Roy, T, Smith CM, Clark PA, and Church KH. A robust true direct-print technology for tissue engineering. Proceedings of the 2007 International Manufacturing Science and Engineering Conference MSEC2007, Conference Publication October 2007.

Gossage KW, Hariri LP, Stone AL, Smith CM, Rodriguez JJ, Williams SK, and Barton JK. Evaluation of collagen and endothelial cell growth using texture analysis techniques on optical coherence tomography images. Conference Publication, Photonics West, January 2004.

Presentations:

“Utilizing a three-dimensional bioassembly tool to fabricate spatially organized multicellular vascular constructs,” Poster Presentation, Experimental Biology, April 2005.

“Three dimensional printing system for the fabrication of cell and polymer constructs,” Poster Presentation, Society for Biomaterials, May 2003.

“Three Dimensional Analysis of Mural Cell Coverage in Microvascular Collagen Gels,” Poster Presentation, Experimental Biology, April 2003.

“Automated analysis of angiogenic potential of microvessel fragments established in three-dimensional collagen gels using confocal microscopy,” Poster Presentation, Gordon Research Conference on Lasers in Medicine and Biology, July 2002.