
MARIAH S. HAHN, PhD
Associate Professor, Department of Chemical Engineering
Holder of the Ray Nesbitt Development Professorship IV
Texas A&M University
<http://www.hahntissuelab.com>

EDUCATION/TRAINING

Post-Doctoral Researcher, Bioengineering
Rice University, Houston, TX 2004-2005
Advisor: Dr. Jennifer West, Department of Bioengineering

PhD, Electrical Engineering (Bioelectrical Concentration)
Massachusetts Institute of Technology, Cambridge, MA 09/2004
Advisor: Dr. Robert Langer, Department of Chemical Engineering

MS, Electrical Engineering
Stanford University, Stanford, CA 01/2001

BS, Chemical Engineering
University of Texas at Austin, Austin, TX 05/1998
Graduated with Highest Honors

PROFESSIONAL APPOINTMENTS

Associate Professor, Texas A&M University 09/2011-
Holder of the Ray Nesbitt Development Professorship IV
Department of Chemical Engineering

Assistant Professor, Texas A&M University 08/2005-08/2011
Holder of the Ray Nesbitt Development Professorship IV
Department of Chemical Engineering

Adjunct Professor, Texas A&M University 08/2005-
Department of Biomedical Engineering

Faculty Member, Texas A&M University 08/2006-
Materials Science and Engineering Program

HONORS AND AWARDS

NAE 2010 Frontiers of Engineering Symposium Participant 2010
NSF CAREER Award 2010-2015
ASEE GSW Young Faculty Award 2009
College of Engineering Select Young Faculty Award 2009
ACS PROGRESS/Dreyfus Lectureship Award 2008
National Science Foundation Graduate Fellowship 1999-2002
John Linvill Fellowship 2000
Jodie Eisenhower Presidential Scholarship 1997
National Science Scholar 1995

PEER-REVIEWED PUBLICATIONS

Average Citations per Record: 18.25; h-index: 13.

*Corresponding author italicized.

1. C. Yang, A. Wax, M. Hahn, K. Ramashandran, and *M. Feld*. (2001). Phase-referenced interferometer with subwavelength and subhertz sensitivity applied to the study of cell membrane dynamics. *Optics Letters* 26 (16):1271-73.
2. M.S. Hahn, J. Kobler, S. Zeitels, *R. Langer*. (2005). Midmembranous vocal fold lamina propria proteoglycans across selected species. *Annals of Otology, Rhinology, and Laryngology*. 114 (6): 451-62. PMID: 16042103

3. M.S. Hahn, J.S. Miller, *J.L. West*. (2005). Laser scanning lithography for surface micropatterning on hydrogels. *Advanced Materials*. 17 (24): 2939-42.
4. M.S. Hahn, B. Teply, M. Stevens, S. Zeitels, *R. Langer*. (2006). Collagen composite hydrogels for vocal fold lamina propria restoration. *Biomaterials*. 27 (7): 1104-9. PMID: 16154633
5. M.S. Hahn, J. Kobler, B. Starcher, S. Zeitels, *R. Langer*. (2006). Quantitative and comparative studies of the vocal fold extracellular matrix I: Elastic fibers and hyaluronan. *Annals of Otolaryngology, Rhinology, and Laryngology*. 115 (2): 156-64. PMID: 16514800
6. M.S. Hahn, L. Taite, J. Moon, M. Rowland, K. Ruffino, *J.L. West*. (2006). Photolithographic patterning of poly(ethylene glycol) hydrogels. *Biomaterials*. 27 (12): 2519-24. PMID: 16375965
7. J.S. Miller, M. I. Bethencourt, M. Hahn, T.R. Lee, *J.L. West*. (2006). Laser-scanning lithography (LSL) for the soft lithographic patterning of cell-adhesive self-assembled monolayers. *Biotechnology and Bioengineering*. 93 (6): 1060-8. PMID: 16444742
8. M.S. Hahn, J. Kobler, S. Zeitels, *R. Langer*. (2006). Quantitative and comparative studies of the vocal fold extracellular matrix II: Collagen. *Annals of Otolaryngology, Rhinology, and Laryngology*. 115 (3):225-32. PMID: 16572613
9. M.S. Hahn, J. Miller, *J. West*. (2006). Three dimensional biochemical and biomechanical patterning of hydrogels for guiding cell behavior. *Advanced Materials*. 18 (20): 2679-84.
10. M.S. Hahn, M.K. McHale, E. Wang, R. Schmedlen, *J. West*. (2007). Physiologic pulsatile flow bioreactor conditioning of poly(ethylene glycol)-based tissue engineered vascular grafts. *Annals of Biomedical Engineering*. 35 (2): 190-200. PMID: 17180465
11. R. Murthy, C.D. Cox, M.S. Hahn, *M.A. Grunlan*. (2007). Protein-resistant silicones: Incorporation of PEO via siloxane tethers. *Biomacromolecules*. 8(10):3244-52. PMID: 17725363
12. H. Liao, D. Munoz-Pinto, X. Qu, Y. Hou, M. Grunlan, *M.S. Hahn*. (2008). Influence of hydrogel mechanical properties and mesh size on vocal fold fibroblast extracellular matrix production. *Acta Biomaterialia*. 4 (5): 1161-71. PMID: 18515199
13. Y.Hou, A.R. Matthews, A.M. Smitherman, A.S. Bulick, M.S Hahn, H. Hou; A. Han, *M.A. Grunlan*. (2008). Thermoresponsive nanocomposite hydrogels with cell-releasing behavior. *Biomaterials*. 29 (22): 3175-84. PMID: 18455788
14. *M.S. Hahn*, C. Jao, W. Faquin, J. Grande-Allen. (2008). Glycosaminoglycan composition of the vocal fold lamina propria in relation to function. *Annals of Otolaryngology, Rhinology, and Laryngology*. 117 (5): 371-81. PMID: 18564535
15. J. Moon, M.S. Hahn, X. Li, *J. West*. (2009). Micropatterning of poly(ethylene glycol) diacrylate hydrogels with biomolecules to regulate and guide endothelial morphogenesis. *Tissue Engineering*. 15 (3): 579-85. PMID: 18803481
16. A.S. Bulick, D. Munoz-Pinto, M. Mani, D. Cristancho, M. Urban, *M.S. Hahn*. (2009). Impact of endothelial cells and mechanical conditioning on smooth muscle cell extracellular matrix production and differentiation. *Tissue Engineering*. 15 (4): 815-25. PMID: 19108675
17. D. Munoz-Pinto, A. Bulick, *M.S. Hahn*. (2009). Uncoupled investigation of scaffold modulus and mesh size on smooth muscle cell behavior. *J Biomed Mater Res A*. 90 (1): 303-16. PMID: 19402139
18. D. Munoz-Pinto, P. Whittaker, *M.S. Hahn*. (2009). Lamina propria cellularity and collagen composition: An integrated assessment of structure in humans. *Annals of Otolaryngology, Rhinology, and Laryngology*. 118 (4): 299-306. PMID: 19462852
19. D. Munoz-Pinto, C.A. Jimenez-Vergara, L.M. Gelves, R. McMahon, V. Guiza-Arguello, *M.S. Hahn*. (2009). Probing vocal fold fibroblast response to hyaluronan in controlled 3D contexts. *Biotechnology and Bioengineering*. 104 (4): 821-31. PMID: 19718686
20. J. Gaspard, *M.S. Hahn*, J.A. Silas. (2009). Polymerization of hydrogels inside self-assembled block copolymer vesicles. *Langmuir*. 5 22): 12878-84. PMID: 19835397
21. A. Rocha, M.S. Hahn, *H. Liang*. (2010). Critical-fluid-shear-stress analysis for cell-polymer adhesion. *Journal of Materials Science*. 45 (3): 811-17.
22. D. Munoz-Pinto, R. McMahon, M. Kanzelberger, A.C. Jimenez-Vergara, Y. Hou, M. Grunlan, *M.S. Hahn*. (2010). Inorganic-organic hybrid scaffolds for osteochondral regeneration. *J of Biomed Mater Res A*. 94 (1): 112-21. PMID: 20128006
23. H. Hou, Y. Hou, M.A. Grunlan, D. Munoz-Pinto, M.S. Hahn, *A. Han*. (2010) Micropatterning of poly(N-isopropylacrylamide) PNIPAAm hydrogels: Effect on thermosensitivity and cell-release behavior. *Sensors and Materials*. 22 (3): 109-20.

24. Y. Hou, C.A. Schoener, K.R. Regan, D. Munoz-Pinto, M.S. Hahn, *M.A. Grunlan*. (2010). Photo-crosslinked PDMS_{star}-PEG hydrogels: Synthesis, characterization, and potential application for tissue engineering scaffolds. *Biomacromolecules*. 11(3):648-56. PMID: 20146518
25. C.A. Jimenez-Vergara, R. McMahon, D. Munoz-Pinto, L. Cubero-Ponce, A. Morales, *M.S. Hahn*. (2010). Approach for fabricating tissue engineered vascular grafts with stable endothelialization. *Annals of Biomedical Engineering*. 38 (9): 2885-95. PMID: 20464634
26. *E. Cosgriff-Hernandez, M. Hahn*, B. Russell, T. Wilems, D. Munoz-Pinto, M.B. Browning, J. Rivera, M. Höök. (2010). Bioactive hydrogels based on Designer Collagens. *Acta Biomaterialia*. 6 (10): 3969-77. PMID: 20466083
27. X. Qu, AC Jimenez-Vergara, D.J. Munoz-Pinto, D. Ortiz, R.E. McMahon, D Cristancho, S. Becerra-Bayona, V. Guiza-Arguello, K.J. Grande-Allen, *M.S. Hahn*. (2011). Regulation of smooth muscle cell phenotype by glycosaminoglycan identity. *Acta Biomaterialia*. 7(3):1031-9. PMID: 21094702
28. R.E. McMahon, X. Qu, A.C. Jimenez-Vergara, C.A. Bashur, S.A. Guelcher, A.S. Goldstein, *M.S. Hahn*. (2011). Electrospun mesh-hydrogel composites for tissue engineered vascular grafts. *Tissue Eng. C*, 17 (4):451-61. PMID: 21083438
29. M.B. Browning, T. Wilems, M. Hahn, *E.M. Cosgriff-Hernandez*. (2011). Compositional control of poly(ethylene glycol) hydrogel modulus independent of mesh size. *J Biomed Mater Res*, 98A (2): 268-73.
30. AC Jimenez-Vergara, D.J. Munoz-Pinto, S. Becerra-Bayona, B. Wang; A. Iacob, *M.S. Hahn*. (2011). Influence of glycosaminoglycan identity on vocal fold fibroblast behavior. *Acta Biomaterialia*, In Press.
31. D.J. Munoz-Pinto, AC Jimenez-Vergara, Y. Hou, H.N. Hayenga, M. Grunlan, *M.S. Hahn*. Examination of the osteogenic potential of poly(ethylene glycol)-poly(dimethylsiloxane) hybrid hydrogels. In Revision with *Tissue Eng A*.
32. M.B. Browning, D. Dempsey, V. Guiza, S. Becerra, J. Rivera, M. Höök, B. Russell, F. Clubb, M. Miller, T. Fossum, J. Dong, A. Bergeron, M. Hahn, *E. Cosgriff-Hernandez* Multilayer vascular grafts based on collagen-mimetic proteins. In Revision with *Acta Biomaterialia*..

PEER-REVIEWED BOOK CHAPTERS

*Corresponding author(s) italicized.

1. *R.J. Clifton*, X. Jia, T.Jia, C. Bull, M.S. Hahn. "Viscoelastic Response of Vocal Fold Tissues and Scaffolds at High Frequencies." Mechanical of Biological Tissue. Eds. G.A. Holzapfel, R.W. Ogden (2006).
2. *M. Hahn* and *B. Bouma*. "Optical Coherence Tomography." Scott Brown's Otorhinolaryngology: Head and Neck Surgery, 7th Ed. Hodder Arnold (2008).
3. *M.S. Hahn*. "Mechanical Stimulation and Biomimetic Scaffolds for Tissue Engineered Vascular Grafts." E-Book: Topics in Tissue Engineering (2008).

PATENTS

1. M. Höök, B. Russell, E. Cosgriff-Hernandez, M. Hahn. Biomedical applications of Designer Collagens. Patent application filed Dec. 2009. Texas A&M Health Science Center, Texas Engineering Experimental Station, and ECM Technologies.

INVITED PRESENTATIONS

1. M.S. Hahn. Engineering the vocal fold mucosa. Department of Chemical Engineering, Texas A&M University. 02/2004.
2. M.S. Hahn. Effects of pulsatile flow on tissue engineered vascular grafts. Research in Innovative Tissue Engineering, NHLBI. 07/2005.
3. M.S. Hahn. Physiologic pulsatile flow conditioning of PEG-based tissue engineered vascular grafts. Department of Biomedical Engineering, Texas A&M University. 05/2005.
4. M.S. Hahn. Photopatterning hydrogels for tissue engineering applications. Center for Advanced Microstructures and Devices, Louisiana State University. 06/2006.
5. M.S. Hahn. Photopatterning hydrogels for tissue engineering applications. Professional Program in Biotechnology, Texas A&M University. 08/2006.
6. M.S. Hahn. Pulsatile flow bioreactor for blood vessel tissue engineering. Department of Systems Biology and Translational Medicine, Texas A&M Health Science Center. 01/2006.

7. M.S. Hahn. Proteoglycan and collagen composition of the vocal fold lamina propria – Toward vocal fold regeneration. ICALB Phonosurgery Symposium, University of Wisconsin-Madison. 07/2008.
8. M.S. Hahn. Toward rational scaffold design for tissue engineering vascular graft applications. NSF/IGERT Seminar Series, Department of Biomedical Engineering, University of Texas-Austin. 02/2008.
9. M.S. Hahn. Engineering the stem cell microenvironment – Influence of scaffold bioactivity and microorganization. Department of Biomedical Engineering, University of Minnesota-Minneapolis. 10/2008.
10. M.S. Hahn. Biofuels and bioremediation. 1st Annual Graduate Student Convention, Puerto Rico. 03/2009.
11. M.S. Hahn. Modulation of scaffold material properties to guide stem cell differentiation. Houston Society for Engineering in Medicine and Biology (HSEMB). Cell, Molecular, and Tissue Engineering Session Keynote. 03/2009.
12. M.S. Hahn. Tissues, cross-discipline research, and life as a graduate student. Annual Undergraduate Research Scholars Program, Texas A&M University. 08/2009
13. M.S. Hahn. Directing mesenchymal stem cell differentiation through biomaterial properties. TX-UK Stem Cells and Regenerative Medicine Workshop, Rice University. 09/2009.
14. M.S. Hahn. Programming mesenchymal stem cell lineage progression. Department of Biomedical Engineering, Case Western Reserve University. 10/2009.
15. M.S. Hahn. Programming mesenchymal stem cell lineage progression. Department of Chemical and Biomolecular Engineering, Ohio State University. 10/2009.
16. M.S. Hahn. Cell interactions with “Designer Collagen”-based hydrogels. Center for Extracellular Matrix Biology (Institute of Biosciences and Technology), Texas A&M Health Science Center. 11/2009.
17. M.S. Hahn. Dependence of mesenchymal stem cell behavior on microenvironmental stimuli. Department of Chemical Engineering. University of Arkansas. 12/2009.
18. M.S. Hahn. Directing mesenchymal stem cell lineage progression. Department of Chemical Engineering, University of Texas-Austin. 03/2010.
19. M.S. Hahn. Directing mesenchymal stem cell lineage progression. Department of Biomedical Engineering, University of Wisconsin-Madison. 04/2010.
20. M.S. Hahn. Tissue engineering in chemical engineering. E3 Research Experiences for Teachers, Texas A&M University. 06/2010.
21. M.S. Hahn. PDMS_{star}-PEG hydrogels for directed mesenchymal stem cell differentiation. ACS National Meeting, Boston. 08/2010.
22. M.S. Hahn. Hybrid inorganic-organic hydrogels for tuning cell responses. Department of Chemical Engineering. Illinois Institute of Technology. 12/2010.
23. M.S. Hahn. Managing people. Women in Science and Engineering (WISE) Symposium, Texas A&M University. 02/2011.
24. M.S. Hahn. Directing mesenchymal stem cell lineage progression. Department of Biomedical Engineering, Rensselaer Polytechnic Institute. 04/2011.
25. M.S. Hahn. Material-guided mesenchymal stem cell differentiation. Biomaterials Day, College Station. 05/2011.

CONFERENCE PRESENTATIONS

1. M. Hahn, R. Langer, and S. Zeitels. Tissue engineering of the vocal cord mucosa. *AICHE Annual Meeting*, San Francisco (2003).
2. M. Hahn, R. Langer, and S. Zeitels. Engineering the vocal fold mucosa. *Tissue Engineering Society International*, Orlando (2003).
3. R. Clifton, M. Hahn, X. Jia, and T. Jiao. Viscoelastic response of vocal fold tissues and scaffolds at high frequencies. *Symposium on Mechanics of Biological Tissue*. Graz, Austria (2004).
4. M. Hahn, B. Teply, M. Stevens, A. Seiminski, S. Zeitels, and R. Langer. Hydrogels for vocal fold restoration. *AICHE Annual Meeting*, Austin (2004).
5. M. Hahn, M. McHale, K. Nyugen, J. West. Effects of pulsatile flow on tissue engineered vascular grafts. *Society for Biomaterials Annual Meeting*, Memphis (2005).
6. J. Miller, M. Hahn, and J. West. Laser scanning lithographic and soft lithographic patterning. *Society for Biomaterials Annual Meeting*, Memphis (2005).

7. R. J. Clifton, X. Jia, T. Jiao, C. Bull, M. S. Hahn. Viscoelastic response of vocal fold tissues and scaffolds at high frequencies. *Symposium on Mechanics of Biological Tissue* (2005).
8. M. Hahn, J. Miller, J. West. 3D spatial patterning of poly(ethylene glycol) hydrogels with bioactive ligands. *Biomedical Engineering Society Annual Meeting*, Baltimore (2005).
9. M. Hahn, J. Miller, J. West. Surface micropatterning of poly(ethylene glycol) hydrogels. *AICHE Annual Meeting*, Cincinnati (2005).
10. M. McHale, M. Hahn, J. West. Tunable hydrogel system for the development of tissue engineered vascular grafts. *Society for Biomaterials Annual Meeting*, Pittsburgh (2006).
11. M. Hahn, J. West. Biomimetic microcontrolled materials for guiding cell migration. *AICHE Annual Meeting*, San Francisco (2006).
12. Y. Hou, M. Hahn, M. Grunlan. PDMS_{star}-PEO copolymer hydrogels. *ACS Regional Meeting* (2006).
13. H. Liao, M. Hahn. Scaffold pore structure and mechanical properties and their effects on TE outcome. *Biomedical Engineering Society Annual Meeting*, Chicago (2006).
14. D. Munoz-Pinto, M. Hahn. Scaffold pore structure and mechanical properties and their effects on TEVG outcome. *AICHE Annual Meeting*, San Francisco (2006).
15. H. Liao, M. Hahn. PEG-based hydrogels as vocal fold regeneration matrices. *AICHE Annual Meeting*, San Francisco (2006).
16. J.J. Moon, S-H Lee, M.S. Hahn, B.A. Nsiah and J.L. West. Regulation of endothelial angiogenesis and vasculogenesis in synthetic poly(ethylene glycol) hydrogels modified with biomolecules. *Experimental Biology Annual Meeting*, Washington DC (2007).
17. D. Munoz-Pinto and M. Hahn. Investigation of the effects of defined biochemical stimuli on embryonic smooth muscle progenitor cell differentiation. *AICHE Annual Meeting*, Salt Lake City (2007).
18. D. Munoz-Pinto, Y. Hou, M. Grunlan, M. Hahn. Novel inorganic-organic hydrogels for tissue engineered vascular grafts. *AICHE Annual Meeting*, Salt Lake City (2007).
19. X. Qu, M. Grunlan, M. Hahn. Modulating smooth muscle cell response with novel tunable inorganic-organic hydrogels. *American Chemical Society*, New Orleans (2008).
20. A.S. Bulick and M. Hahn. Novel PDMS-PEO hydrogels for tissue engineered vascular grafts. *AICHE Annual Meeting*, Philadelphia (2008).
21. D. Munoz-Pinto and M. Hahn. Novel inorganic-organic hybrid hydrogels for bone tissue engineering. *AICHE Annual Meeting*, Philadelphia (2008).
22. X. Qu and M. Hahn. Evoking a mature SMC phenotype in mouse embryonic progenitor cells. *AICHE Annual Meeting*, Philadelphia (2008).
23. M. Hahn. An engineering approach to teaching biotechnology concepts. *GSW ASEE Conference*, Waco (2009).
24. M. Kanzelberger, D. Munoz-Pinto, M. Hahn. Controlled exploration of synergistic effects of heterotypic cell-cell interactions and mechanical stimulation on blood vessel formation. *Society for Biomaterials*, San Antonio (2009).
25. R. McMahon, A.C. Jimenez-Vergara, M. Hahn. The relative impact of scaffold modulus versus applied strain on smooth muscle cell behavior. *AICHE Annual Meeting*, Nashville (2009).
26. D. Munoz-Pinto, M. Hahn. Relative influence of scaffold bioactivity versus modulus on cell behavior. *AICHE Annual Meeting*, Nashville (2009).
27. Y. Hou, C.A. Schoener, K.R. Regan, D. Munoz-Pinto, M.S. Hahn, M.A. Grunlan. Photo-crosslinked PEO-PDMS_{star} hydrogels: Synthesis, characterization, and potential application for tissue engineering. *Material Research Society National Meeting*, Boston (2009).
28. D. Munoz-Pinto, B. Wang, T. Wilems, M-B Browning, E. Cosgriff-Hernandez, J. Rivera, B. Russell, M. Höök, M. Hahn. Bioactive hydrogels based on collagen-mimetic proteins. *Society for Biomaterials*, Seattle (2010).
29. D. Munoz-Pinto, C. Schoener, Y. Hou, M. Grunlan PhD, M.S. Hahn. PDMS_{star}-PEG hydrogels for directed mesenchymal stem cell differentiation. *ACS National Meeting*, Boston (2010).
30. A.C. Jimenez, D. Munoz-Pinto, D. Ortiz, M.S. Hahn. Influence of GAG identity on SMC foam cell formation. *BMES Annual Meeting*, Austin (2010).
31. X. Qu, D. Munoz-Pinto, M.S. Hahn. Relative impact of cell shape versus ECM ligand identity on MSC lineage progression. *BMES Annual Meeting*, Austin (2010).
32. D. Munoz-Pinto, B. Wang, M.B. Browning, E.M. Cosgriff-Hernandez, B. Russell, M. Höök, and M.S. Hahn. Bioactive hydrogels based on collagen-mimetic proteins. *AICHE Annual Meeting*, Salt Lake City (2010).

33. A.C. Jimenez, M.S. Hahn. Controlled exploration of synergistic effects of heterotypic cell-cell interactions and mechanical stimulation on blood vessel formation. *AICHE Annual Meeting*, Salt Lake City (2010).
34. S. Becerra-Bayona, D. Munoz-Pinto, M.S. Hahn. Relative Influence of collagen concentration versus substrate modulus on MSC fate decisions. *Society for Biomaterials*, Orlando (2011).
35. D. Munoz, V. Guiza, S. Sant, A. Khademhosseini, M. Hahn. Multilayer Hydrogel-Electrospun Mesh Vascular Grafts. *BMES*, Hartford (2011).
36. D. Munoz-Pinto, A.C. Jimenez, Y. Hou, M. Grunlan and M.S. Hahn. PDMS_{star}-PEG Hydrogels for Directed MSC Differentiation. *AICHE*, Minneapolis (2011).

RESEARCH FUNDING

Total Research Funding: \$4.90 M; Total Allocated to Hahn Laboratory: \$2.42 M

Ongoing Research Support

1. R01 EB013297 Hahn, Cosgriff-Hernandez (PIs) percentile score: 5
Multilayer Vascular Grafts based on Collagen-Mimetic Hydrogels
 Total Award Amount: \$1,775,538; Hahn Amount: \$568,634
 Role: Joint PI
2. R03 Hahn, Grunlan (PIs) priority score: 14
Hybrid Inorganic-Organic Hydrogel Scaffolds for Osteochondral Regeneration
 Total Award Amount: \$141,989; Hahn Amount: \$70,028
 Role: Joint PI
3. DMR 0955259 Hahn (PI) 02/15/10-02/14/15
CAREER: Programming Mesenchymal Stem Cell Fate – An Integrated Research and Education Approach
 Development of a defined platform for examining the transcription factor signatures associated with MSC differentiation in response to controlled matrix signals
 Total Award Amount: \$400,000
 Role: PI
4. NIH R21 Cosgriff-Hernandez (PI) 07/01/10-06/30/12
Injectable, High Porosity Bone Scaffolds by Emulsion Templating
 Examination of the cytotoxicity and osteogenic potential of high porosity scaffolds formed by emulsion templating
 Total Award Amount: \$344,832; Hahn Amount: \$85,579
 Role: Co-I
5. AHA 0830102N Hahn (PI) 01/01/08-12/31/12
National Scientist Development Grant: In vitro Platform for the Systematic Investigation of Scaffold Properties on TEVG Outcome
 Comparative assessment of smooth muscle cell responses to defined matrix stimuli toward generating improved tissue engineered vascular graft scaffolds.
 Total Award Amount: \$308,000
 Role: PI
6. R03 DC008891 Hahn (PI) 12/01/07-11/31/12
Tissue Engineering Evaluation of Material Implants for Vocal Fold Restoration
 Evaluation and comparison of various hydrogel-based implants for restoration of scarred vocal fold function.
 Total Award Amount: \$206,658
 Role: PI
7. CBET 0853668 Goldstein, Hahn (PIs) 09/01/09-08/31/12
Collaborative Research: Ligament Tissue Engineering
 Design and in vitro evaluation of hydrogel-electrospun mesh hybrid scaffolds for ligament tissue engineering.
 Hahn Award Amount: \$82,500
 Role: Joint PI

Teaching Scores

All teaching scores are out of a total of 5 possible points.

- F2005: CHEN 464-501(Reactor Kinetics). Mean score: 4.5
- Sp2006: CHEN 464-501(Reactor Kinetics). Mean score: 4.7
- F2006: Semester off from teaching, as per start-up agreement
- Sp2007: CHEN 464-501 (Reactor Kinetics). Mean score: 4.6
- Su2007: CHEN 464-501 (Reactor Kinetics). Mean score: 4.1
- F2007: CHEN 424-501 (Mass Transport). Mean score: 4.0
CHEN 681-600 (Seminar). Mean score: 4.8
- Sp2008: CHEN 489/689. Tissue Engineering and Drug Delivery. Mean score: 4.6
CHEN 681-600 (Seminar). Mean score: 4.7
- F2008: CHEN 282-502 (Engineering Biology). Mean score: 3.5
- Sp2009: CHEN 282-501 (Engineering Biology). Mean score: 4.0
- F2010: CHEN 282-504 (Engineering Biology). Mean score: 3.4
- Sp2010: CHEN282-501 (Engineering Biology). Mean score: 4.0
- F2010: CHEN424-501 (Mass Transport). Mean score: 3.8

Graduate Student Advisor/Mentor

Current

1. A. Carolina Jimenez-Vergara, PhD candidate in Materials Science, 09/08-present
2. Viviana Guiza-Arguello, PhD candidate in Chemical Engineering, 01/10-present
3. Silvia Becerra-Bayona, PhD candidate in Materials Science, 01/10-present

Alumni

1. Huimin Liao, MS Chemical Engineering, 05/07; currently employed at Fisher Wheeler as a process engineer
2. Christina Chern, MS Chemical Engineering, 12/08; currently employed at the US Patent Office as a patent reviewer
3. Allen Bulick, PhD Chemical Engineering, 08/09; currently employed at Dow Chemical as a research scientist
4. Jeffrey Gaspard, PhD Chemical Engineering, 12/09; currently employed as an instructor at Texas A&M University
5. Bo Wang, MS Chemical Engineering, 05/11; currently a doctoral student at UT Austin
6. Paul (Xin) Qu, PhD Chemical Engineering, 05/11; currently a post-doc at UC San Diego
7. Rebecca McMahon, PhD Chemical Engineering, 05/11; currently a post-doc at MD Anderson
8. Dany Munoz-Pinto, PhD Chemical Engineering, 05/11; currently a post-doc at Texas A&M

Student Honors

1. Dany Munoz-Pinto, TEES Fellowship for Spanish Speaking Students, Fall 2009
2. Dany Munoz-Pinto, Deissler Fellowship (for excellence in graduate research), Fall 2009
3. Silvia Becerra-Bayona, SFB STAR Travel Award, Society for Biomaterials Annual Meeting; Orlando 2011
4. Silvia Becerra-Bayona, TEES Fellowship for Spanish Speaking Students, Fall 2011

Graduate Committee Member

Cory Lee Klemashevich - PHD in CHEN
Marc A. Rufin - PHD in BMEN
Melissa L. Giese - PHD in BMEN
Viviana R. Guiza-Arguello - PHD in CHEN
Silvia M. Becerra-Bayona - PHD in MSEN
Robert Scott S. Moglia - PHD in BMEN
Mary Beth Browning - PHD in BMEN
Andrea Carolina Jimenez Vergara - PHD in MSEN
David K. Dempsey - PHD in BMEN
Bo Wang - MS in CHEN
Ana M. Chamoun-Emanuelli - PHD in CHEN

Brennan M. Bailey - PHD in MSEN
 Billy W. Newton - PHD in CHEN
 Andrea Carolina Jimenez Vergara - MS in MSEN
 Rebecca E. McMahon - PHD in CHEN
 Cody Alan Schoener - MS in BMEN
 Zachary Rothman Kraus - MS in CHEN
 Jeffery Simon Gaspard - PHD in CHEN
 Qun Ma - MS in CHEN
 Xin Qu - PHD in CHEN
 Dany J. Munoz Pinto - PHD in CHEN
 Allen Scott S. Bulick - PHD in CHEN
 Christina Chern - MS in CHEN
 Xiaole Yang - MS in CHEN
 Colby Moya - PHD in CHEN

Postdoctoral Advisor/Mentor

Current

1. Dany Munoz-Pinto, 06/11-present

Alumni

1. Yaping Hou, PhD, 11/09-07/10; currently a post-doc for a bone tissue engineering lab at UCSF

Undergraduate Student Advisor/Mentor

*students co-authored or to be co-authored on publications due to contributions are italicized.

1. Lillian Rodriguez, Spring 2006
2. Caitlin Molloy, Summer 2006
3. Krishna Posim-Reddy, Fall 2007 (completed MS at Brown University)
4. *Matthew Urban, Spring 2007*
5. Carolyn Pearce, Summer 2007 (currently attending UT Galveston Medical School)
6. *Leidy Marcela Gelves, Fall 2007* (completed MS at UIS, Colombia)
7. *Sandra Jacob, Fall 2007-Spring 2009* (currently attending UT Houston Medical School)
8. *Diana Ortiz, Spring 2007*
9. Patricia Ramirez, Spring 2007 (currently pursuing a PhD in France)
10. Jason Griffin, Summer 2007
11. *Deissy Cristancho, Fall 2008*
12. Galina Sukhonosova, Spring 2008 (currently pursuing a PhD at Texas A&M)
13. Rohan Parolkar, Summer 2008 (currently pursuing a PhD at Carnegie Mellon)
14. *Lynnette Cubero-Ponce, Summer 2008*
15. *Anabel Morales, Summer 2008*
16. *Viviana Guiza-Arguello, Fall 2008* (currently pursuing a PhD at Texas A&M)
17. Brian Wagner, Fall 2008
18. Trevor Tumlinson, Summer 2009 (currently attending medical school)
19. Bethany Vlaiku, Summer 2009 (currently pursuing an MS)
20. Robert Rogers, Fall 2009-present
21. Chris Hohenberger, Summer 2010
22. Ratna Ng, Summer 2010
23. *Bagrat Grigoryan, Fall 2009-present*
24. Gregory Dykes, Summer 2010
25. Blas Quiroga, Fall 2010
26. Jeff Bullock, Fall 2010 (currently applying to dental school)
27. Pantki Shah, Summer 2011
28. *Jessica Long, Summer 2011*

PROFESSIONAL ACTIVITIES

Professional Memberships

American Institute of Chemical Engineers (AIChE), Biomedical Engineering Society (BMES), Society for Biomaterials (SFB), American Chemical Society (ACS), American Society of Engineering Education (ASEE), American Association for the Advancement of Science (AAAS)

National Committees

SFB, Awards Committee	2011-2012
SFB, Tissue Engineering Special Interest Group Chair	2011-2013
SFB, Membership Committee	2010-2011
AIChE, Area 8B (Biomaterials) Program Vice-Chair	2010-2011
SFB, Tissue Engineering Special Interest Group Program Chair	2009-2011
AIChE, Women's Initiative Committee Chair	2008-2009
AIChE, Women's Initiative Committee Vice Chair	2007-2008

Conference Session Chairs

SFB Annual Meeting	2009-2011
AIChE Annual Meeting	2007-2011
BMES Annual Meeting	2006, 2010

Journal Reviewer

Reviewed manuscripts for over 15 journals, including *Advanced Materials*, *Advanced Functional Materials*, *Biomacromolecules*, *Langmuir*, *Biomaterials*, *Soft Matter*, *Tissue Engineering*, *Biotechnology and Bioengineering*, *Journal of Biomedical Materials Research Part A*, *Annals of Biomedical Engineering*, *Journal of Biomedical Materials Research Part B*, *Journal of the Acoustical Society of America*, *Biomacromolecules*, *Journal of Biomechanics*, *Biopolymers*, *Integrative Biology*

Proposal Reviewer

Reviewed proposals for the American Heart Association (AHA), the National Science Foundation (NSF/RAPD and NSF/BMAT), the Petroleum Research Fund (PRF), and the National Institutes of Health (NIDCD, NHLBI standing panels and special emphasis panels).