CURRICULUM VITAE

Stephanie J. Bryant, Ph.D.

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PROFESSIONAL EXPERIENCE

Associate Professor, Chemical and Biological Engineering, University of Colorado, 8/2011-
Patten Assistant Professor, Chemical and Biological Engineering, University of Colorado, 7/2009-7/2011
Assistant Professor, Chemical and Biological Engineering, University of Colorado, 8/2005-6/2009.
Assistant Professor, Craniofacial Biology, University of Colorado Denver Health Sciences, 8/2005-present.
Postdoctoral Senior Fellow, Bioengineering, University of Washington, 2/2003-8/2005.
Postdoctoral Fellow, Chemical Engineering, University of Colorado, 9/2002-12/2002.
Visiting Graduate Researcher, Medical Engineering, Queen Mary College, 9/2001-12-2001.

EDUCATION

Ph.D. in Chemical Engineering, August 2002, University of Colorado at Boulder.
B.S. in Chemical Engineering (with Honors), December 1995, University of Texas at Austin.

HONORS AND AWARDS

2012 Burroughs Welcome Fund: Collaborative Research Travel Grant
2012 Leverhulme Visiting Professor
2011 Biotechnology and Bioengineering Daniel I.C. Wang Award
2010 Provost Faculty Achievement Award, CU Boulder.
2010-2011 Society for Biomaterials Membership Committee, *Elected*.
2009-2014 NSF Faculty Early CAREER Award.
2009 Dean's Faculty Fellowship, College of Engineering and Applied Science, CU (Spring 2009).
2007 CU Boulder Technology Transfer New Inventor of the Year.
2007 Dean's Award for Professional Progress, College of Engineering and Applied Science, CU.
2006 Travel Award, The Fourth Scientific Meeting of The TMJ Association.
2006-2007 University of Colorado, Junior Faculty Development Award.
2005-2009 National Institutes of Health, NIDCR, K22 Career Transition Grant.
2003-2005 National Institutes of Health Individual Postdoctoral Fellow, Ruth L. Kirschstein NRSA.
2003 American Heart Association Postdoctoral Fellowship, declined to accept NIH fellowship.
1999-2002 National Science Foundation Graduate Fellow.
1998-2002 Department of Education's Graduate Assistantships in Areas of National Need Fellow.
2002 Abstract selected as a finalist for Orthopaedics at the IV World Congress of Biomechanics.
2002 Tissue Engineering SIG. Graduate Student Recognition, Annual Meeting of the Society for Biomaterials.
2001Orthopaedic SIG. Graduate Student Recognition, Annual Meeting of the Society for Biomaterials.
2001 Student Travel and Professional Development Award. Annual Meeting of the Society for Biomaterials.
1999 BMES Student Travel Award for BMES/IEEE Conference.
1999 Second Place Presentation Award at The 36th Annual Rocky Mountain Bioengineering Symposium.
1999 Beverly Sears Dean's Small Grant Award.

EDITORIAL BOARDS

2010-2013 *Tissue Engineering*, Editorial Board.

PUBLICATIONS

1. N.L. Farnsworth, B.E. Mead, L.R. Antunez, A.E. Palmer, S.J Bryant. A biomimetic charged environment regulates tissue production in chondrocytes by ionic osmolytes and intracellular calcium. *In Preparation.*
2. M.D. Swartzlander, A.K. Blakney, J.L. Kaar, T.R. Kyriakides, and S.J. Bryant. Impact of protein adsorption on the macrophage and foreign body reaction to immobilized RGD in PEG hydrogels. *In Preparation.*
3. N.J. Steinmetz, E. Aisenbrey, a. Aziz, K.K. Westbrook, H.J. Qi, and S.J. Bryant. Property-Function Characterization of a Multi-layered Hydrogel for Interfacial Tissue Engineering Applications. *In Preparation.*
4. J.J. Roberts, R.M. Elder, A. Jayaraman, S.J. Bryant. Interaction of hyaluronan binding peptides with glycosaminoglycans in poly(ethylene glycol) hydrogels. *Submitted.*
5. S. Sircar, E. Aisenbrey, S.J. Bryant, and D.M. Bortz. Determining equilibrium osmolarity in Poly(ethylene glycol)/Chondroitin sulfate gels mimicking articular cartilage. *Submitted.*
6. L.D. Amer, M.J. Mahoney, and S.J. Bryant. Tissue Engineering Approaches to Cell Based Diabetes Therapy. *Submitted.*
7. J.J. Roberts and S.J. Bryant. Comparison of Photopolymerizable Thiol-ene PEG and Acrylate-Based PEG Hydrogels for Cartilage Development. *Biomaterials. 34(38): 9969-9979 (2013)*.
8. A. Linnenberger, M.I. Bodine, C. Fiedler, J.J. Roberts, S.C. Skaalure, J.P. Quinn, S.J. Bryant, M. Cole, and R.R. McLeod. Three Dimensional Live Cell Lithography. *Optics Express. 21(8) 10269-10277 (2013).*
9. N. Farnsworth, L. Antunez, and S.J. Bryant. Dynamic Compressive Loading Differentially Regulates Chondrocyte Anabolic and Catabolic Activity with Age. *Biotechnology and Bioengineering. 110(7):2046-57 (2013).* PMID: 23404228.
10. M.D. Swartzlander, A.D. Lynn, A.K. Blakney, T.R. Kyriakides, S.J. Bryant. Understanding the host response to cell-laden poly(ethyelene glycol)-based hydrogels. *Biomaterials. 34(4):952-64 (2013).*
11. V. Dhote, S. Skaalure, U. Akalp , J. Roberts, S. J. Bryant and F.J. Vernerey. On the role of hydrogel structure and degradation in controlling the transport of cell-secreted matrix molecules for engineered cartilage. *Journal of the Mechanical Behavior of Biomedical Materials*. *19:61-74 (2013).*
12. N. Farnsworth, L. Antunez, and S.J. Bryant. Influence of Chondrocyte Maturation on Acute Response to Impact Injury in PEG Hydrogels. *Journal of Biomechanics. 45(15): 2556-2563 (2012).*
13. N. Farnsworth, C. Bensard, and S.J. Bryant. The Role of the PCM in Reducing Oxidative Stress Induced by Radical Initiated Photoencapsulation of Chondrocytes in Poly(ethylene glycol) Hydrogels. *Osteoarthritis and Cartilage. 20(11): 1326-1335 (2012).*
14. N.J. Steinmetz and S.J. Bryant. Chondroitin sulfate and dynamic loading alter chondrogenesis of human MSCs in PEG hydrogels. *Biotechnology and Bioengineering. 109(10): 2671-2682 (2012)*.
15. J.R. Popp, J.J. Roberts, D.V. Gallagher, K.S. Anseth, S.J. Bryant, T.P. Quinn. An instrumented bioreactor for mechanical stimulation and real-time, nondestructive evaluation of engineered cartilage tissue. *Journal of Medical Devices: 6(2): 021006 (7 pages) (2012).*
16. S.L. Hume, S.M. Hoyt, J.S. Walker, B. Sridhar, J.F. Ashley, C.N. Bowman, and S.J. Bryant. Alignment of Multi-Layered Muscle Cells within 3D Hydrogel Macrochannels. *Acta Biomaterialia: 8(6): 2193-2202 (2012).*
17. S.C. Skaalure, I. L. Milligan, S.J. Bryant. Age impacts extracellular matrix metabolism in chondrocytes encapsulated in degradable hydrogels. *Biomedical Materials: 7(2): (2012). Special Issue on Injectable gels for tissue/organ repair. Invited.*
18. A.K. Blakney, M.D.Swartzlander, S.J. Bryant. The effects of substrate stiffness on the *in vitro* activation of macrophages and *in vivo* host response to poly(ethylene glycol)-based hydrogels. *J Biomed Mater Res*

Part A: 100A: 1375–1386, (2012). *Winner of the Society for Biomaterials Outstanding Student Award: Undergraduate Category.*

19. K. Wingate, W. Bonani, Y. Tan, S.J. Bryant, W. Tan. Elasticity of Three-Dimensional Nanofiber Matrix Directs Mesenchymal Stem Cell Differentiation to Vascular Cells with Endothelial or Smooth Muscle Cell Markers. *Acta Biomaterialia: 8(4): 1440-1449 (2012).*

20. F.J. Vernerey, E.C. Greenwald, S.J. Bryant. Triphasic mixture model of cell-mediated enzymatic degradation of hydrogels. *Computer Methods in Biomechanics and Biomechanical Engineering. 15(11) 1197-1210 (2012).*

21. N.J. Steinmetz, S.J. Bryant. The Effects of Intermittent Dynamic Loading on Chondrogenic and Osteogenic Differentiation of Human Marrow Stromal Cells Encapsulated in RGD Modified PEG Hydrogels. *Acta Biomaterialia. 7: 3829–3840 (2011).*

22. Roberts JJ, Earnshaw A, Ferguson VR, and Bryant SJ. A comparative study of the viscoelastic mechanical behavior of agarose and poly(ethylene glycol) hydrogels. *Journal of Biomedical Materials Research – Part B. 99B: 158–169 (2011).*

23. J.J. Roberts, G.D. Nicodemus, S. Giunta, S.J. Bryant. Incorporation of biomimetic matrix molecules into PEG hydrogels enhances matrix deposition and reduces load-induced loss of chondrocyte-secreted matrix. *Journal of Biomedical Materials Research Part A. 1;97(3):281-91 (2011).*

24. J.J. Roberts, G.D. Nicodemus, E.C. Greenwald, S.J. Bryant. Degradation Improves Tissue Formation in (Un)Loaded Chondrocyte-laden Hydrogels. *Clinical Orthopaedics and Related Research*. *469(10): 2725-2734 (2011)* (invited contribution as part of the special issue on Cartilage Resurfacing).

25. A.D. Lynn, A.K. Blakney, T.R. Kyriakides, and S.J. Bryant. Temporal progression of the host response to implanted poly(ethyelene glycol)-based hydrogels. *Journal of Biomedical Materials Research Part A.* 96(4):621-31 (2011).

26. G.D. Nicodemus, S.C. Skaalure, and S.J. Bryant. Gel structure impacts pericellular and extracellular matrix deposition which subsequently alters metabolic activities in chondrocyte-laden PEG hydrogels. *Acta Biomaterialia.* 7(2): 492-504 (2011).

27. A.D. Lynn and S.J. Bryant. Phenotypic changes in bone marrow-derived murine macrophages cultured on PEG-based hydrogels activated or not by lipopolysaccharide. *Acta Biomaterialia. 7(1): 123–132 (2011)*.

28. S.M. LaNasa, I. Hoffecker, and S.J. Bryant. Presence of Pores and Hydrogel Composition Influence Tensile Properties of Scaffolds Fabricated from Well-Defined Sphere Templates. *Journal of Biomedical Materials Part B*. *96B: 294–302 (2011)*.

29. K.M. Jeerage, S.M. LaNasa, H.A. Hughes, S.J. Bryant, D.S. Lauria, A.J. Slifka. Electrochemical Measurement of Diffusion in Photopolymerized Poly(ethylene glycol) Hydrogels. *Polymer. 51(23): 5456-5461 (2010).*

30. H.R.C. Screen, S.R. Byers, A.D. Lynn, V. Nguyen, D. Patel, S.J. Bryant. Characterization of a Novel Fiber Composite Material for Mechanotransduction Research of Fibrous Connective Tissues. *Advanced Functional Materials. 20(5): 738-747 (2010).*

31. I. Villanueva, S.K. Gladem, Jeff Kessler, and S.J. Bryant. Dynamic loading stimulates chondrocyte biosynthesis when encapsulated in charged hydrogels prepared from poly(ethylene glycol) and chondroitin sulfate. *Matrix Biology 29(1):51-62 (2010).*

32. A.D. Lynn, T.R, Kyriakides, and S.J. Bryant. Characterization of the *In Vivo* Host Response and the *In Vitro* Macrophage Response to Poly(ethylene glycol)-based Hydrogels. *Journal of Biomedical Materials Research Part A. 20(5): 738-747 (2010).*

33. G.D. Nicodemus and S.J. Bryant. Mechanical loading regimes affect the anabolic and catabolic activities of chondrocytes encapsulated in PEG hydrogels. *Osteoarthritis and Cartilage. 18(1): 126-137 (2010).*

34. X.Liang, A.D. Lynn, D.M. King, A.S. Cavanagh, S.J. Bryant, P. Li, S.M. George, and A.W. Weimer. Biocompatible Interface Films Deposited within Porous Polymers by Atomic Layer Deposition. *Journal of Applied Materials & Interfaces. 1(9): 1988-1995 (2009).*

35. I. Villanueva, C.A. Weigel, and S.J. Bryant. Cell-matrix interactions and mechanical loading influence chondrocyte response and gene expression in PEG-RGD hydrogels. *Acta Biomaterialia 5:* 2832-2846 (2009).
36. S.M. LaNasa and S.J. Bryant. Influence of ECM proteins and their analogs on skeletal and cardiac muscle cell response when cultured on 2D hydrogels. *Acta Biomaterialia. 5: 2929-2938 (2009).*
37. I. Villanueva, N.L. Bishop, and S.J. Bryant. Medium osmolarity and PCM development improves chondrocyte survival when photoencapsulated in PEG hydrogels at low densities. *Tissue Engineering Part A. 15(10): 3037-3048 (2009).*
38. I. Villanueva, B. Klement, D. von Deutsch, and S.J. Bryant. Crosslinking density alters early metabolic activities in chondrocytes encapsulated in poly(ethylene glycol) hydrogels and cultured in the rotating wall vessel. *Biotechnology and Bioengineering. 102(4): 1242-1250 (2009)*.
39. S.Atzet, S.Curtin, P. Trinh, S. Bryant, and B.D. Ratner. Degradable poly(2-hydroxyethyl methacrylate)-co-polycaprolactone hydrogels for tissue engineering scaffolds. *Biomacromolecules, 9(12):3370-3377 (2008)*.
40. G.D. Nicodemus, K.A.Shiplet, S. Kaltz, S.J. Bryant. Dynamic compressive loading influences degradation of PEG-PLA hydrogels. *Biotechnology and Bioengineering, 102(3):948-59 (2009).*
41. S.J. Bryant, G.D. Nicodemus, I. Villanueva. Designing 3D photopolymer hydrogels to regulate biomechanical cues and tissue growth for cartilage tissue engineering. *Pharmaceutical Research, 25(10): 2379-2386 (2008)* (Invited Original Research Article).
42. G.D. Nicodemus and S.J. Bryant, Review: Cell encapsulation in biodegradable hydrogels for tissue engineering applications. *Tissue Engineering Part B: Review, 14(2): 149-165(2008) (Invited).* Listed as one of the most 20 most cited articles in the journal *Tissue Engineering, Parts A,B &C* from 2008-2009.
43. G.D. Nicodemus, S.J. Bryant, The role of hydrogel structure and dynamic loading on chondrocyte gene expression and matrix formation. *Journal of Biomechanics*, *41(7): 1528-1536 (2008).*
44. I. Villanueva, D.S. Hauschulz, D. Mejic and S.J. Bryant, "Static and dynamic compressive strains influence nitric oxide production and chondrocyte bioactivity when encapsulated in PEG hydrogels of different crosslinking densities. *Osteoarthritis and Cartilage*, *18(8): 909-918 (2008).*
45. G.N. Nicodemus, I. Villanueva and S.J. Bryant. Mechanical Stimulation of TMJ Condylar Chondrocytes encapsulated in PEG Hydrogels." *Journal of Biomedical Materials Research*, *83A (2):323-331 (2007).*
46. S.J. Bryant, J.L. Cuy, K.D. Hauch and B.D. Ratner. Photo-patterning of porous hydrogels for tissue engineering. *Biomaterials, 28: 2978-2986 (2007)*.
47. I. Villanueva, B. Klement, D. von Deutsch, and S.J. Bryant. Effects of simulated microgravity on nitric oxide production and proteoglycan synthesis by chondrocytes encapsulated in 3D PEG hydrogels. *Gravitational and Space Biology Bulletin, 20(1): (2006).*
48. S.J. Bryant, K.D. Hauch and B.D. Ratner. Spatial Patterning of Thick Poly(2-Hydroxyethyl Methacrylate) Hydrogels. *Macromolecules, 39 (13): 4395-4399 (2006)*.
49. S.J. Bryant, J.A. Arthur and K.S. Anseth. Incorporation of tissue-specific molecules alters chondrocyte metabolism and gene expression in photocrosslinked hydrogels. *Acta Biomaterialia. 1(2): 243-252 (2005).*
50. B.D. Ratner and S.J. Bryant. Biomaterials: Where we've been and where we are going. *Annual Review of Biomedical Engineering*. *Vol. 6: 41-75 (2004).*
51. S.J. Bryant, K.A. Davis-Arehart, N. Luo, R.K. Shoemaker and K.S. Anseth. Synthesis and characterization of photopolymerized multifunctional hydrogels: water-soluble poly(vinyl alcohol) and chondroitin sulfate macromers for chondrocyte encapsulation. *Macromolecules* 37(18): 6726-6733 (2004).
52. S.J. Bryant, K.S. Anseth, T.T. Chowdhury, D.A. Lee, and D.L. Bader. Crosslinking density influences chondrocyte metabolism in dynamically loaded photocrosslinked poly(ethylene glycol) hydrogels. *Annals of Biomedical Engineering.* 32(3):1-12(2004).

53. S.J. Bryant, K.S. Anseth, D.A. Lee, and D.L. Bader. Crosslinking density influences the morphology of chondrocytes photoencapsulated in PEG hydrogels during the application of compressive strain. *Journal of Orthopaedic Research*. 22(5): 1143-1149 (2004).
54. S.J. Bryant, R.J. Bender, K.L. Durand, and K.S. Anseth. Encapsulating chondrocytes in degrading PEG hydrogels with high modulus: engineering gel structural changes to facilitate cartilaginous tissue production. *Biotechnology and Bioengineering*. 86(7): 747-755 (2004).
55. S.J. Bryant, K.L. Durand, and K.S. Anseth. Manipulations in hydrogel chemistry control photoencapsulated chondrocyte behavior and their extracellular matrix production. *Journal of Biomedical Materials Research*. 67A: 1430-1436 (2003).
56. P.J. Martens, S.J. Bryant, and K.S. Anseth. Tailoring the degradation of hydrogels formed from multivinyl poly(ethylene glycol) and poly(vinyl alcohol) macromers for cartilage tissue engineering. *Biomacromolecules*. 4(2): 283-292 (2003).
57. S.J. Bryant and K.S. Anseth. Controlling the spatial distribution of ECM components in degradable PEG hydrogels for tissue engineering cartilage. *Journal of Biomedical Materials Research*. 64A(1):70-79(2003).
58. K.S. Anseth, A.T. Metters, S.J. Bryant, P.J. Martens, J.H. Elisseeff, C.N. Bowman. *In situ* forming degradable networks and their application in tissue engineering and drug delivery. *Journal of Controlled Release*. 78:199-209 (2001).
59. S.J. Bryant and K.S. Anseth. Hydrogel properties influence ECM production by chondrocytes photoencapsulated in poly(ethylene glycol) hydrogels. *Journal of Biomedical Materials Research*. 59: 63-72 (2002).
60. S.J. Bryant and K.S. Anseth. The effects of scaffold thickness on tissue engineered cartilage in photocrosslinked poly(ethylene oxide) hydrogels. *Biomaterials*. 22: 619-626 (2001).
61. S.J. Bryant, C.R. Nuttelman and K.S. Anseth. Cytocompatibility of Ultraviolet and Visible Light Photoinitiating Systems on Cultured NIH/3T3 Fibroblasts *In Vitro*. *Journal of Biomaterials Science. Polymer Edition*. 11(5): 439-457 (2000).

BOOK CHAPTERS

1. S.J. Bryant. Cell Encapsulation. In *Biomedical Engineering Handbook*. In Press.
2. S.J. Bryant and K.S. Anseth. Photopolymerization of hydrogel scaffolds. In *Scaffolding in Tissue Engineering*, Marcel Dekker, Inc. P.X. Ma and J.Elisseeff (eds.) 2005.
3. S. Bryant, P. Martens, J. Elisseeff, M. Randolf, R. Langar and K. Anseth. Transtissue photopolymerization of poly(Vinyl Alcohol) hydrogels. In *Chemical and Physical Networks Formation and Control of Properties*, The Wiley Polymer Networks Group Review Series, Volume 2, B.T. Stokke and A. Elgsaeter (eds.), pp. 395-403.

PATENTS

1. S.J. Bryant and G.D. Nicodemus. “Methods and Compositions for Retaining ECM Materials in Hydrogels” US Patent Application filed October 25, 2010.
2. X. Liang, A.W. Weimer and S.J. Bryant. Biocompatible Coatings by Atomic Layer Deposition. Patent Application filed May 14, 2008, University of Colorado.
3. D. Hauschultz, D. Mejic, S.J. Bryant, I. Villanueva, G.D. Nicodemus. Apparatus to mechanically load soft matter. Patent application filed October 31, 2009, University of Colorado.
4. S. Atzet, S.A. Curtin, B.D. Ratner, S.J. Bryant. Degradable Poly(hydroxyethyl methacrylate) Hydrogels. Invention disclosure filed December 4, 2006, University of Washington.
5. S.J. Bryant, K.D. Hauch, and B.D. Ratner. Methods for Photopatterning Hydrogels. U.S. Patent No. 7,192,693 Issued: March 20, 2007 to University of Washington.

PRESENTATIONS AT NATIONAL AND INTERNATIONAL CONFERENCES

1. J.J. Roberts, R.M. Elder, A. Jayaraman, and S.J. Bryant. Hyaluronan binding peptides aid in hyaluronan retention for tissue engineering applications. 23rd Annual Conference of the Australasian Society for Biomaterials and Tissue Engineering, April 22-24, 2014. *Accepted.*
2. A. Aziz and S.J. Bryant. Identifying targets for peptide-based osteogenic induction for osteochondral tissue engineering. 2014 Society for Biomaterials, Denver, CO, April 16-19, 2014. *Accepted.*
3. C. Schnatwinkel and S.J. Bryant. The Application of a Decellularized Tendon Biomaterial and RNAi to Study Integrin-mediated Mechanotransduction in Tenocytes. 2014 Society for Biomaterials, Denver, CO, April 16-19, 2014. *Accepted.*
4. E. Aisenbrey, S.J. Bryant. A Cartilage-Like PEG Hydrogel Directs Chondrogenesis of hMSCs Under Mechanical Stimulation. 2014 Society for Biomaterials, Denver, CO, April 16-19, 2014. *Accepted.*
5. A.J. Neumann, S.C. Skaalure, S.J. Bryant. Designing exogenously degradable poly(ethylene glycol) hydrogels for cartilage tissue engineering applications. 2014 Society for Biomaterials, Denver, CO, April 16-19, 2014. *Accepted.*
6. M.D. Swartzlander, A.K. Blakney, L.D. Amer, K.D. Hankenson, T.R. Kyriakides, and S.J. Bryant. Understanding the Immunomodulatory Effects of MSCs in Hydrogels on Macrophages and the Foreign Body Reaction. 2014 Society for Biomaterials, Denver, CO, April 16-19, 2014. *Accepted.*
7. S.C. Skaalure and S.J. Bryant. Designing Cell-Mediated Degrading PEG Hydrogels for Personalizing Cartilage Tissue Engineering. 2014 Society for Biomaterials, Denver, CO, April 16-19, 2014. *Accepted.*
8. L.Amer, M.J. Mahoney, and S.J. Bryant. Enzymatically degradable poly(ethylene glycol) hydrogels for long term maintenance and differentiation of human embryonic stem cell derived pancreatic precursor cells. 2014 Society for Biomaterials, Denver, CO, April 16-19, 2014. *Accepted.*
9. S.J. Bryant, M.D. Swartzlander, L.D. Amer, A.K. Blakney, T.R. Kyriakides, “Understanding the Foreign Body Reaction in Tissue Engineering”. 2014 MRS Spring Meeting, April 21-25, 2014. *Accepted.*
10. C. Schnatwinkel and S.J. Bryant. The Role of Integrin-alpha2 Signaling during Mechanotransduction in Tenocytes and in Tendon Tissue Homeostasis. Orthopedic Research Society Annual Meeting. New Orleans, LA, March 15-18, 2014. *Accepted.*
11. S.C. Skaalure, U. Akalp, F.J. Vernerey, S.J. Bryant. Computational Modeling-directed Design of Enzyme-degradable Hydrogels for Cartilage Tissue Engineering. Orthopedic Research Society Annual Meeting. New Orleans, LA, March 15-18, 2014. *Accepted*.
12. J.J. Roberts and S.J. Bryant, "Thiol-ene versus acrylate: how does photopolymerization mechanism impact encapsulated cells for tissue engineering applications?" Photopolymerization Fundamentals Meeting 2013, September 22-25, 2013.
13. J.J. Roberts, M.D. Swartzlander, S.J. Bryant. Hydrogels to Enhance New Matrix Assembly. 2013 Biomedical Engineering Society Annual Meeting. Seattle, WA, September 25-28, 2013.
14. J.J. Roberts and S.J. Bryant. Photopolymerization Mechanism Impacts Cartilage Development in Poly(ethylene glycol) Hydrogels. 2013 Biomedical Engineering Society Annual Meeting. Seattle, WA, September 25-28, 2013.
15. M.D. Swartzlander, A.K. Blakney, K.D. Hankenson, T.R. Kyriakides, and S.J. Bryant. Immunomodulation of the Foreign Body Reaction by MSCs Declines with Differentiation. 2013 Biomedical Engineering Society Annual Meeting. Seattle, WA, September 25-28, 2013.
16. A. Linnenberger, C. Fiedler, J.J. Roberts, S.C. Skaalure, S.J. Bryant, M.C. Cole, R.R. McLeod. Optical Trapping for Tissue Scaffold Fabrication. 2013 SPIE Optics+Photonics Meeting. San Diego, CA, August 25-29, 2013.
17. K.R.C. Kinneberg, A. Nelson, R.C. Paietta, J.J. Roberts, B. Harley, S.J. Bryant, V. Ferguson. Inclusion of a COLLAGEN-GAG sponge core improves tangent modulus of multi-phase PEGDM hydrogel constructs. 20130 ASME Summer Bioengineering Conference. Sunriver, OR, June 26-29, 2013.

18. S.C. Skaalure and S.J. Bryant. Cell-mediated degradable hydrogels tailored to adult cells for cartilage tissue engineering. 2013 Society for Biomaterials Annual Meeting. Boston, MA. April 10-13, 2013.
19. A.K. Blakney, M.D. Swartzlander, S.J. Bryant. The effects of substrate stiffness on the in vitro activation of macrophages and in vivo host response to poly(ethylene glycol)-based hydrogels, New Orleans, October 4-6, 2012.
20. M.D. Swartzlander, A.D. Lynn, A.K. Blakney, T.R. Kyriakides, S.J. Bryant. Understanding the Host Response to Cell-Laden Poly(ethylene glycol)-based Hydrogels. 2012 Society for Biomaterials, New Orleans, October 4-6, 2012. *Submitted.*
21. J.J. Roberts and S.J. Bryant. Network structure impacts chondrocyte tissue deposition in mechanicaly-stimuatled peg hydrogels. 2012 BMES Fall Meeting, Atlanta, GA, October 24-27, 2012.
22. S. Skaalure, S.J. Bryant. Age impacts extracellular matrix production by chondrocytes in a degradable hydrogel system. 2011 Annual meeting of the Biomedical Engineering Society. Hartford, Conn, October 12-15, 2011.
23. S.L. Hume, S.J. Bryant. Cardiomyocyte response to ultra stiff hydrogel substrates. 2011 Annual meeting of the Society for Biomaterials. Orlando, FL, April 13-16, 2011.
24. R. Lawal, A.K. Blakney, M.D. Swartzlander, S.J. Bryant. Understanding macrophage activation in response to LPS-stimulation when cultured on PEG-RGD hydrogels. 2011 Annual meeting of the Society for Biomaterials. Orlando, FL, April 13-16, 2011.
25. J.R. Popp, J.J. Roberts, S.J. Bryant, and T.P. Quinn. Online monitoring of tissue-engineered cartilage development in a dynamic compression bioreactor. 2011 Annual meeting of the Society for Biomaterials. Orlando, FL, April 13-16, 2011.
26. J.J. Roberts, G.D. Nicodemus, E.C. Greenwald, S.J. Bryant. Degradation impacts chondrocyte matrix production in dynamically loaded poly(ethylene glycol)-based hydrogels2011 Annual meeting of the Society for Biomaterials. Orlando, FL, April 13-16, 2011.
27. M.D. Swartzlander, A.K. Blakney, A.D. Lynn, T.R. Kyriakides, S.J. Bryant. Incorporation of RGD attenuates the foreign body reaction to PEG hydrogels. 2011 Annual meeting of the Society for Biomaterials. Orlando, FL, April 13-16, 2011.
28. H.RC. Screen, T. Demirci, A.D. Lynn, A.K. Blakney, D. Patel, S.J. Bryant, Spring Meeting of the British Society for Matrix Biology, Bristol, UK, April 11-12, 2011.
29. J.R. Popp, J.J. Roberts, S.J. Bryant, and T.P. Quinn. Nondestructive, real-time evaluation of tissue engineered cartilage development in a dynamic compression bioreactor. 2011 Annual meeting of the Orthopaedic Research Society. Long Beach, CA, January 13-16, 2011.
30. Steinmetz N.J., Walline K., and S.J. Bryant. Characterizing the Osteogenic Properties of hMSCs-laden PEG Hydrogels Modified with a P-15 Peptide Motif. 2011 Annual meeting of the Orthopaedic Research Society. Long Beach, CA, January 13-16, 2011.
31. A.K. Blakney, A.D. Lynn, S.J. Bryant. Characterizing the Mutual Effects of Activated Macrophages on Fibroblasts Encapsulated in Poly(ethylene glycol) Hydrogels. 2010 AIChE Annual Meeting, Salt Lake City, UT. Nov 7-12, 2010.
32. Lynn A.D., A.K. Blakney, M.D. Swartzlander, and S.J. Bryant. Macrophage affect and are affected by cells encapsulated in PEG-based hydrogels: An in vitro co-culture study. 2010 AIChE Annual Meeting, Salt Lake City, UT. Nov 7-12, 2010.
33. Steinmetz N.J., K. Walline, and S.J. Bryant. Development and Characterization of Composite PEG Hydrogels for Osteochondral Tissue Engineering. 2010 Annual Meeting for the Society of Biomaterials. Seattle, WA, April 21-24, 2010.
34. S.M. LaNasa and S.J. Bryant. Muscle Cells Align in 3D when Seeded in Channels Patterned into Porous Hydrogels. 2010 Annual Meeting for the Society of Biomaterials. Seattle, WA, April 21-24, 2010.
35. S.J. Bryant, G.D. Nicodemus, J.J. Roberts, and S. Guinta. Extracellular matrix molecules incorporated into bioinert hydrogels enhance matrix deposition and retention. 2010 Annual Meeting for the Society of Biomaterials. Seattle, WA, April 21-24, 2010.

36. A.D. Lynn, T.R. Kyriakides. J. Johnson, C.N. Bowman, S.J. Bryant. Modifying Macrophage Activation and the Foreign Body Response to PEG-based Hydrogels. 2010 Annual Meeting for the Society of Biomaterials. Seattle, WA, April 21-24, 2010.
37. S.J. Bryant, A.D. Lynn, H.R.S.Screen. Fiber composite scaffolds uniquely regulate fibroblast response to cyclic tensile strain. 2010 Annual meeting of the Orthopaedic Research Society. New Orleans, LA, March 5-9, 2010.
38. G.D. Nicodemus and S.J. Bryant. Mechanical Loading Stimulates a Catabolic Response in Chondrocyte-Laden PEG Hydrogels. 2010 Annual meeting of the Orthopaedic Research Society. New Orleans, LA, March 5-9, 2010.
39. J.J. Roberts, G.D. Nicodemus, A. Gonzales, and S.J. Bryant. Degradation Mechanisms Impact Neocartilage Deposition in Mechanically Stimulated Poly(ethylene glycol) Gels. 2010 Annual meeting of the Orthopaedic Research Society. New Orleans, LA, March 5-9, 2010.
40. H.R.C. Screen, D. Patel, V. Nguyen, S.R. Byers, and S.J. Bryant. Characterizing a Novel Hydrogel Fiber Composite Material for the Tissue Engineering of Fibrous Tissues. Third International Conference on Mechanics of Biomaterials & Tissues. Clearwater Beach, Fl, December 13-17, 2009.
41. I. Villanueva, S. Gladem, J. Kessler, and S.J. Bryant. Charge Enhances Matrix Synthesis by Chondrocytes in Dynamically Stimulated Hydrogel Constructs. Third International Conference on Mechanics of Biomaterials & Tissues. Clearwater Beach, Fl, December 13-17, 2009.
42. J.J. Roberts, G.D. Nicodemus, A. Earnshaw, V.L. Ferguson, and S.J. Bryant. The Mechanical Properties of Poly(ethylene glycol) Hydrogels for TMJ Tissue Regeneration Applications. TMJ Bioengineering Conference: A Ground-Breaking Forum for Scientists, Surgeons and Bioengineers to Address Temporomandibular Joint Disorders. Boulder, CO, November 4-7, 2009.
43. N.J. Steinmetz and S.J. Bryant. The Effects of Intermittent Dynamic Loading on Chondrogenic and Osteogenic Differentiation of Human Marrow Stromal Cells Encapsulated in RGD Modified PEG Hydrogels. TMJ Bioengineering Conference: A Ground-Breaking Forum for Scientists, Surgeons and Bioengineers to Address Temporomandibular Joint Disorders. Boulder, CO, November 4-7, 2009.
44. N.L. Bishop, I. Villanueva, and S.J. Bryant. Development of an In Vitro Model to Study Cytokine Stimulated Response in Chondrocytes Utilizing Poly(ethylene glycol) (PEG) Hydrogels. TMJ Bioengineering Conference: A Ground-Breaking Forum for Scientists, Surgeons and Bioengineers to Address Temporomandibular Joint Disorders. Boulder, CO, November 4-7, 2009.
45. A.D. Lynn, A.K. Blakney, T.R. Kyriakides and S.J. Bryant. Macrophage Interrogation of PEG-Based Hydrogels Used in Tissue Engineering Applications. 2009 AIChE Annual Meeting. Nashville, TN, November 8-9, 2009.
46. N.L. Bishop, M.Kissler, M. Husa, R.Terkeltaub, and S.J. Bryant. Effects of Inorganic Pyrophosphate on Chondrocyte Response When Encapsulated in 3D Synthetic Hydrogels. 2009 World Congress on Osteoarthritis, Montreal, Canada, September 9-13, 2009.
47. N.L. Bishop, I. Villanueva, and S.J. Bryant. Interleukin-1 Treatment of Chondrocytes Encapsulated in 3D Synthetic Hydrogels. 2009 World Congress on Osteoarthritis, Montreal, Canada, September 9-13, 2009.
48. A.L. Ernshaw, J.J. Roberts, G.D. Nicodemus, S.J. Bryant, V. Ferguson. The Mechanical Behavior of Engineered Hydrogels. 2009 Summer Bioengineering Conference. Lake Tahoe, CA, June 17-21, 2009.
49. H.R.C. Screen, S.R. Byers, V. Nguyen, S.J. Bryant. Developing a Novel Fibre Composite Material for Tendon Tissue Engineering. 2009 Annual meeting of the Orthopaedic Research Society. Las Vegas, NV, February 22-55, 2009.
50. I. Villanueva, N.L. Bishop, J.L. Christensen, S.J. Bryant. Effects of IL-1β and Medium Osmolarity on Cell Viability and Nitrite Production in Chondrocyte-Seeded Poly(ethylene glycol) Hydrogels. 2009 Annual meeting of the Orthopaedic Research Society. Las Vegas, NV, February 22-55, 2009.
51. I. Villanueva, S.K. Gladem, S.J. Bryant. Effects of chondroitin sulfate incorporation on chondrocyte morphology and metabolism in mechanically stimulated poly(ethylene glycol) hydrogels. 2009 Annual meeting of the Orthopaedic Research Society. Las Vegas, NV, February 22-55, 2009.

52. G.D. Nicodemus, S.M. Giunta, and S.J Bryant. Rational design of 3D hydrogels to capture and retain ECM molecules within mechanically stimulated PEG gels. 2009 Annual meeting of the Orthopaedic Research Society. Las Vegas, NV, February 22-55, 2009.
53. N. Bishop, I. Villanueva, S. Gladem, S.J. Bryant. Medium Osmolarity Influences Chondrocyte Survival During Photoencapsulation in Poly(ethylene glycol) Hydrogels. 2009 Annual meeting of the Orthopaedic Research Society. Las Vegas, NV, February 22-55, 2009.
54. S.M. LaNasa, H.A. Hughes, S.J. Bryant. Patterned Channels in PEG Hydrogels for Cardiac Muscle Tissue Engineering. TERMIS-NA 2008 Annual Conference, San Diego, CA, December 7-10, 2008.
55. A.D. Lynn, T.R. Kyriakides, S.J. Bryant. *In Vitro and In Vivo* Characterization of the Foreign Body Response to Poly(Ethylene Glycol) Based Hydrogels. TERMIS-NA 2008 Annual Conference, San Diego, CA, December 7-10, 2008.
56. G.D. Nicodemus, S.J. Bryant. Controlling Anabolic and Catabolic Processes through Mechanical Stimulation of Chondrocytes TERMIS-NA 2008 Annual Conference, San Diego, CA, December 7-10, 2008.
57. G.D Nicodemus, I. Villanueva, S.J. Bryant. Designing 3D Photopolymer Gels to Regulate Biomechanical Cues. 2008 AIChE Annual Meeting. Philadelphia, PA, November 16-21, 2008.
58. S.M. Giunta, G.D. Nicodemus, and S.J. Bryant. We Knee'D to Look at What We're Losing, Too! – The Effect of Mechanical Loading and Hydrogel Structure on the Release of Extracellular Matrix Components. 2008 AIChE Annual Meeting. Philadelphia, PA, November 16-21, 2008.
59. X. Liang, A.D. Lynn, D.M. King, S.J. Bryant and A.W. Weimer. Atomic Layer Deposition Surface Modified Porous Polymer for Tissue Engineering Application. 2008 AIChE Annual Meeting. Philadelphia, PA, November 16-21, 2008.
60. S.J. Bryant, G.D. Nicodemus, K.A. Shiplet, S. Kaltz. Chondrocyte Function and Gel Degradation of Dynamically Loaded Gels. 2008 World Biomaterials Congress, Society of Biomaterials, Amsterdam, The Netherlands, May 28-June 1, 2008.
61. I. Villanueva, C.A. Weigel, S.J. Bryant, Using 3D PEG Hydrogel Models to Elucidate the Role of RGD as a Mechanoreceptor in Chondrocytes. 2008 World Biomaterials Congress, Society of Biomaterials, Amsterdam, The Netherlands, May 28-June 1, 2008.
62. S.J. Bryant, S.M. LaNasa, H.A. Hughes, K. Liu. Designing the Chemistry and Architecture of PEG Scaffolds for Cardiac Muscle Tissue Engineering. 2008 World Biomaterials Congress, Society of Biomaterials, Amsterdam, The Netherlands, May 28-June 1, 2008.
63. S.J. Bryant and G.D. Nicodemus. Anabolic and Catabolic Responses of Chondrocytes in Mechanically Stimulated PEG Hydrogels. Hilton Head Workshop, Hilton Head Island, South Carolina, March 12-16, 2008.
64. S.J. Bryant, I. Villanueva, C.A. Weigel. "Cell-matrix interactions influence chondrocyte response in mechanically loaded PEG-RGD hydrogels." 2008 Annual meeting of the Orthopaedic Research Society. San Francisco, CA, March 2-5, 2008.
65. X. Liang, A.D. Lynn, D.M. King, A.S. Cavanagh, S.J. Bryant, S.M. George, and A.W. Weimer, Ceramic Coated Porous Polymer for Tissue Engineering Applications, the 32nd International Conference & Exposition on Advanced Ceramics and Composites, Daytona Beach, Florida, January 27-February 1, 2008
66. N. Bishop, I. Villanueva, J. Christensen, S.J. Bryant. "Developing *In Vitro* Osteoarthritis Models Using Poly(ethylene glycol) (PEG) Hydrogels," Midwest Connective Tissue Workshop, Rush University Medical School, Chicago, IL December 14-15, 2007.
67. I. Villanueva, C.Weigel, S.J. Bryant. "Using Poly(ethylene glycol) (PEG) Hydrogels Containing RGD-peptides as Models to Understand Chondrocyte-Matrix Interactions Under Mechanical Loading," Midwest Connective Tissue Workshop, Rush University Medical School, Chicago, IL December 14-15, 2007.

68. I.Villanueva, CA Weigel, and SJ Bryant. “Elucidating chondrocyte-matrix interactions using 3D hydrogel models subjected to mechanical loading.” 2007 World Congress on Osteoarthritis. December 6-9, 2007, Ft. Lauderdale, Florida.

69. S.K. Atzet, B. Ratner, S.A. Curtin, and S.J. Bryant. “Degradable Poly(Hydroxyethyl Methacrylate) Hydrogels For Tissue Engineered Scaffolds: Controlled Molecular Weight Degradation Products.” 2007 AIChE Annual Meeting. Salt Lake, UT, November 5-9, 2007.

70. Xinhua Liang, David M. King, Aaron D. Lynn, Andrew S. Cavanagh, Stephanie J. Bryant, John H. Blackson, Joseph D. Harris, Steven M. George, and Alan W. Weimer, “Novel Porous Polymer/ceramic Composite Material for Tissue Engineering Applications,” 2007 AIChE Annual Meeting. Salt Lake, UT, November 5-9, 2007.

71. K.M. Jeerage, Electrochemical Measurements of Diffusion through Cardiac Muscle Tissue Engineering Scaffolds. 212th Electrochemical Society Meeting, Chicago, CO, October 7-12, 2007.

72. S.M. LaNasa, H.A. Hughes and S.J. Bryant. Patterned and porous poly(ethylene glycol) scaffolds for cardiac muscle tissue engineering. 2007 Biomedical Engineering Society Annual Fall Meeting, Los Angeles, CA, September 26-29, 2007.

73. K.M. Jeerage, S.M. LaNasa, A.D. Shaw, S.J. Bryant. “Electrochemical Measurements of Diffusion through Cardiac Muscle Tissue Engineering Scaffolds.” 2007 Biomedical Engineering Society Annual Fall Meeting, Los Angeles, CA, September 26-29, 2007.

74. S.J. Bryant. “Teaching Biomaterials.” ASEE Summer School for Chemical Engineering Faculty. Pullman, WA. July 27-August 3, 2007.

75. G. Nicodemus and S.J. Bryant. “Influence of dynamic loading regimes and scaffold degradation on chondrocyte response in PEG hydrogels.” Annual Meeting of the Tissue Engineering and Regenerative Medicine International Society, Toronto, Ontario, Canada, June 13-16, 2007.

76. S.J. Bryant, D.J. Mortisen, S.M. LaNasa, K.D. Hauch, B.D. Ratner. “Controlling the 3D architecture of hydrogel scaffolds for tissue engineering.” 2007 Annual Meeting of the Society for Biomaterial, Chicago, IL, April 18-21, 2007.

77. S.J. Bryant and G. Nicodemus. “Mechanically stimulated PEG hydrogels for cartilage tissue engineering.” 2007 Annual meeting of the Orthopaedic Research Society. San Diego, CA, February 11-14, 2007.

78. I. Villanueva, B. Klement, D. von Deutsch, and S.J. Bryant. “Effects of simulated microgravity on nitric oxide production and proteoglycan synthesis by chondrocytes encapsulated in 3D PEG hydrogels.” American Society for Gravitational and Space Biology Annual Meeting. Arlington, VA, November 2-5, 2006.

79. S.J. Bryant, I. Villanueva, and G. Nicodemus. “Mechanically stimulated photopolymerized hydrogels for cartilage tissue engineering.” 2006 AIChE Annual Meeting. San Francisco, CA, November 12-17, 2006.

80. S. Kaltz, G. Nicodemus, and S.J. Bryant. “Mechanical Loading Effects on Degradation Profiles of Peg-Pla Hydrogel Scaffolds for Cartilage Regeneration.” 2006 AIChE Annual Meeting. San Francisco, CA, November 12-17, 2006.

81. S.J. Bryant, I. Villanueva, and G. Nicodemus. “Mechanical stimulation of photopolymerized hydrogel scaffolds for TMJ articular cartilage regeneration.” The Fourth Scientific Meeting of The TMJ Association. Bethesda, MD, September 11-12, 2006.

82. I. Villanueva and S.J. Bryant. “Chondrocyte Metabolism and Nitric Oxide Production in Mechanically Stimulated PEG Hydrogel Constructs.” SBE's 2nd International Conference on Bioengineering and Nanotechnology. Santa Barbara, CA, September 5-6, 2006.

83. I. Villanueva and S.J. Bryant. “Mechanically loaded photopolymerized hydrogels as 3D models to probe mechanotransduction pathways in chondrocytes.” World Congress on Biomechanics, Munich, Germany, June 29-August 4, 2006.

84. G. Nicodemus, S.J. Bryant. “Effects of mechanical loading and crosslinking density on gene expression of chondrocytes encapsulated in hydrogels.” World Congress on Biomechanics, Munich, Germany, June 29-August 4, 2006.

85. I. Villanueva, H.E. Davis, and S.J. Bryant. “Crosslinking Density Influences NO Production in Chondrocytes Seeded in PEG Hydrogels under Dynamic Loading,” Regenerate World Congress on Tissue Engineering and Regenerative Medicine, Pittsburgh, PA, April 24-27, 2006.

86. D.J. Mortisen, S.J. Bryant, J.L. Cuy, C.E. Murry, K.D. Hauch, B.D. Ratner, “Photopatterned poly(hydroxyethyl methacrylate) hydrogels for cardiac tissue engineering.” Regenerate World Congress on Tissue Engineering and Regenerative Medicine, Pittsburgh, PA, April 24-27, 2006.

87. B.D. Ratner, S.J. Bryant, S. Curtin, S. Desai, E. Johnson, A.Marshall, D. Mortisen, and F. Simonovsky. “Novel Polymers for Tissue Engineering Applications.” Pacific Polymer Conference IX, American Chemical Society, Maui, Hawaii, December 11-24, 2005.

88. D.J. Mortisen, S.J. Bryant, J.L. Cuy, K.D. Hauch, and B.D. Ratner. “Photopatterned poly(hydroxyethyl methacrylate) hydrogels for cardiac tissue engineering,” Pacific Polymer Conference IX, American Chemical Society, Maui, Hawaii, December 11-24, 2005.

89. B.D. Ratner, C. Giachelli, C. Murry, E. Donaldson, A. Marshall, B. Beckstead, M. Linnes, D. Mortisen, K. Hauch, S. Bryant and S.K.S. Chian. “Novel Polymeric Scaffolds: Platforms for Tissue Engineering,” 3rd International Conference on Materials for Advanced Technologies. Singapore, July 3-8, 2005.

90. S.J. Bryant, K.D. Hauch, and B.D. Ratner. “A novel patterning method for thick PHEMA hydrogels,” Materials Research Society, San Francisco, CA, March 28-April 1, 2005.

91. M.A. Rice, P. Martens, S.J. Bryant, M.J. Mahoney, C.N. Bowman, K.S. Anseth. “Photopolymerization of synthetic hydrogel niches for 3D cell culture and tissue regeneration,” American Chemical Society, Anaheim, CA, March 28-April 1, 2004.

92. S.J. Bryant, J.L. Cuy, K.D. Hauch, and B.D. Ratner. “PHEMA gels with controlled architectures for cardiac tissue engineering,” Regenerate 2004, Seattle, WA, June 9-12, 2004.

93. P. Martens, M. Mahoney, S. Bryant, M. Rice, K. Anseth. “Synthetic Hydrogel Niches for 3D Cell Culture and Tissue Regeneration: The Role of Gel Architecture and Degradation,” 40th IUPAC World Polymer Congress, Paris, France, July 4-9, 2004.

94. S.J. Bryant, A.J. Marshall, K.D. Hauch and B.D. Ratner. “Tailoring the architecture of photopolymerized porous pHEMA scaffolds for cardiac tissue engineering,” 7th World Biomaterials Congress, Sidney, Australia, May 17-21, 2004.

95. S.J. Bryant, J.A. Arthur, M.A. Rice, K.A. Davis, and K.S. Anseth. “Manipulations in hydrogel chemistry control photoencapsulated chondrocyte behavior and extracellular matrix production.” 26th Australasian Polymer Symposium, Shearton, Noosa, July 13-17,2003.

96. K.S. Anseth, S.J. Bryant, and P.J. Martens. “In situ forming cell gel constructs: Monitoring gel degradation to control extracellular matrix evolution,” 225th American Chemical Society National Meeting, New Orleans, LA, March 23-27 2003.

97. D.J. Quick, S.J. Bryant, and K.S. Anseth, “Altering gene expression of chondrocytes photoencapsulated in hydrogels by local DNA delivery,” 2003 Annual Meeting of the Society for Biomaterial, Reno, Nevada.

98. S.J. Bryant, R.J. Bender, K.L. Durand, and K.S. Anseth, “Controlling the architecture of degradable, photocrosslinked hydrogels for cartilage tissue engineering,” 2002 Annual AIChE Meeting, Indianapolis, Indiana, November, 3-8, 2002.

99. P. Martens, S. Bryant, and K. Anseth. “Photopolymerization of poly(Vinyl Alcohol) and poly (ethylene glycol) based macromers to produce crosslinked, degradable hydrogels with controlled transport properties”, American Chemical Society National Meeting, Boston, MA, August 2002.

100. S.J. Bryant, K.S. Anseth, T.T. Chowdhury, D.A. Lee, and D.L. Bader, “Crosslinking density influences chondrocyte morphology and metabolism in mechanically loaded PEG hydrogels,” World Congress on Biomechanics, Calgary, Alberta, Canada, August 4-9, 2002.

101. S.J. Bryant, R.J. Bender, K.L. Durand, and K.S. Anseth, "Developing cell scaffolds for tissue engineering cartilage using degradable photocrosslinked PEG hydrogels," 2002 Annual Meeting of the Society for Biomaterial, Tampa, Florida, April 24-27, 2002.

102. P. Martens, S. Bryant, T. Holland, C. Bowman, and K. Anseth. "Modeling and experimental characterization of degradable poly (vinyl alcohol) tissue scaffolds", Material Research Society Meeting, Boston, MA, November 2001.

103. S. Bryant, C. Shields, and K. Anseth, "Guided ECM evolution and integration of engineered cartilage using photocrosslinked PEG-hydrogels," 2001 Annual Fall Meeting of the Biomedical Engineering Society, Durham, NC, October 2001.

104. K. Durand, S. Bryant, and K. Anseth, "An *in vivo* investigation of chondrocyte ECM production in photocrosslinked, degradable PEG hydrogels," 2001 Annual Fall Meeting of the Biomedical Engineering Society, Durham, NC, October 2001.

105. S. Bryant, K. Durand, and K. Anseth, "Degradation kinetics influence ECM production of photoencapsulated chondrocytes in PEG-based hydrogels," Division of Polymer Chemistry for the 222nd ACS National Meeting, Chicago, Illinois, August 26-30, 2001.

106. S. Bryant and K. Anseth, "Tailoring the architecture of degradable photocrosslinkable poly(ethylene oxide) hydrogels for tissue engineering cartilage," 2001 Annual Meeting of the Society for Biomaterials, Saint Paul, Minnesota, April 24-29, 2001.

107. N. Luo, S. Bryant, and K. Anseth, "Photopolymerizable PVA and chondroitin sulfate hydrogels for cartilage tissue engineering," 2001 Annual Meeting of the Society for Biomaterials, Saint Paul, Minnesota, April 24-29, 2001.

108. S. Bryant and K. Anseth, "Gel properties influence extracellular matrix formation in chondrocytes photoencapsulated in poly(ethylene oxide) and poly(vinyl alcohol) hydrogels," 2000 Annual Fall Meeting of the Biomedical Engineering Society, Seattle, Washington, October 2000.

109. K.S. Anseth, A.K. Burkoth, J. Burdick, S.J. Bryant, "*In situ* forming polymeric biomaterials," 219th ACS National Meeting in San Francisco, March 26-30, 2000.

110. N. Luo, S. Bryant, A. Crapisi, C. Bowman, and K. Anseth, "Preparation of photo-polymerizable hydrogels for cartilage tissue engineering: PVA and chondroitin sulfate as raw materials," Colorado Biotechnology Symposium, Fort Collins, Colorado, September 2000.

111. S. Bryant and K. Anseth, "*In situ* forming poly(ethylene oxide) and poly(vinyl alcohol) hydrogels for cartilage tissue engineering," World Polymer Congress, 38th Macromolecular IUPAC Symposium, Warsaw, Poland, July 2000.

112. S. Bryant and K. Anseth, "*In vitro* formation of neocartilage in photocrosslinked poly(ethylene oxide) hydrogels," Chicago 2000 World Congress on Medical Physics and Biomedical Engineering Conference, Chicago, IL, July 2000.

113. S. Bryant and K. Anseth, "Photocrosslinkable poly(ethylene oxide) and poly(vinyl alcohol) hydrogels for tissue engineering cartilage," 1999 Annual Fall Meeting of the Biomedical Engineering Symposium, Atlanta, GA, October 1999.

114. S. Bryant, C. Nuttelman, and K. Anseth, "The effects of crosslinking density on cartilage formation in photocrosslinkable hydrogels," Rocky Mountain Bioengineering Symposium, Copper Mountain, April 1999.

115. K. Anseth, J. Elisseeff, S. Bryant, R. Langer, M. Randolf, and M. Yaremchuk. *In situ* transdermal photopolymerization of hydrogels, Annual Meeting of the Society for Biomaterial, Providence, Rhode Island, April 22-May 2, 1999.

116. C. Nuttelman, S. Bryant, K. Anseth," Poly(vinyl alcohol) hydrogels for the tissue engineering of cartilage," AIChE Meeting, Miami Beach, Florida, November 1998.

117. S. Bryant, C. Nuttelman, K. Anseth, "A novel technique using photopolymerization for cell encapsulation as a method for cartilage regeneration," The 28th Annual Biochemical Engineering Symposium, Ames, Iowa, October 1998.

118. K. Anseth, S. Bryant, P. Martens, J. Elisseeff, R. Langar, and M. Randolf, "Transdermal photopolymerizations for biomedical applications," IUPAC Polymer Networks 98, Trondheim, Norway, June 1998.

119. F.W.F. Lee, S. Bryant, P. Todd and D. Kompala, "Maximizing protein synthesis in high cell density perfusion bioreactors," 27th Annual Biochemical Engineering Symposium, Fort Collins, Colorado, September 13, 1997.

INVITED TALKS

1. S.J. Bryant. "Photopolymerized Biomaterials," Photopolymerization Fundamentals Meeting Short Course 2013, September 22-25, 2013.
2. S.J. Bryant. "Cell-laden photopolymerized hydrogels for tissue engineering: from encapsulation to in vivo performance." Photopolymerization Fundamentals Meeting 2013, September 22-25, 2013.
3. "Cell encapsulation in biodegradable hydrogels," Advanced in Tissue Engineering 2013 21th Annual Short Course, Rice University, Houston, TX, August 13-17, 2013.
4. "The Foreign Body Reaction in Tissue Engineering: Is it Important?" JSCBB Mini Symposium, July 30, 2013.
5. "Understanding Biochemical and Biomechanical Cues for Functional Tissue Regeneration," University of Akron, Akron, OH, February 14, 2013.
6. "Mechanical Stimulation of Synthetic Hydrogel Niches for Musculoskeletal Regeneration," University of Oklahoma, Norman, OK, December 6, 2012.
7. "Polymer Networks as Biomaterials," 2012 Polymer Networks Group Meeting. Jackson Hole, WY, August 10-12, 2012.
8. "Synthetic Hydrogel Niches for Musculoskeletal Research and Tissue Engineering," Institute of Medical Engineering and Medical Physics, Cardiff University, Cardiff, UK, March 28, 2012.
9. "Biomimetic Hydrogel Niches: Understanding Biophyisical and Biochemical Cues to Promote Integration and Functional Tissue Regeneration," School of Engineering and Material Science, Queen Mary University of London, London, UK, January 23, 2012.
10. "Cell encapsulation in biodegradable hydrogels," Advanced in Tissue Engineering 2011 19th Annual Short Course, Rice University, Houston, TX, August 13-16, 2011.
11. "Synthetic Hydrogel Niches as a Platform for Musculoskeletal Research and Regeneration." AO Foundation, Davos Switzerland, December 1, 2010.
12. "Mimicking the complexity of tissues through engineered biomaterials." CIMBPosium, University of Colorado, Boulder, November 18, 2010.
13. "Cell encapsulation in biodegradable hydrogels," Advanced in Tissue Engineering 2010 18th Annual Short Course, Rice University, Houston, TX, August 12-15, 2010.
14. "Synthetic Niches for Functional Tissue Engineering," The Charles C. Gates Regenerative Medicine & Stem Cell Biology Program Seminar Series, , University of Colorado Denver, March 17, 2010.
15. "Three-dimensional synthetic niches for regenerating living tissues," Lunchtime Talks in Science & Mathematics, Adams State College, Alamosa, CO, November 5, 2009.
16. "Cell encapsulation in biodegradable hydrogels," Advanced in Tissue Engineering 2009 17th Annual Short Course, Rice University, Houston, TX, August 12-15, 2009.
17. "Synthetic Photopolymer Hydrogels for Functional Tissue Engineering," Department of Chemical and Nuclear Engineering, University of New Mexico, Albuquerque, NM, April 7, 2009.
18. "Designing Synthetic Niches for 3D Cell Culture and Tissue Regeneration of Cartilage," Rheumatology Allergy and Immunology Seminar Series, University of California, San Diego, December 9, 2008.

19. "Mechanical Stimulation of 3D Photopolymer Gel Constructs for Orthopedic Tissue Engineering," Keynote speaker for Orthopedic Biomaterials Session, 2008 BMES Annual Fall Meeting, St. Louis, MO, October 2-4, 2008.
20. "Hydrogel Structure and Dynamic Loading effects on Chondrocytes," 5th International Meeting on "Cell Therapy, Bioengineering, and Regenerative Medicine" Nancy, France, September 11-12, 2008.
21. "Cell encapsulation in biodegradable hydrogels," Advanced in Tissue Engineering 2008 16th Annual Short Course, Rice University, Houston, TX, August 13-16, 2008.
22. "Biomechanical Regulation in Photopolymer Cell-Scaffolds for Cartilage Tissue Engineering," Keynote speaker, 24th Annual Research Day, Colorado Section: American Association for Dental Research, University of Colorado Denver School of Dental Medicine, Anschutz Medical Campus, Aurora, CO, February 20, 2008.
23. "Designer 3D Photopolymer Hydrogels for Tissue Engineering Application," Midwest Connective Tissue Workshop, Rush University Medical School, Chicago, IL December 14-15, 2007.
24. "Using Engineering Principles to Grow Living Tissues," Lunchtime Talks in Science & Mathematics, Adams State College, Alamosa, CO, November 29, 2007.
25. "Cell encapsulation in biodegradable hydrogels," Advanced in Tissue Engineering 2007 15th Annual Short Course, Rice University, Houston, TX, August 15-18, 2007.
26. "Manipulations in photopolymerization kinetics to achieve patterned structures: Applications for tissue engineering." Photopolymerization Fundamentals 2007. Breckenridge, CO. June 24-27, 2007.
27. "Electrochemical Measurement of Oxygen Consumption by Cardiomyocytes adhered to Tissue Engineered Scaffolds." 2nd Annual University of Colorado, Boulder and National Institute of Standards and Technology (NIST) Research Symposium, March 22, 2007. (*Invited as a recipient of the CU/NIST seed grant program for 06-07).*
28. "Photopolymerized hydrogels for functional tissue engineering." Biomaterials from 2D to 3D to Larger than Life: A Symposium on the Future of Biomaterials to Celebrate Buddy Ratner's 60th Birthday, Kaanapali, Maui, Hawaii, December 14-17, 2006.
29. "Photopolymerized hydrogels: from 3D models to probe mechanotransduction to tissue engineering scaffolds." Midwest Connective Tissue Workshop, Rush University Medical School, Chicago, IL October 20-21, 2006.
30. "Mechanically loaded photopolymerized hydrogels for tissue engineering." National Institutes of Standards and Technology, Bethesda, MD September 13, 2006.
31. "Photopolymer gels to probe mechanical forces in cartilage". Medical scientist training program seminar series, University of Colorado Health Science Center, Denver, CO, March 1, 2006.

GRANTS RECEIVED

NIH R21: ""The Interplay between Macrophages and Differentiating MSCs in Cell-Laden Hydrogel," 4/1/2013-3/31/2015.

NIH R01, "Personalizing Matrix Assisted Autologous Chondrocyte Implantation," 9/12/13-9/11/18.

NEW AWARD: NIH R01, "Synthetic Mesenchymal Stem Cell Niches for Vascular Therapy," 9/1/13-8/30/2018.

NIH R21: "*Dynamically Responsive Bioreactors for Cartilage Regeneration*," 9/1/12-8/31/14.

NIH R21: "*A Platform to Study Tenocyte Mechanotransduction*," 9/1/12-8/31/14.

NIH R21: "*Engineering Bimodal Degrading Gels,"* 4/1/11-3/31/13.

State Proof of Concept Grant (BDEG), "Mechanically Trained Engineered Cartilage for Craniofacial Reconstruction," 6/1/10-1/31/12.

NIH R03*: "Modulating the Host Response to Tissue Engineering Scaffolds,"* 3/1/10-2/28/12.

NSF: *2009 MRS Symposium on Engineering for Regenerative Medicine; Boston, MA, 12/15/09-11/30/10.*

American Federation for Aging Research: *"Elucidating the role of biomechanical factors in age-related changes in cartilage: A possible risk factor for developing osteoarthritis*," 7/1/09-6/30/11.

NSF: *CAREER: Multi-structured Hydrogels to Control Biochemical and Biomechanical Cues to MCSs: An Integrative Plan to Promote Diversity*. 4/1/09-3/31/14, $500,000 (PI). REU Supplement.

CeraPedics (Industry): *"The Role of Immobilized P-15 in Osteogenesis of human Mesenchymal Stem Cells Encapsulated in Photopolymerized Poly(Ethylene Glycol) Hydrogels for Bone Tissue Engineering.*"

University of Colorado Technology Transfer Office: *"Bioreactor to Mechanically Load Soft Material under Tension*," Proof of Concept Grant, 5/1/08-1/1/09.

CU Innovative Seed Grant Program: *"New Tools to Elucidate the Role of Intracellular Ca2+ in Mechanically Stimulated Cartilage Cells*," 7/1/08-6/30/09.

Mechanical Stimulation of Cells in Photopolymerized Gels. National Institutes of Health, K22 Career Transition Award, 9/05-8/09.

Novel Polymeric Supports for Cardiac Muscle Regeneration, American Health Assistance Foundation, National Heart Foundation, 4/06-3/07.

Electrochemical Measurement of Oxygen Consumption by Cardiomyocytes adhered to Tissue Engineering Scaffolds, CU-NIST Seed Grant, 6/06-5/07.

Tissue Engineering in the Classroom, University of Colorado Outreach Council, 9/06-8/07.

PROFESSIONAL SOCIETIES

American Institute of Chemical Engineers (AIChE)
Materials Research Society (MRS)
Society for Biomaterials (SFB)
Biomedical Engineering Society (BMES)

CHAIR OF MEETINGS AND SYMPOSIA

1. Co-Char of Session, "Undergraduate Session", 2013 BMES Annual Meeting, Seattle, WA, September 26-29, 2013.
2. Co-Chair of Session "Emerging Technologies," Annual Meeting of the ASC, New Orleans, LA April 7-11, 2013.
3. Co-Chair of Session, "Biomimetic Materials for Tissue Engineering" Annual Meeting of the Society for Biomaterials, Orlando, Fl, April 13-16, 2011.
4. Co-Chair of Session, "Novel Biomaterials and Scaffolds" Annual Meeting Biomedical Engineering Society, St. Louis, MO, October 6-9, 2010.
5. Co-Chair of Session, "Surface Modification and Characterization of Biomaterials." Annual Fall Meeting of the AIChE, Nov 7-12, 2010.
6. Co-Chair of Session, "Biomimetic Materials for Tissue Engineering Rapid Fire" Society for Biomaterials Annual Meeting, Seattle, WA, April 21-24, 2009.
7. Organized Symposium, "Engineered Biomaterials for Regenerative Medicine," Material Research Society Fall Meeting, Boston, MA, Nov 30-Dec 4, 2009.
8. Panel member for Women's Initiative Committee's Session on "Pathways to Success in Academia," Annual Fall Meeting of the AIChE, Nov 1-6, 2009.
9. Session Chair, '"Biomaterial Scaffolds for Tissue Engineering," Annual Fall Meeting of the AIChE, Nov 1-6, 2009.
10. Co-Chair of Session, "Orthopedic Biomaterials II", Annual Meeting Biomedical Engineering Society, St. Louis, MO, October 1-3, 2008.
11. Co-Chairperson of Session, "Cellular Functions in Tissue Engineering," Society for Biomaterials World Congress, Amsterdam, the Netherlands, May 28- June 1, 2008.
12. Organized and Co-Chairperson of Symposium, "Developing Best Practices in Tissue Engineering Education," Society for Biomaterials Annual Meeting, Chicago, IL, April 2007.

MEMBER OF FEDERAL REVIEW PANELS

1. National Institutes of Health, MOSS G 55R stage 1 reviewer, May 2010.
2. National Institutes of Health, ZRG1 MOSS-P, Small Business: Orthopedic and Skeletal Biology, March 2010.
3. National Science Foundation, Severed on eight panels between 2007-2014.
4. National Institutes of Health, MOSS G 52 Review Panel, December 2009
5. National Institutes of Health, National Heart Lung Blood Institute. Enabling Technologies for Regenerative Medicine, July 2007.

REVIEWER OF JOURNALS

ACS Applied Materials & Interfaces
Acta Biomaterialia
Advanced Drug Delievery Reviews
Annals of Biomedical Engineering
Biorheology
Biomacromolecules
Biomaterials
Biotechnology and Bioengineering
Biotechnology Progress
BMC Biotechnology
Clinical Orthopaedics and Related Reserch
European Polymer Journal
European Journal of Cell Biology
ECM
Journal of Biomaterial Science Poymer Ed.
Journal of Biomechanics
Journal of Biomedical Materials Research, Part A
Journal of Biomedical Materials Research, Part B
Journal of Orthopedic Research
Journal of Physical Chemistry
Journal of the Royal Society Interface
Journal of the Taiwan Institute of Chemical Engineers
Langmuir
Organic & Biomolecular Chemistry
Osteoarthritis and Cartilage
Soft Matter
Stem Cell
Tissue Engineering
Proceedings of the National Academy of Sciences

COURSES TAUGHT

Fall 2013: CHEN 4810, *Senior Lab,* 21 undergraduate students.

Spring 2013: CHEN 4805, *Biomaterials.* 60 undergraduate students.

Fall 2012: CHEN 3210, *Chemical Engineering Heat Transfer.* 99 undergraduate students.

Spring 2011: CHEN 5210, *Transport Phenomenon.* 30 graduate students.

Spring 2010: CHEN 4805, *Biomaterials.* 77 undergraduate students. (Instructor Rating: 5.2/6.0, Department Average Instructor Rating: 4.8/6.0)

Spring 2010: CHEN 5805, *Advanced Biomaterials.* 12 graduate students. (Instructor Rating: 5.0/6.0, Department Average Instructor Rating: 4.9/6.0)

Fall 2009: CHEN 3210, *Chemical Engineering Heat Transfer.* 56 undergraduate students. (Instructor Rating: 4.3/6.0, Department Average Instructor Rating: 4.8/6.0).

Fall 2008: CHEN 3210, *Chemical Engineering Heat Transfer.* 63 undergraduate students. (Instructor Rating: 4.1/6.0, Department Average Instructor Rating: 4.8/6.0).

Spring 2008: CHEN 4805/5805, *Biomaterials*. 36 students (9 graduate students, 27 undergraduate students). (Instructor Rating: 5.5/6.0, Department Average Instructor Rating: 4.6/6.0).

Fall 2007: CHEN 3210, *Chemical Engineering Heat Transfer.* 78 undergraduate students. (Instructor Rating: 4.3/6.0, Department Average Instructor Rating: 4.4/6.0).

Fall 2006: CHEN 3210, *Chemical Engineering Heat Transfer.* 59 undergraduate students. (Instructor Rating: 5.4/6.0, Department Average Instructor Rating: 4.3/6.0)

Spring 2005: CHEN 4838/5838, *Special Topics: Biomaterials*. 28 students (14 graduate students, 14 undergraduate students). New course development. (Instructor Rating: 3.46/4.0, Department Average Instructor Rating: 2.82/4.0).

Fall 2005: CHEN 3210, *Chemical Engineering Heat Transfer*. 52 undergraduate students. (Instructor Rating: 2.2/4.0, Department Average Instructor Rating: 2.86/4.0)

PAST AND PRESENT ADVISEES

***Graduate Students Supervised*:**

Idalis Villanueva, PhD, January 2005-2009, **Graduated with PhD** (NASA Harriet Jenkins Graduate Fellow), "The effects of Biochemical and Biomechanical Cues on Cartilage Cells Using Synthetic, Photopolymerizable Hydrogels." **Current Position:** Lecturer, Department of Bioengineering, University of Maryland College Park.

Garret Nicodemus, PhD, January 2005-2009, **Graduated with PhD**, "Mechanical conditioning of photopolymerized cell scaffolds for cartilage tissue engineering." **Current Position:** *Instructor and Research Associate, Department of Chemical and Biological Engineering, CU Boulder.*

Stephanie LaNasa, PhD, January 2006-December 2011, **Graduated with PhD** (NSF Graduate Fellow), "Development and Characterization of Porous and Patterned Hydrogel Scaffolds for Cardiac Muscle Tissue Engineering." **Current Position:** NRC post-doctoral fellow at NIST, Boulder, CO.

Aaron Lynn, PhD, August 2006-June 2010, **Graduates with PhD**, "Characterization and Manipulation of the *in vivo* Host Response and *In Vitro* Macrophage Response to Synthetic Hydrogels." **Current Position:** Finishing MD portion of PhD/MD program.

Neven Steinmetz, PhD January 2007-11, **Graduates with PhD**, "Mechanical conditioning of mesenchymal stem cells in tailored composite hydrogel scaffolds for treating osteochondral defects." **Current Position:** Whitaker Post-doc fellow at University of Glasgow, Scotland.

Nikki Bishop, January 2008-May 2012, **Graduates with PhD**, "The Role of Chondrocyte Age in Cellular Response to External Cues And Their Implications in Tissue Engineering." **Current Position:** Post-doctoral fellow University of Colorado Denver

Emily Hiers, May 2007-May 2008, Non-thesis M.S. (co-advised with Chris Bowman). "Modeling polymerization kinetics in the presence of cells."

Justine Roberts, January 2009-present, PhD student. "Mechanical conditioning of bioinsipred photopolymerized hydrogels for cartilage tissue engineering."

Eric Greenwald, August 2009-May 2010, **Graduated with MS**. "Numerical Model of Hydrogel Mechanics, Fluid Flow, and Enzyme Diff usion and Degradation."

Stacey Skaalure, January 2010-present, PhD student. "Mechanically stimulated biodegradable hydrogels for cartilage tissue engineering."

Mark Swartzlander, January 2010-present, PhD student "Modulating the foreign body reaction to tissue engineering scaffolds.'

Luke Amer, January 2011-present, PhD student (co-advised with Dr .Mahoney) "Hydrogels for neural tissue engineering."

Aaron Aziz, May 2012-present, PhD "Bio-inspired hydrogels for osteogenesis in osteochondral tissues."

Elizabeth Aisenbrey, January 2013-present, PhD "Bioinspired hydrogels for chondrogenesis in osteochondral tissues"

Stanley Chu, January 14- present, PhD student

Graduate and MD Students Supervised (Independent Study, MD Research Rotation):
Aaron Lynn (MD/PhD Student, UCDHSC, Sum06), Steve Gingrich (MD Student, Penn State, Sum2007), Maliheh Shomali (PhD Student ChemEng. F07), Nikki Bishop (PhD Student ChemEng F07), Justine Roberts (PhD Student, ChemEngF08), Devatha Nair (PhD Student Mechanical Engineering, F08), Audrey Earnshaw (MS Student Mechanical Engineering, 08/09), Balaji Sridhar (MD/PhD Student, UCDHSC, Sum10), Aaron Aziz (IQ Bio rotation student).

Undergraduate Students Supervised (Independent Study, Senior Thesis, and Research) (45 total):
Hillary E. Davis (Sum05, REU student from Georgia Tech), Johnross Ford (Sept 2005-present, NIH/HHMI Scholar), Clark Bergnard (Senior Thesis, Jan 2006-May 2007), Kimberly Shiplet (Senior Thesis, Jan 2006-May 2007), Jenny Yang (Jan 2006-May 2006, Senior Thesis, Sept 2007-May2008), Angela Hellstern (Jan 2006-May 2007). Stuart Kaltz (Sum06, REU student from Michigan State: Received 2nd place in ChBE REU poster presentation competition), Courtney Weigel (Sept 2006-Dec 2006), Naseem Ammari (Sept 2006-Dec 2006), Jeffrey Kessler (Jan 2007-Dec 2007), Holly Hughes (Jan 2007-August 2007, UROP Fellow), Ke Liu (Summer 2007, Cornell University), Joy Dickensheets (Sum07, REU program), Andrea Cascio (Sum07, REU program), Rasheed Lawal (Sept 2007-Present, NIH/HHMI Scholar), Sara Gladem (Sept 2007-present, DLA Apprentice), Michael Holmberg (Senior Thesis, Sept 2007-May 2008), Jennifer Christensen (Senior Thesis, Sept 2007-May 2008), Kristen Potter (Oct 2007-May 2008, BURST fellow). Vien Nguyen (Independent Study,Jan 2008-May 2008, Senior Thesis, Sept 2008-May 2009), Scott Byers (Independent Study, Jan 2008-May2008, Senior Thesis, Sept 2008-May 2009), James Prager (Independent Study, Jan 2008-May 2008), Richard Fisher (Independent Study, Jan 2008-May 2008), Suzanne Giunta (Sum08, REU program, 3rd place Food, Pharmaceutical & Biotechnology at 2008 AiChE), Anna Blakney (Sum 2008-May 2012, SURE Program, AY08/09, BURST Fellow, AY09/10 HHMI/UROP Fellow, Senior Thesis, NSF GRFP fellow), Ian Hoffecker (Senior Thesis, Sept 2008-May 2009), Eric Greenwald (Senior Thesis, Sept 2008-May 2009), Louisa Eberle (Independent Study, Spr09), Amanda Gonzales (Sum09, REU), Sarah Hoyt (Senior Thesis, Sept 2009-May 2010), Claire Bensard (Sept 2009-May2010, HHMI Fellow), Robert Dong (Sept 2009-May 2010, BURST Fellow), Nikki Look (Jan 2010-May 2010, UROP Fellow), Andrew Maier (Jan 2010), Krista Donahue (DLA, 2009-2010, Senior Thesis 2010-2011), Lorena Antunez (May 2010-June2011). Saikripa M. Radhakrishnan (Jan 2011-, Goldwater Scholar), Tu Phan (Jan 2011-December 2011), Ben Mead (June 2011-May2013, Senior Thesis), Ian Milligan (REU 2011, Senior Thesis 2011-2012), Elizabeth Aisenbrey (REU 2011), Kirsten Fitch (REU, 2011), Erica Duffy (Independent Study, August2011-May2012), Joe Quinn (May 2012-August 2012), Ashley Pennington (September 2012-, BURST Fellow), Joe Villanueva (SMART fellow, Summer 2013), Brook McMillan (Summer 2013).