ELIZABETH G. LOBOA

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Education

PH.D. MECHANICAL ENGINEERING, JUNE 2002
Stanford University, Stanford, CA

M.S.E. BIOMECHANICAL ENGINEERING, DECEMBER 1997
Stanford University, Stanford, CA

B.S. MECHANICAL ENGINEERING, JUNE 1995
University of California, Davis, CA

University Leadership and Service

Provost and Vice President for Academic Affairs, Southern Methodist University, 2020 – present

Co-PI and Search Committee, Translational Regenerative Medicine Cluster Hire, North Carolina State University Colleges of Engineering, Textiles, and Veterinary Medicine, 2012 – 2013
College of Engineering Faculty Development Committee, North Carolina State University, 2008 – 2011
Research Advisory Board, Department of Orthopaedics, UNC-Chapel Hill, NC, 2009 – 2015
Chair Search Committee, UNC/NCSU Joint Department of Biomedical Engineering, 2007 – 2009
Research Committee, UNC/NCSU Joint Department of Biomedical Engineering, 2007 – 2011
Search Committee, Rehabilitation Engineering Center Director, North Carolina State University, 2009

Solids Technical Committee, American Society of Mechanical Engineers Bioengineering Division, 2007 – present

Session Chair and Moderator, multiple sessions at Annual Meetings of the Biomedical Engineering Society, Orthopaedic Research Society, Tissue Engineering and Regenerative Medicine International Society, BMES-Cellular and Molecular Bioengineering Conference, North Carolina Tissue Engineering and Regenerative Medicine Society, Hilton Head Regenerative Medicine Conference, ASME Summer Bioengineering Conference, Nanofibers for the 3rd Millennium, Institute of Biological Engineering *et al.*, 2007 – present

Reviewer and Judge, multiple abstracts at Annual Meetings of the Biomedical Engineering Society, Orthopaedic Research Society, Tissue Engineering and Regenerative Medicine International Society, BMES-Cellular and Molecular Bioengineering Conference, North Carolina Tissue Engineering and Regenerative Medicine Society, ASME Summer Bioengineering Conference, *et al.*, 2007 – present

Session Chair, 2017 BMES-Cellular and Molecular Bioengineering (CMBE) Conference: *Stem4MCID5Bonfl Eeng.6 (ng)101 (*

12. **Loboa EG**. Importance of Tirelessly Supporting Innovation at Universities (Nov 2019). Women in Innovation and Technology Luncheon. Washington University. St. Louis, MO.
13. **Loboa EG**. Moderator, Working with Men to Change Perceptions and Break Down Barriers (Nov 2019). The Global Women in STEM Leadership Summit. Atlanta, GA.
14. **Loboa EG**. What's Your Superpower (Nov 2019). The Global Women in STEM Leadership Summit. Atlanta, GA.
15. **Loboa EG.** Presenter and AtIH3 (h)2 ( )]T1 0 Tenc.815 0 Td(S)Tj5 (7939.6 (l)-9.6 (B)4 (a)l)-4.6 (v-4 (s)8.6 (hi)-l)]TJ0

32. **Loboa EG**. Panelist, Talent Management Panel (June 2017). 2017 10th Annual Shared Assessments Summit. Arlington, VA.
33. **Loboa EG**. Regenerative Medicine vs. MRSA – Battling with Biomaterials (May 2017). University of Rochester's Biomedical Engineering Seminar Series. University of Rochester. Rochester, NY.
34. **Loboa EG**. Regenerative Medicine in the Age of Multi-Drug Resistant Bacteria (Apr 2017). University of Arkansas Biomedical Engineering Seminar Speaker Series. University of Arkansas. Fayetteville, AR.
35. **Loboa EG**. Regenerative Medicine, Mechanobiology and MRSA (Apr 2017). University of Iowa's Chemical and Biochemical Engineering Graduate Student Seminar Series. University of Iowa. Iowa City, IA.
36. **Loboa EG**. Guest Speaker, Regenerative Medicine and Wound Healing; Tissue Engineering & Biomaterials (Mar 2017). Saint Teresa's Academy. Kansas City, MO.
37. **Loboa EG**. A Tissue Engineered Life: From UCD to ASC then MIZ (Feb 2017). UC Davis College of Engineering Showcase. University of California at Davis. Davis, CA.
38. **Loboa EG**. Functional Tissue Engineering in the Age of Multi-Drug Resistant Bacteria (Dec 2016). 2016 American College of Veterinary Pathologists (ACVP) and American Society for Veterinary Clinical Pathology (ASVCP) Concurrent Annual Meeting. New Orleans, LA.
39. **Loboa EG**. Keynote Speaker, 2016 Women in Business Awards Luncheon (Oct 2016). Columbia Daily Tribune Women in Business Awards. Columbia, MO.
40. **Loboa EG**. Tissue Engineering with Multi-Drug Resistant Bacteria in the Way (Sep 2016). Saturday Morning Science. University of Missouri. Columbia, MO.
41. **Loboa EG**. What Does Your CV/Resume Say About You (Mar 2016)? Women's Leadership Forum and New Investigator Mentoring Committee Professional Advancement Session. 2016 Annual Meeting of the Orthopaedic Research Society. Orlando, FL.
42. **Loboa EG**. Translating Textiles to Tissues: Tissue Engineering using Industry Standard Manufacturing Approaches (Jan 2016). 2016 Biomedical Engineering Society (BMES) Cellular and Molecular Bioengineering Conference. New Orleans, LA.
43. **Loboa EG**. Our Fat Future: Translating Adipose Stem Cell Therapy (Dec 2015). 11th Annual World Stem Cell Summit. Atlanta, GA.
44. **Loboa EG**. Our Fat Future: Understanding and Translating hASC for Clinical Applications (Nov 2015). International Federation of Adipose Therapeutics Symposium. New Orleans, LA.
45. **Loboa EG**. Biomimetic Material Approaches to Tissue Engineering, Regenerative Medicine, and Wound Healing (Oct 2015). AIP-AVS Industrial Physics Forum. San Jose, CA.
46. **Loboa EG**. Regenerative Medicine in Biomedical Engineering (Aug 2015). School of Medicine Annual Research Retreat. UNC-Chapel Hill. Chapel Hill, NC.
47. **Loboa EG**. Advances in Wound Care (July 2015). Johnson & Johnson. Skillman, NJ.
48.

53. **Loboa EG**. Engineering Innovation: Biomimetic Approaches to Wound Care and Regenerative Medicine (Feb 2015). North Carolina State University. Raleigh, NC.
54. **Loboa EG**. Functional Applications of Electrospun Nanofibers in Tissue Engineering, Regenerative Medicine, and Wound Healing (Feb 2015). RISE Conference. Miami, Florida.
55. **Loboa EG**. Engineering Innovation – New Approaches to Wound Care (Jan 2015). Eastman Chemical Company. Kingsport, Tennessee.
56. **Loboa EG**. Regenerating and Engineering Tissues with Bacteria in the Way (Nov 2014). School of Dentistry. UNC-Chapel Hill. Chapel Hill, NC.
57. **Loboa EG**. My Life in Tissue Engineering, Regenerative Medicine, and Wound Healing: Professional and Personal Adventures (Nov 2014). Bioengineering Graduate Student Society Selected Speaker. University of Maryland. College Park, MD.
58. **Loboa EG**. Tissue Engineering in the Age of Multi-Drug Resistant Bacteria (Oct 2014). 12th NJ Symposium on Biomaterials Science. New Brunswick, NJ.
59. **Loboa EG**. Biomimicry and Mechanobiology in Wound Healing and Regenerative Medicine (July 2014). Stanford University. Stanford, CA.
60. **Loboa EG**. Biomimetic Forces and Fibers for Wound Healing and Regenerative Medicine Applications (July 2014). Santa Clara University. Santa Clara, CA.
61. **Loboa EG**. Mechanobiology and its Effect on the Development of Osteochondral Tissue for Regenerative Medicine (July 2014). Swine in Biomedical Research International Conference. Raleigh, NC.
62. **Loboa EG**. Partnerships of Necessity: Regenerative Medicine, Tissue Engineering, and Wound Healing (May 2014). Regenerative Medicine Foundation 2014 Conference. San Francisco, CA.
63. **Loboa EG**. Nanofibrous Platforms for Wound Healing and Tissue Engineering Applications (Apr 2014). 2014 Annual Meeting of the American Association of Textile Chemists and Colorists (AATCC). Asheville, NC.
64. **Loboa EG**. Biomimetic Materials and Mechanics to Regulate Stem Cell Fate (Apr 2014). UNC Stem Cell Symposium. UNC-Chapel Hill. Chapel Hill, NC.
65. **Loboa EG**. Nanofibrous Scaffolds for Tissue Engineering and Drug Delivery: Advancements and Challenges (Mar 2014). New Horizon Workshop. Annual Meeting of the Orthopaedic Research Society. New Orleans, LA.
66. **Loboa EG**. Biomimetic Smart Bandages for Wound Healing and Tissue Engineering Applications (Jan 2014). Engineer's Council Seminar. Raleigh, NC.
67. **Loboa EG**. Matrices and Mechanics to Direct hASC Fate (Nov 2013). 2013 SESAPS Conference. Bowling Green, KY.
68. **Loboa EG**. BME, Mechanobiology, Biomimicry, Wound Healing, and Regenerative Medicine (Oct 2013). Joint UNC-NCSU Regenerative Medicine Symposium. Raleigh, NC.
69. **Loboa EG**. Biomimetic Forces and Fibers for Osteochondral Tissue Engineering using Human Adipose-Derived Stem Cel rcmt 20rchar Cerolioa Sarlilege

73. **Loboa EG**. Biomimetic Forces and Fibers for Wound Healing and Tissue Engineering Applications (June 2013). University of Nebraska Medical Center. Nebraska Regenerative Medicine Project. Omaha, NE.
74. **Loboa EG**. Biomimetic Forces and Fibers: Improving Success in Functional Tissue Engineering, Regenerative Medicine, and Wound Healing (Apr 2013). University of Texas. Dallas, TX.
75. **Loboa EG**. From College to Grad School to Professorship and Motherhood. A Guide (Sort of…) (Apr 2013). The Hockaday School. Dallas, TX.
76. **Loboa EG**. Functional Tissue Engineering: Converting Fat to Bone and Cartilage (Mar 2013). Texas Tech University. Lubbock, TX.
77. **Loboa EG**. How to Make Bone and Cartilage: Start with Fat (Feb 2013). Scholars Forum. North Carolina State University. Raleigh, NC.
78. **Loboa EG**. Biomimetic Approaches for Functional Tissue Engineering Using Human Stem Cells (Nov 2012). Texas A&M University. College Station, TX.
79. **Loboa EG**. Biomimetic Materials and Mechanobiology: Tissue Engineering using Human Adipose-Derived Stem Cells (Oct 2012). Johns Hopkins University. Baltimore, MD.
80. **Loboa EG**. Regenerative Medicine: Can Fat Derived Stem Cells Rebuild Bone and Muscle (Oct 2012). New Horizons in Science Conference. Raleigh, NC.
81. **Loboa EG**. Bioactive Scaffolds to Control Human Stem Cell Fate (Oct 2012). 11th NJ Symposium on Biomaterials Science. New Brunswick, NJ. Podium Presentation (Plenary Session).
82. **Loboa EG**. Biomimetic Stimuli to Regulate Stem Cell Fate (Sep 2012). European Materials Research Society 2012 Meeting. Warsaw, Poland.
83. **Loboa EG**. Tissue Engineering Using Stem Cells (Aug 2012). Gordon Research Conference on Musculoskeletal Biology and Bioengineering. Proctor Academy. Andover, NH.
84. **Loboa EG**. The Use of Electrospun Nonwoven Fibers/Fabrics for Tissue Engineering, Wound Healing, and Regenerative Medicine Applications (JunM6z4.6 (e)-1Tj/TT31(2)2 ())8C.6 (o)2(i)8.3 tch

94. **Loboa EG**. Material Stimuli to Regulate Stem Cell Fate (Nov 2011). Materials Research Society. Raleigh, NC.
95. **Loboa EG**. Biomimetic In Vitro Technologies for Functional Bone Tissue Engineering (Nov 2011). North Carolina Tissue Engineering and Regenerative Medicine Society Conference. Winston-Salem, NC.
96. **Loboa EG**. Advances in Biomedical Engineering – Bone (Oct 2011). HESI/CAAT Workshop on Testicular Toxicology In Vitro Models. Baltimore, MD.
97. **Loboa EG**. Functional Osteochondral Tissue Engineering using Human Adipose-Derived Stem Cells (Oct 2011). Comparative Biomedical Sciences Seminar. College of Veterinary Medicine. North Carolina State University. Raleigh, NC.
98. **Loboa EG**. The Use of Electrospun Nonwoven Fibers/Fabrics for Human Cell and Tissue Growth (Oct 2011). INDA Association of the Nonwoven Fabrics Industry RISE Conference. Raleigh, NC.
99. **Loboa EG**. Nanofibrous and Nanocomposite Nonwovens for Bone Tissue Engineering Applications Using Human Stem Cells (Sep 2011). NETInc Innovative Nonwovens Conference. Atlanta, GA.
100. **Loboa EG**. Mechanobiological Approach to Osteochondral Defect Repair Using Human Adipose Derived Stem Cells (Sep 2011). Rheumatology Grand Rounds. University of North Carolina. Chapel Hill, NC.
101. **Loboa EG**. Nanofibrous and Nanocomposite Materials and Human Adipose-Derived Stem Cells: Functional Bone Tissue Engineering Applications (Aug 2011). Nanofibers for the 3rd Millennium Conference. Raleigh, NC.
102. **Loboa EG**. Biomimetic Material and Mechanical Stimuli to Regulate Stem Cell Fate (May 2011). The 2011 Cell- Mn6.3 (i.2 04.6 (p)10.9 9 (

113. **Loboa EG**. Mechanical and Material Approaches to Control Stem Cell Fate (Oct 2009). Materials Science and Engineering Department Seminar Series. NC State University. Raleigh, NC.
114. **Loboa EG**. Functional Tissue Engineering and Regenerative Medicine of Musculoskeletal Tissues (Aug 2009). National Veterinary Scholars Symposium. Raleigh, NC.
115. **Loboa EG.** Stem Cells & Tissue Engineering (Mar 2009). ONE HEALTH Intellectual Exchange Group. North Carolina Biotechnology Center. Research Triangle Park. Raleigh, NC.
116. **Loboa EG**, Pfeiler TW, Sumanasinghe RD, Hanson AD. Cyclic Tensile Strain Induces Osteogenesis in hMSCs and hASCs (Mar 2009). 2009 Hilton Head Workshop. Regenerative Medicine: Advancing to Next Generation Therapies. Hilton Head Island, SC.
117. **Loboa EG**. Stem Cells and Functional Tissue Engineering (Nov 2008). Durham Technical Community College. Durham, NC.
118. **Loboa EG**. Functional Tissue Engineering Methodologies for Adult Stem Cells (Nov 2008). Wake Forest Institute for Regenerative Medicine. Wake Forest University. Winston-Salem, NC.
119. **Loboa EG**. Mechanobiology of Adult Stem Cells: Orthopaedic Applications (Nov 2008). Orthopaedic Grand Rounds. Department of Orthopaedic Surgery. UNC-Chapel Hill.

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69. *Mizzou News – University of Missouri* (Oct 2016). "Watching Stem Cells Change Provides Clues to Fighting Osteoporosis in Older Women."
70. *Columbia Daily Tribune* (Oct 2016). "First female MU Engineering Dean to speak at Women in Business event."
71. *Bioengineer.org* (Sep 2016). "Methods used to create textiles also could help manufacture human tissues."
72. *Orthopedics this Week* (Apr 2016). "Found! More cost-effective method of tissue engineering."
73. *Journal of Emergency Medical Services* (Apr 2016). "Methods used to create textiles also could help manufacture human tissues."
74. *Futurity.org (*Apr 2016). "Methods used to create textiles also could help manufacture human tissues."
75. *Smithsonian Magazine* (Apr 2016). "Taking a cue from textile-making to engineer human tissue."
76. *Textile World* (Apr 2016). "Methods used to create textiles also could help manufacture human tissues."
77. *EurekAlert* (Apr 2016). "Methods used to create textiles also could help manufacture human tissues."
78. *NewsWise* (Apr 2016). "Methods used to create textiles also could help manufacture human tissues."
79. *BioSpace* (Apr 2016). "Methods used to create textiles also could help manufacture human tissues."
80. *KurzweilAI* (Apr 2016). "Methods used to create textiles also could help manufacture human tissues."
81. *KurzweilAI Facebook* (Apr 2016). "Methods used to create textiles also could help manufacture human tissues."
82. *Medical News Today* (Apr 2016). "

Mentor, Women in Science and Engineering (WISE) scholars, North Carolina State University, Raleigh, NC, 2005 – 2015
Mentor, Park Scholars, North Carolina State University, Raleigh, NC, 2005 – 2015

Honors and Awards

Fellow, Asia-Pacific Artificial Intelligence Association (AAIA), 2022: Selected for "top scientist with outstanding achievements in the area of regenerative medicine and pharmacoengineering."

Fellow, American Association for the Advancement of Science, 2021: Selected for "transformative academic leadership, promotion of diversity and inclusion in STEM fields, and impactful research in biomedical engineering, particularly for contributions in regenerative medicine and tissue engineering."

Fellow, American Society of Mechanical Engineers, 2021: Selected for "exceptional engineering achievements and contributions to the engineering profession and to ASME."

Fellow, National Academy of Inventors, 2019: Selected for demonstrating "highly prolific spirits of innovation in creating or facilitating outstanding inventions that have made a tangible impact on the quality of life, economic development and welfare of society."

Lloyd and Margaret Ketcham Research Professorship, 2017

Insight into Diversity Giving Back Award, 2017

UC Davis Distinguished Engineering Alumni Award, 2016

Fellow, American Institute for Medical and Biological Engineering (AIMBE), 2016: Selected for "outstanding contributions to functional tissue engineering, regenerative medicine and wound healing as well as academic leadership and mentoring in engineering."

Fellow, Biomedical Engineering Society (BMES), 2016: Selected for "exceptional achievements and contributions to the field of Biomedical Engineering, and for Inspired Leadership within the Biomedical Engineering Society."

Fellow, ELATE (Executive Leadership in Academic Technology and Engineering), 2015

North Carolina State University Faculty Scholar Award, 2012

North Carolina State University Chancellor's Innovation Award, 2011

Stanford University Distinguished Alumni Scholar Award, 2010

UK-US Stem Cell Collaboration Development Award, 2009

Sigma Xi Faculty Research Award, 2009

Ralph E. Powe Junior Faculty Award, 2005

Selected Participant, Science and Engineering Education Scholars Program (19 participants accepted nationwide): 7th Annual Conference on developing and implementing more effective teaching methodologies for undergraduate science and engineering, 2002

Selected Delegate, Rotary International Group Study Exchange Trip to India (declined), 2001

Jeffrey K. Lyons Award for Outstanding Service to the Stanford Community, 2000

Engineering and *Medicine*. 2018 De
Epub 2018 Nov 2

10. Wall M, Butler D odle J, **Loboa EG**, Banes A. Key developments that impa of mechanobiology ansduction. *Journal of Orthopaedic Research.* 2018 Feb; . https://doi.org/10

11. Mohiti-Asli M, R and evaluation of model for investig

21. Mohiti-Asli M, Casey M, Thamonwan D, Pourdeyhimi B, **Loboa EG**. Evaluation of silver ion-releasing scaffolds in a 3D coculture system of MRSA and human adipose-derived stem cells for their potential use in treatment or prevention of osteomyelitis. *Tissue Engineering Part A.* 2016 Nov;22(21-22):1258-1263. https://v(i)-4.6 Tw 9 -rg/10.108(i)-4.69/ten.(i)-4.6tea.2016.006(i)-4.63. Epub 2016 Oct 25.

22. Wall ME, Dyment NA, Bodle J, Volmer J**, Loboa E**, Cederlund A, Fox AM, Banes AJ. Cell Signaling in Tenocytes: Response to Load and Enhanced cellular infiltration of human adipose-derived stem cells in allograft menisci using a needle-punch method. *Journal of Orthopaedic Surgery and Research.* 2016 Oct 28;11(1):132. https://v(i)-4.6 Tw 9 -rg/10.118(i)-4.6/s13018-(i)-4.6-0651-x. Epub 2016 Oct 28.

Vaughn CE, Griffith EH, Fisher MB, Loboa EG (.)]TJ/TT0 1 Tf 0 -17.6 Td [(22)-6.6 (.)]TJ/TT0 1 Tf 0 -17.6 Td [(Cell Physiol Biochem. 2016;38(2):617-631. doi: 10.1159/000438657. Epub 2016 Jan 27.

24. Nasrollahzadeh M, Ganji F, Taghizadeh SM, Daraei B, **Loboa EG**

33. Bago J, Guillaume P, Okolie O, Mohiti-Asli M, **Loboa EG**, Hingtgen S. ATPS-31 Polymeric bio-scaffolds increase the efficacy of stem cell-mediated therapy for glioblastoma. *Neuro-Oncology*. 2015 Nov 1;17(5):v24-v25. https://doi.org/10.1093/neuonc/nov204.31. Epub 2015 Nov 9.

34. Neupane B, Jin T, Mellor LF, **Loboa EG**, Ligler FS, Wang G. Continuous-wave stimulated emission depletion microscope for imaging actin cytoskeleton in fixed and live cells. *Sensors (Basel)*. 2015 Sep 18;15(9):24178-24190. doi: 10.3390/s150924178.

35. Nordberg RC, **Loboa EG**. Our fat future: translating adipose stem cell therapy. *Stem Cells Translational Medicine*. 2015 Sep;4(9):974-979. https://doi.org/10.5966/sctm.2015-0071. Epub 2015 July 16.

36. Mellor, LF, Mohiti-Asli M, Williams J, Kannan A, Dent MR, Guilak F, **Loboa EG**. Extracellular calcium modulates chondrogenic and osteogenic differentiation of human adipose-derived stem cells: a novel approach for osteochondral tissue engineering using a single stem cell source. *Tissue Engineering Part A.* 2015 Sep;21(17-18):2323-2333. https://doi.org/10.1089/ten.TEA.2014.0572. Epub 2015 July 13.

37. Haslauer CM, Avery MR, Pourdeyhimi B, **Loboa EG**. Translating textiles to tissue engineering: creation and evaluation of microporous, biocompatible, degradable scaffolds using industry relevant manufacturing approaches and human adipose derived stem cells. *Journal of Biomedical Materials Research B: Applvem*

(feature article). *Journal of Biomechanics.* 2010 Jan 5;43(1):119-127. https://doi.org/10.1016/j.jbiomech.2009.09.017. Epub 2009 Oct 7. Invited submission.

69. McCullen SD, Zhu Y, Bernacki SH, Narayan RJ, Pourdeyhimi B, Gorga RE, **Loboa EG**. Electrospun composite poly(L-lactic acid)/tricalcium phosphate scaffolds induce proliferation and osteogenic differentiation of human adipose-derived stem cells. *Biomedical Materials.* 2009 June;4(3):035002. https://doi.org/10.1088/1748-6041/4/3/035002. Epub 2009 Apr 24.

70. Hanson AD, Marvel SW, Bernacki SH, Banes AJ, van Aalst J, **Loboa EG**. Osteogenic effects of rest inserted and continuous cyclic tensile strain on hASC lines with disparate osteodifferentiation capabilities. *Annals of Biomedical Engineering.* 2009 May;37(5):955-965. https://doi.org/10.1007/s10439-009-9648-7. Epub 2009 Feb 20.

71. Reed CR, Han L, Andrady A, Caballero M, Jack MC, Collins JB, Saba SC, **Loboa EG**, Cairns BA, van Aalst JA. Composite tissue engineering on polycaprolactone nanofiber scaffolds. *Annals of Plastic Surgery.* 2009 May;62(5):505-512. https://doi.org/10.1097/SAP.0b013e31818e48bf.

72. Hyde GK, McCullen SD, Jeon S, Stewart SM, Jeon H, **Loboa EG**, Parsons GN. Atomic layer deposition and biocompatibility of titanium nitride nano-coatings on cellulose fiber substrates. *Biomedical Materials.* 2009 Apr;4(2):025001. https://doi.org/10.1088/1748-6041/4/2/025001. Epub 2009 Feb 11.

73. Sumanasinghe RD, Pfeiler TW, Monteiro-Riviere NA, **Loboa EG**. Expression of proinflammatory cytokines by human mesenchymal stem cells in response to cyclic tensile strain. *Journal of Cellular Physiology* 8

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94. **Loboa EG**, Beaupré GS, Carter DR.

Submitted Articles in Review/Revision

1. Nordberg RC, Magalhaes RS, Cervelló I, Williams JK, Loboa EG, Atala A. A biomechanical assessment of tissue-engineered polymer neo-uteri after orthotopic implanation. *Fertility and Sterility*. (in review)

Refereed Conference Proceedings

1. Mellor LF, Nordberg RC, Huebner P, Mohiti-Asli M, Taylor MA, Efird W, Oxford JT, Spang J, Shirwaiker RA, **Loboa EG** (Aug 2018). Investigation of multi-phasic 3D-bioplotted scaffolds for site-RÍ m2T2 1 Tf ( )Tj /

11. Mohiti-Asli M, Risselada M, Jacob M, Pourdeyhimi B, **Loboa EG** (Nov 2015). In vivo evaluation of silver ion releasing scaffolds for treatment of infected wounds using a porcine model. 2015 Annual Meeting of the North Carolina Tissue Engineering and Regenerative Medicine Society. Winston-Salem, NC.

12. Shaobo C, Behnam P, **Loboa EG** (Nov 2015). Additives doped PLA spunblown nonwovens for bacterial adhesion reduction and biomedical implantation. 2015 Annual Meeting of the North Carolina Tissue Engineering and Regenerative Medicine Society. Winston-Salem, NC.

13. Bodle JC, Hamouda MH, **Loboa EG** (Oct 2015). Lineage specific chemo – and mechanosensitivity of primary cilia in adipose-derived stem cells. 2015 Annual Meeting of the Biomedical Engineering Society. Tampa, FL. Podium Presentation.

14. Nordberg R, Charoenpanich A, **Loboa EG** (Oct 2015). Corin is a key regulator of osteogenesis in mesenchymal stem cells via angiogenic mechanisms. 2015 Annual Meeting of the Biomedical Engineering Society. Tampa, FL.

15. **Loboa EG** (Sep 2015). Effects of Donor Age and Menopausal Status on Proliferation and Osteogenic Differentiation of Human Adipose Derived and Bone Marrow Derived Mesenchymal Stem Cells. 2015 4th TERMIS World Congress. Boston, MA.

16. Mellor LF, Mehendale SV, Sonnenberg S, Taylor MA, Heubner P, Guilak F, Shirwaiker RA, **Loboa EG** (Sep 2015). orn1.6 (d) (h)10.9 52 Td(n.77n (0.315 T4)10.26 Tw 5.41 Td-1.7 (-2 (o)2 (w)6.6]TJ0.002.2 (

24. Mellor LF, Taylor MA, Baker T, Hiremath M, Oxford JT, **Loboa EG** (Jan 2015). Mechanotransduction of articular cartilage and subchondral bone in unloading conditions. Biomedical Engineering Society: Cellular and Molecular Bioengineering 2015 Annual Meeting. St. Thomas, USVI. Podium Presentation.

25. Sonnenbe i (di)-4.6 (P-4.6d.6 (ng)10 Tc 0)Tj/TT(. 1.6 (V)4.7 (I2.3 (,)10.6 (T)2.3 (a)-1.6 (y)10.8 (l)-4.6 (o6 (V)4.7, M)-6.9 (i)-4.6 (ng)10.8 (S)1.6 (oc)-1.6 (i)-4.6 (e)9.2 (t)]TJ-0.011 Tc 0.011 Tw 14.239 0 Td[(y:)-15.6 ( )]TJ0 Tc -0.022 Tw 1 0 Td[(C)4 (e)-1.7 (

27. Tn SA,

28. Cai S, Bodle J, Mathieu PS, Hamouda M, McCarty G, **Loboa E**

49. Bodle JC, Williams R, Veland I, Christensen S, **Loboa EG** (Sep 2013). Primary cilia on the differentiating adipose derived stem cell: investigating regenerative mechanisms on the cell level. BMES 2013 Annual Meeting. Seattle, WA.

50. Mohiti-Asli M, Murphy S, Saha S, Pourdeyhimi B, Atala A, **Loboa EG** (Sep 2013). In vitro and in vivo investigations of poly(L-lactic acid)/ibuprofen nanofibers for skin wound healing applications. BMES 2013 Annual Meeting. Seattle, WA.

51. Mathieu PS, Bodle JC, **Loboa EG**

63. Charoenpanich A, Wall ME, Tucker CJ, Andrews DMK, Lalush DS, Dirschl DR, **Loboa EG** (Sep 2012). Microarray analysis of human MSC from osteoporotic donors in 3D collagen culture: the effect of 10% uniaxial cyclic tensile strain. 2012 Annual Meeting of the North Carolina Tissue Engineering and Regenerative Medicine Society. Raleigh, NC.

64. Tuin SA, Miller SM, Ganesh V, Cunningham DJ, Pfeiler TW, Bernacki SH, Pourdeyhimi B, **Loboa EG** (Sep 2012). Pulsatile fluid flow increases Runx2 expression in human adipose derived stem cells cultured on novel three-dimensional high surface area poly(L-lactic acid) scaffolds. 2012 Annual Meeting of the North Carolina Tissue Engineering and Regenerative Medicine Society. Raleigh, NC.

65. Charoenpanich A, Wall ME, Tucker CJ, Andrews DMK Lalush DS, Dirschl D, **Loboa EG** (Aug 2012). Microarray analysis of human MSC from osteoporotic donors in 3D collagen culture: 10% uniaxial cyclic tensile strain upregulates genes associated with bone formation and angiogenesis. Gordon Research Conference on Musculoskeletal Biology and Bioengineering. Proctor Academy, Andover, NH.

66. Charoenpanich A, Bodle JC, McCullen SD, **Loboa EG** (Mar 2012). Biomimetic material and mechanical stimuli for functional bone tissue engineering using human adipose-derived stem cells. 2012 Hilton Head Reg

75. Williams JM, Kannan A, Dent MR, Estes BT, Moutos FT, Hluck BH, Guilak F, **Loboa EG** (Nov 2011). Elevated extracellular calcium inhibits chondrogenic differentiation of human adipose derived stem cells in pellet culture. 2011 Annual Meeting of the North Carolina Tissue Engineering and Regenerative Medicine Society. Winston-Salem, NC.

76. Rubenstein CD, Bodle JC, Phillips ME, **Loboa EG** (Nov 2011). Human adipose derived stem cells exhibit changes in primary cilia conformation and lineage specification in response to varying substrate stiffness. 2011 Annual Meeting of the North Carolina Tissue Engineering and Regenerative Medicine Society. Winston-Salem, NC.

77. Bodle JC, Rubenstein CD, Phillips ME, Bernacki SH, **Loboa EG** (Nov 2011). Primary cilia dynamically modulate phenotypic specification in adipose-derived stem cells. 2011 Annual Meeting of the North Carolina Tissue Engineering and Regenerative Medicine Society. Winston-Salem, NC.

78. Saha S, Mohiti-Asli M, Gracz H, Pourdeyhimi B, **Loboa EG** (Nov 2011). Ibuprofen loaded PLA scaffolds for wound healing applications. 2011 Annual Meeting of the North Carolina Tissue Engineering and Regenerative Medicine Society. Winston-Salem, NC.

79. Mathieu PM, Cunningham DJ, Pourdeyhimi B, **Loboa EG** (Nov 2011). Finite element analysis of fluid shear stress in spunbond poly(L-lactic acid) (PLA) scaffolds in response to varying fluid flow rates. 2011

100. **Loboa EG** (Aug 2010). Nanofibrous and nanocomposite materials for functional bone tissue engineering using human adipose derived stem cells. Proceedings of Nanofibers for the 3rd Millennium: A Summit of the World's Leaders in Nanofibers. Raleigh, NC.

101. Charoenpanich A, Wall ME, Tucker CJ, Andrews DMK, Lalush DS, **Loboa EG** (Mar 2010). Microarray Analysis of Human Adipose-Derived Adult Stem Cells in 3D Collagen Scaffolds Undergoing Osteogenic Differentiation in the Presence and Absence of Cyclic Tensile Strain. Proceedings of the 56th Annual Meeting of the Orthopaedic Research Society. New Orleans, LA.

102. McCullen SD, Bernacki SH, **Loboa EG** (Mar 2010). Elevated Ca^{2+} greatly increases human adipose-derived stem cell mineralization in the absence and presence of osteogenic supplements. Proceedings of the 56th Annual Meeting of the Orthopaedic Research Society. New Orleans, LA.

103. Bodle JC, Sakhare AR, Vidt ME, SooHoo JR, Haslauer CM, McCulloch RC, **Loboa EG** (Mar 2010). Novel tensile strain bioreactor for culture of three-dimensional tissue-engineered constructs. Proceedings of the 56th Annual Meeting of the Orthopaedic Research Society. New Orleans, LA.

104. McCullen SD, Miller PR, Narayan RJ, **Loboa EG** (Mar 2010). Assembly of laser structured electrospun scaffolds for bone tissue engineering. Proceedings of the 56th Annual Meeting of the Orthopaedic Research Society. New Orleans, LA.

105. Haslauer CM, Pourdeyhimi B, **Loboa EG** (Mar 2010). Islands-in-the-sea fibers with interconnected micropores for bone tissue engineering. Proceedings of the 56th Annual Meeting of the Orthopaedic Research Society. New Orleans, LA.

106. McCullen SD, McQuilling JP, Grossfeld RM, Clarke LI, **Loboa EG** (Mar 2010). AC electric field exposure of 1 V/cm at 1 Hz accelerates and increases osteogenesis of human adipose-derived stem cells. Proceedings of the 56th Annual Meeting of the Orthopaedic Research Society. New Orleans, LA. Podium Presentation.

107. Haslauer CM, Pourdeyhimi B, **Loboa EG** (Mar 2010). Validation Of Nanoporous Hollow Fiber Scaffolds for Bone Tissue Engineering Using hASCs. Proceedings of the 14th Annual Hilton Head Workshop: "Regenerative Medicine: Advancing to Next Generation Therapies." Hilton Head, SC. Podium Presentation.

108. McCullen SD, Miller PR, Gittard SD, Pourdeyhimi B, Narayan RJ, **Loboa EG** (Nov 2009). In situ collagen polymerization of layered cell-seeded electrospun scaffolds. Proceedings of the 11th Annual North Carolina Tissue Engineering and Regenerative Medicine Conference. Winston-Salem, NC. Podium Presentation.

109. Marvel S, Okrasinski S, Bernacki S, Dayton PA, **Loboa EG** (Nov 2009). Functional bone tissue engineering of adult stem cells aided by low intensity pulsed ultrasound. Proceedings of the 11th Annual North Carolina Tissue Engineering and Regenerative Medicine Conference. Winston-Salem, NC.

110. Miller PR, McCullen SD, Gittard SD, **Loboa EG**, Narayan RJ (Nov 2009). Assembly of laser structured electrospun scaffolds for bone tissue engineering. Proceedings of the 11th Annual North Carolina Tissue Engineering and Regenerative Medicine Conference. Winston-Salem, NC.

111. Bodle JC, Sakhare AR, Qi J, Bernacki SH, Banes AJ, **Loboa EG** (Nov 2009). Primary cilia: potential mechanotransducers in human adipose derived stem cells? Proceedings of the 11th Annual North Carolina Tissue Engineering and Regenerative Medicine Conference. Winston-Salem, NC.

112. Charoenpanich A, Wall ME, Tucker CJ, Andrews DMK, **Loboa EG** (Nov 2009). Upregulation of corin during osteogenic differentiation of human adipose derived adult stem cells in 3D collagen gel culture. Proceedings of the 11th Annual North Carolina Tissue Engineering and Regenerative Medicine Conference. Winston-Salem, NC.

113.

126. Pfeiler TW, Sumanasinghe RD, **Loboa EG** (Nov 2008). Effects of Varied Cyclic Tensile Strain Magnitudes on hMSC Calcium Deposition in 3D Collagen Culture. Proceedings of the 10th Annual North

constructs. Transactions of the 51st Annual Meeting of the Orthopaedic Research Society. Washington DC.

167. McCord MG, Blanchard SM, **Loboa EG**,

DC6

180. Bouletreau PJ, Warren SM, Paccione MF, Greenwald JA, Nijher NS, Kummer FJ, LeGeros RZ, Grayson BH, McCarthy JG, **Loboa EG**, Carter DR, Longaker MT (June 2001). New Developments in Craniofacial Distraction. Proceedings of the 3rd International Congress of Craniofacial and Maxillofacial Distraction. Paris, France. Podium Presentation.

181. **Loboa Polefka EG**, Beaupré GS, Carter DR (Mar 2000). Stress and strain distributions are correlated with pseudarthrosis development. Proceedings of the 46th Annual Meeting of the Orthopaedic Research Society. Orlando, FL.

182. **Loboa Polefka EG**, Beaupré GS, Carter DR (Feb 2000). Mechanobiology of delayed fracture healing. Proceedings of the 2nd National Rehabilitation Research & Development Conference. Arlington, VA.

183. Carter DR, **Loboa Polefka EG**, Beaupré GS (r ing.

Current Research Grants and External Funding

1. Missouri Department of Higher Education Loboa (PI) **07/01/20 – Current
   Imaging the Future - Clinical Service Engineering for Missouri
   Role: PI $5,114,444 (Direct & Indirect Costs; Request & Cost Share)
   ** Recommended to Governor by the Missouri Board of Higher Education for state funding in FY20 and approved and awarded. Funding was withheld until FY22 due to Covid-19 budget cuts. Due to SMU Provost appointment, all funding and research maintained and overseen by MU.

Past Research Grants and External Funding

1. NSF/CBET 1702841 Loboa (PI) 09/01/17 – 08/31/21
   Collaborative Research: 3D-Biofabrication of hASC-based Biomimetic Osteochondral Tissue and the Role of Extracellular Calcium Receptor.
   Role: PI $396,359 (Loboa Direct and Indirect costs) Total Project = $600,000
2. NIH SBIR 1R43OD026279 CryoCrate (PI) 09/01/18 – 08/31/19
   In-Situ Cryopreservation without Cryoprotectants
   Role: Co-I (Academic PI) $90,113.00 (Loboa Direct & Indirect costs)
3. UNC GA Research Opportunities Initiative Award Jay/Ligler (PI) 07/01/15 – 06/31/18
   Integrating engineering with pharmaceutical sciences to improve the delivery of therapeutic and diagnostic agents
   Role: Co-PI on Project 3 $1,830,000
4. OREF 15-059 Spang (PI) 07/01/15 – 06/30/18
   Development of a functional osteochondral replacement graft: 3D tissue engineering and biomimetic stem cell guidance.
   Role: Co-PI $250,000 (Direct and Indirect costs)
5. NCSU Chancellor's Faculty Excellence Program Ghashghaei (PI) 08/15/15 – 07/31/18
   Faculty cluster hire in quantitative and computational developmental biology
   Role: College of Engineering Lead *(until took position as MU COE Dean)* $4-6 million
6. NWI 14-160 Loboa (PI) 01/05/15 – 01/14/18
   Structure-Process-Property Relationship of Additive Loaded SpunBlown Nonwovens.
   Role: PI $150,000 (Direct costs)
7. NIH/NIA 1-F30-AG040868-01 O'Conor (PI) 07/01/11 – 05/31/16
   Osmotic Signaling in Chondrocyte Aging & Osteoarthritis
   Mentor to MD/PhD candidate Chris O'Conor for graduate research in osteoarthritis.
   Role: Co-I and UNC Advisor $161,689
8. NIH R37AR049003 Loeser (PI) 04/01/15 – 03/31/16
   Integrins and Mechanotransduction in Cartilage
   Role: Co-I $152,000
9. Dick & Marlene Daugherty Entrepreneuralism Endowment Loboa (PI) 04/01/15 – 03/31/16
   Precision Diagnostics/PrecisiBand start-up endeavors
   Role: Company Founder & PI $3,500 (Direct costs)

10. NSF/CBET 1133427 Loboa (PI) 01/15/12 – 01/14/16

18. William R. Kenan Jr. Institute for Engineering, Technology & Science
    Translational Regenerative Medicine Initiative — Piedrahita (PI) — 08/16/14 – 08/15/15
    Role: Co-PI — $80,000 (Direct costs)

19. NSF Graduate Research Diversity Supplement — Loboa (PI) — 08/15/12 – 08/14/15
    Supplement to NSF/CBET IDR 1133427
    Supplement to current funded NSF grant to broaden participation of underrepresented students in PhD programs in engineering.
    Role: PI — $41,000

20. NIH CTSA 550KR61325 — Loboa (PI) — 07/01/14 – 06/30/15
    Fiber-Reinforced Extracellular Matrix Hydrogels for Skeletal Muscle Regeneration
    Investigation of synthetic polymeric fibrous systems for reinforcement of ECM derived hydrogels to regenerate skeletal muscle
    Role: PI — $50,000 (Direct costs)

21. NWI 11-136 — Loboa (PI) — 05/16/12 – 05/15/15
    Interconnected Micropores in Hollow Nonwoven Fibers
    Creation and scale up of hollow nonwoven fibers with enhanced diffusion capabilities for tissue engineering and regenerative medicine applications.
    Role: PI — $132,000 (Direct costs)

22. NSF CBET-1358349: Conference Support Award — Mauck (PI) — 12/01/13 – 11/30/14
    2014 Cellular and Molecular Bioengineering (CMBE) Conference
    The major goal of this project is to provide funding for students, trainees, and young faculty to attend and present work at the 2014 BMES Cell and Molecular Bioengineering Conference.
    Role: Co-PI — $15,000 (Direct costs)

23. NIH/NIBIB 1R13 EB0818181 — Mauck (PI) — 09/30/13 – 08/31/14
    2014 Cellular and Molecular Bioengineering (CMBE) Conference
    The major goal of this project is to provide funding for students, trainees, and young faculty to attend and present work at the 2014 BMES Cell and Molecular Bioengineering Conference.
    Role: Co-PI — $10,000 (Direct costs)

24. CCMTR Translational Research Grant — Loboa (PI) — 07/01/13 – 06/30/14
    Improving Osteochondral Tissue Engineering in a Large Animal Model
    Comparing and optimizing osteochondral tissue engineering in a porcine model using adipose derived stem cells and chondrocytes for improved large animal model investigations of human pathologies.
    Role: PI — $15,000 (Direct costs)

25. Orthopaedic Trauma Association — Ostrum (PI) — 01/01/13 – 12/31/13
    Human Adipose Derived Stem Cells for Nonunion Bone Regeneration.
    Pilot study funds to investigate novel bone regeneration approaches for nonunion in a murine model.
    Role: Co-PI — $25,000

26. NCRC 10-128 — Loboa (PI) — 08/01/10 – 08/31/13
    Controlled Release Systems using Core-Sheath Nanofibers for Wound Healing and Tissue Engineering Applications

36. Veteriniry Practice Plan, CVM, NCSU Marcellin (PI) 01/01/08 – 12/31/08
In vitro response of human adipose-derived adult stem cells to EBM-made titanium implants
Analyses of titanium processing on viability and proliferation of adipose-derived adult stem cells.
Role: Co-PI $4,000 (Direct costs)

37. UNC-CH/NCSU BME Research Initiation Project Loboa (PI) 09/1/07 – 06/30/08
Functional Bone Tissue Engineering via Electrical Stimulation of Adipose-Derived Human Mesenchymal Stem Cells using Conductive, Electrospun, Nanocomposite Scaffolds
Use of e(08)11.3 (l)-4.6 (d61ti)11.3 (ta)3.4 D (o)10.8 (p)10.9 u(s)8.3 d.9 u(sn.9 (f)-3no.7 (t)6.3 (i6)-4.6 (i)6)-2.3 (i)6.3

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2002 ME288 Bioengineering & Biodesign Seminar
2001 ME281 Orthopaedic and Cardiovascular Bioengineering and Medicine

Students and Post-Doctoral Fellows Supervised

Previous Master's Students – Chair

1. 2004-07 *Ariel Hanson,* M.S., Joint Dept. of Biomedical. Eng., UNC-CH/NCSU
2. 2005-06 *Seth McCullen,* M.S., Joint Dept. of Biomedical Eng., UNC-CH/NCSU
3. 2007-9 *Adisri Charoenpanich,* M.S., Joint Dept. of Biomedical Eng., UNC-CH/NCSU
4. 2006-9 *Skylar Marvel,* M.S., Joint Dept. of Biomedical Eng., UNC-CH/NCSU
5. 2010-12 *John Williams,* M.S., Joint Dept. of Biomedical Eng., UNC-CH/NCSU
6. 2010-14 *Pattie Mathieu,* MS, Joint Dept. of Biomedical Eng., UNC-CH/NCSU

Previous Master's Students – Co-Chair

1. 2005-7 *Jillian Rouse,* M.S., Joint Dept. of Biomedical Eng., UNC-CH/NCSU
2. 2007-10 *Magaly Ramirez,* M.S., Forest Biomaterials, NCSU

Previous Ph.D. Students – Chair

1. 2003-6 *Ruwan Sumanasinghe,* Ph.D., Joint Dept. of Biomedical Eng., UNC-CH/NCSU
2. 2004-9 *T. Wayne Pfeiler,* Ph.D., Joint Dept. of Biomedical Eng., UNC-CH/NCSU
3. 2005-9 *Carla Haslauer,* Ph.D., Joint Dept. of Biomedical Eng., UNC-CH/NCSU
4. 2005-9 *Seth McCullen,* Ph.D., Joint Dept. of Biomedical Eng., UNC-CH/NCSU
5. 2009-13 *Adisri Charoenpanich,* Ph.D., Joint Dept. of Biomedical Eng., UNC-CH/NCSU
6. 2010-13 *Mahsa Mohiti-Asli,* Ph.D., Textile Eng., NCSU
7. 2008-14 *Josephine Bodle,* Ph.D., Joint Dept. of Biomedical Eng., UNC-CH/NCSU
8. 2009-16 *Christopher O'Conor,* Ph.D., Joint Dept. of Biomedical Eng., UNC-CH/NCSU
9. 2011-16 *Stephen Tuin,* Ph.D., Joint Dept. of Biomedical Eng., UNC-CH/NCSU
10. 2013-17 *Rachel Nordberg,* Ph.D., Joint Dept. of Biomedical Eng., UNC-CH/NCSU
11. 2013-18 *Shaobo Cai,* Ph.D., Materials Science & Eng., NCSU

Previous Ph.D. Students – Co-Chair

1. 2002-5 *Gwanseob Shin,* Ph.D., Industrial Eng., NCSU
2. 2004-8 *Nilesh Ingle,* Ph.D., Fiber & Polymer Science, College of Textiles, NCSU and Joint Dept. of Biomed. Eng., UNC-CH/NCSU
3. 2006-10 *Meghan Samberg,* Ph.D., Joint Dept. of Biomedical Eng., UNC-CH/NCSU
4. 2007-11 *Oswaldo Lazoya,* Ph.D., Joint Dept. of Biomedical Eng., UNC-CH/NCSU

Post-doctoral Research Fellows Supervised

1. 2004-6 *Michelle Wall,* Ph.D., Postdoctoral Fellow, Joint Dept. of Biomedical Eng., UNC-CH/NCSU
2. 2008-9 *Xiaodong Cao,* Ph.D., Postdoctoral Fellow, Joint Dept. of Biomedical Eng., UNC-CH/NCSU and Forest Biomaterials, NCSU
3. 2009-10 *Carla Haslauer,* Ph.D., Postdoctoral Fellow, Joint Dept. of Biomedical Eng., UNC-CH/NCSU
4. 2013-16 *Liliana Mellor,* Ph.D., Postdoctoral Fellow, Joint Dept. of Biomedical Eng., UNC-CH/NCSU
5. 2013-16 *Mahsa Mohiti-Asli,* Ph.D., Postdoctoral Fellow, Joint Dept. of Biomedical Eng., UNC-CH/NCSU
6. 2013-15 *Sonya Sonnenberg,* Ph.D., Postdoctoral Fellow, Joint Dept. of Biomedical Eng., UNC-CH/NCSU
7. 2014-16 *Andrew Steward,* Ph.D., Postdoctoral Fellow, Joint Dept. of Biomedical Eng., UNC-CH/NCSU
8. 2015-16 *Josephine Bodle,* Ph.D., Postdoctoral Fellow, Joint Dept. of Biomedical Eng., UNC-CH/NCSU
9. 2017-18 *Rachel Nordberg,* Ph.D., Postdoctoral Fellow, College of Engineering, UM-Columbia
10. 2019 *Rasoul Seyedmahmoud,* Ph.D., Postdoctoral Fellow, College of Engineering, UM-Columbia

Doctoral and Master's Committee Memberships

1. 2003-7 *Ray Yao,* Ph.D. Candidate, Joint Dept. of Biomedical Eng., UNC-CH/NCSU
2. 2003-7 *Ann Marie Fox,* Ph.D. Candidate, Joint Dept. of Biomedical Eng., UNC-CH/NCSU
3. 2005-9 *Ajit Moghe,* Ph.D. Candidate, Fiber and Polymer Science, NCSU

25. 2008-10 *John Petitte*, Candidate for B.S., Dept. of Chemical & Biomolecular Eng., NC State Univ.
26. 2009-11 *Arthi Kannan*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
27. 2009-11 *Morgan Dent*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
28. 2009-12 *Trent Langston*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
29. 2010 *Yang Zhu*, NCSU-ZJU summer research program, Candidate for B.S. Dept. of Polymer Science and Eng., Zhejiang Univ.
30. 2010-11 *Joseph Hardin*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
31. 2010-12 *Candace Rubenstein*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
32. 2010-12 *Daniel Cunningham*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
33. 2010-12 *Shrea Saha*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
34. 2011 *Huayu Shi*, NCSU-ZJU summer research program, Candidate for B.S. Dept. of Polymer Science and Eng., Zhejiang Univ.
35. 2011-12 *Brendan McKelvy*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
36. 2011-12 *Thea Roper*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
37. 2010-12 *Michelle Phillips*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
38. 2010-13 *Ramey Williams*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
39. 2011-13 *Brandon Hluck*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
40. 2012-13 *Lewis Lott*, Candidate for B.S., Dept. of Biomedical Eng., Delaware State Univ.
41. 2012-13 *Lyman Woollens*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
42. 2012-13 *Varun Ganesh*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
43. 2012-13 *Chris Gardner*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
44. 2012-13 *Sean Miller*, Candidate for B.S., Dept. of Biomedical Eng., UNC Chapel Hill
45. 2013-14 *Sean D'Souza*, Candidate for B.S., Biology, NC State Univ.
46. 2012-14 *Chris Phillips*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
47. 2012-15 *Chris Vaughn*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
48. 2012-15 *Sarah Guess*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
49. 2012-15 *Taylor Cook*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
50. 2013-16 *Mehdi Hammouda*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
51. 2013-14 *Samuela Fernandes*, Candidate for B.S., Dept. of Biology, NC State Univ.
52. 2014-16 *Michael Taylor*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
53. 2014-15

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