

ELIZABETH G. LOBOA

Southern Methodist University
Office of the Provost
P.O. Box 750221
Dallas, TX 75275
Tel: 214.768.3219

Provost and Senior Vice President for Academic Affairs
<http://smu.edu/provost>
<http://www.linkedin.com/in/loboa/>
<https://twitter.com/egloboa>
E-mail: egloboa@smu.edu

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 Senior Vice President for Academic Affairs, Southern Methodist University, June 2024 – present
Provost and Vice President for Academic Affairs, Southern Methodist University, 2020 – May 2024
Vice Chancellor for Strategic Partnerships, University of Missouri, 2018 – 2020
Dean and Ketcham Professor of the College of Engineering, University of Missouri, 2017 – 2020
Dean, College of Engineering, University of Missouri, 2015 – 2020
UM System Review Committee for Excellence in Research and Creative Works, University of Missouri System, Columbia, 2018 – 2020
Council of Leaders, University of Missouri System, Columbia, 2018 – 2020
MU Engagement Council, University of Missouri, Columbia, 2018 – 2020
Roy Blunt NextGen Precision Health Building, Academic and Research Programming Group, University of Missouri System and University of Missouri, Columbia, 2018 – 2020
Coordinator, Precision Medicine Summit, University of Missouri System, Columbia, 2018
University of Missouri System Taskforce for Innovation, Entrepreneurship, Technology Commercialization and Industry Partnership, 2017 – 2020
Board of Directors, Missouri Innovation Center, 2016 – 2020
Co-Chair, University of Missouri, Chancellor Search Committee, 2017
Associate Chair/Department Head, UNC/NCSU Joint Department of Biomedical Engineering, 2013 – 2015
Biomedical Engineering Department Lead, NCSU Building Future Faculty Program, 2013 – 2015
Strategic Science Task Force, North Carolina State University, 2011 - 2012
Chair, Graduation Committee, UNC/NCSU Joint Department of Biomedical Engineering, 2006 – 2015
Chair, Biomaterials Graduate Curriculum Committee, UNC/NCSU Joint Dept. of Biomedical Engineering and NCSU Dept. of Materials Science & Engineering, 2009 – 2011
Core Leader, Translational Regenerative Medicine core, Center for Comparative Medicine and Translational Research, North Carolina State University, 2014 – 2015
Strategic Planning Committee, UNC/NCSU Joint Department of Biomedical Engineering, 2013 – 2015
Internal University Program Reviewer, Department of Physiology, North Carolina State University, 2014 – 2015
Chair, Biomaterials and Tissue Engineering Curriculum Committee, UNC/NCSU Joint Department of Biomedical Engineering, 2004 – 2005
Co-Chair, NCSU Regenerative Medicine Interest Group, 2012 – 2015
College Leadership Survey Committee, North Carolina State University, 2011 – 2012
Faculty Workload Committee, UNC/NCSU Joint Department of Biomedical Engineering, 2005 – 2007
Executive Committee, Center for Comparative Medicine and Translational Research, North Carolina State University, 2011 – 2015

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
 Advisory Committee, Tissue Mechanics Laboratory, North Carolina State University, 2003 – 2015
 Faculty Search Committees (multiple), North Carolina State University and University of North Carolina at
 Chapel Hill, 2004 – 2015
 Selected Participant, Bridges Academic Leadership Program, 2011
 Selected Participant, NSF Advance Leadership Workshop, 2011
 Executive Committee, Sigma Xi, 2010
 Departmental Representative, Biotechnology Program, UNC/NCSU Joint Department of Biomedical
 Engineering, 2005 – 2015
 Course and Curriculum Committee, UNC/NCSU Joint Department of Biomedical Engineering, 2003 – 2005
 Graduate Admissions Committee, UNC/NCSU Joint Department of Biomedical Engineering, 2004 – 2009

Board Membership, Committee and Symposia Contributions

Second Vice Chair, Atlantic Coast Conference Academic Consortium (ACC AC), 2024
 Member, Council on Competitiveness, National Commission Working Group on “The Future of Work and the
 Workforce,” 2023 – Present
 Board of Directors, Applied Optoelectronics, Inc., 2020 - present
 Member, Global Engineering Deans Council, 2019 – 2020
 Member, American Society for Engineering Education Task Force on Graduate Education, 2019 – present
 Advisory Council, Education Counsel Societies Consortium on Sexual Harassment in STEMM, American
 Association for the Advancement of Science, 2019 – present
 Director, Deans Council Executive Board, American Society for Engineering Education, 2019 – 2020
 Ex-officio Member, Engineering Deans Council Public Policy Committee, American Society for Engineering
 Education, 2019 – present
 Advisory Board, AAU Strategy for Sexual Harassment and Gender Discrimination, 2019 – 2020
 Nominations Committee, American Institute for Medical and Biological Engineering (AIMBE), 2018 – present
 Executive Council, Tissue Engineering and Regenerative Medicine International Society – Americas (TERMIS-
 AM), 2017 – present
 Strategic Initiatives Committee, Orthopaedic Research Society, 2016 – 2017
 Chair, Biomedical Engineering Society (BMES) Cellular and Molecular Bioengineering Special Interest Group
 Council, 2016
 Member-at-Large and Orthopaedic Research Society Board Member, Orthopaedic Research Society, 2015 – 2017
 Internal Advisory Committee of NASA Specialized Center of Research (NSCOR) at Wake Forest University,
 2015 – 2020
 Governing Council, BMES Special Interest Group in Cell and Molecular Bioengineering (CMBE, previously
 SPRBM), 2011 – 2016
 Endorsement Committee, Tissue Engineering and Regenerative Medicine International Society (TERMIS),
 2011 – 2017
 Executive Committee, Sigma Xi Scientific Research Society, 2010
 Steering Committee, North Carolina Tissue Engineering and Regenerative Medicine Society (NCTERMS),
 2007 – 2015
 Solids Technical Committee, American Society of Mechanical Engineers Bioengineering Division, 2007 – 2015
 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 – 2020

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 – 2020

Session Chair, 2017 BMES-Cellular and Molecular Bioengineering (CMBE) Conference: *Stem Cell Engineering and MechanoMicroenvironment for Regenerative Medicine*

Conference Chair, 2015 BMES-Cellular and Molecular Bioengineering (CMBE) Conference: *From Womb to Tomb: Mechanobiology of Generation, Regeneration, and Degeneration*

Chair, Nanotechnology and Tissue Engineering: Hope or Hype? New Horizon Workshop, 2014 Annual Meeting of the Orthopaedic Research Society

Conference Co-Chair, 2014 BMES-Cellular and Molecular Bioengineering (CMBE) Conference

Track Chair, Biomedical Engineering, ASME ESDA 2014 Biennial Conference

Program Committee and Session Chair, 2014 Swine in Biomedical Research International Conference

Organizing Committee and Poster Chair, 2nd International Tissue Science & Regenerative Medicine Conference, Raleigh NC, 2013

Program Committee, Nanofibers for the 3rd Millennium: A Summit of the World's Leaders in Nanofibers, 2010

Discussion Leader, Musculoskeletal Biology & Bioengineering Gordon Research Conference, 2010

Local Planning Committee, Annual Meeting of the Institute of Biological Engineering, 2008

Conference Chair, 10th Annual North Carolina Tissue Engineering and Regenerative Medicine Conference, 2008

Chair, *Tissue Engineering Parts A, B, and C* Young Investigator Council, 2013 – 2020

Editorial Board, *Current Stem Cell Reports*, 2015 – 2020

Editorial Board, *Scientific Reports*, Nature Publishing Group, 2014 – 2020

Editorial Board, *Biomedical Materials*, 2014 – 2020

Editorial Board, *Tissue Engineering Parts A, B, and C*, 2012 – 2019

Editorial Board, *Open Orthopaedics Journal*, 2011 – 2020

Professional Experience

2024 – PROVOST AND SENIOR VICE PRESIDENT FOR ACADEMIC AFFAIRS, Southern Methodist University, Dallas, TX

2020 – 24 PROVOST AND VICE PRESIDENT FOR ACADEMIC AFFAIRS, Southern Methodist University, Dallas, TX

2018 – 20 VICE CHANCELLOR FOR STRATEGIC PARTNERSHIPS, University of Missouri, Columbia, MO

2017 – 20 DEAN AND KETCHAM PROFESSOR OF THE COLLEGE OF ENGINEERING, University of Missouri, Columbia, MO

2015 – 20 DEAN AND PROFESSOR OF BIOENGINEERING, University of Missouri, Columbia, MO

2015 – 20 ADJUNCT PROFESSOR, Joint Department of Biomedical Engineering at UNC-Chapel Hill and NC State University; Department of Materials Science and Engineering, NC State University, Raleigh, NC

2015 FOUNDER, PrecisiBand, Raleigh, NC.

2003 – 15 DIRECTOR, Cell Mechanics Laboratory, Joint Department of Biomedical Engineering at UNC-Chapel Hill and NC State University, Raleigh, NC

2014 – 15 ADJUNCT PROFESSOR, Departments of Biotechnology, Physiology, and Fiber and Polymer Science, North Carolina State University, Raleigh, NC; Department of Orthopaedics and Curriculum in Oral Biology, UNC-Chapel Hill, Chapel Hill, NC

2014 – 15 PROFESSOR, Joint Department of Biomedical Engineering at UNC-Chapel Hill and NC State University; Department of Materials Science and Engineering, NC State University, Raleigh, NC

2013 – 15 ASSOCIATE CHAIR, Joint Department of Biomedical Engineering at UNC-Chapel Hill and NC State University, Raleigh, NC

- 2010 – 14 ASSOCIATE PROFESSOR, Department of Materials Science and Engineering, North Carolina State University, Raleigh, NC
- 2009 – 14 ASSOCIATE PROFESSOR, Joint Department of Biomedical Engineering at UNC-Chapel Hill and NC State University, Raleigh, NC
- 2009 – 14 ADJUNCT ASSOCIATE PROFESSOR, Departments of Biotechnology, Physiology, and Fiber and Polymer Science, North Carolina State University, Raleigh, NC; Department of Orthopaedics and Curriculum in Oral Biology, UNC-Chapel Hill, Chapel Hill, NC
- 2006 – 09 ADJUNCT ASSISTANT PROFESSOR, Fiber and Polymer Science, College of Textiles, North Carolina State University, Raleigh, NC
- 2005 – 09 ADJUNCT ASSISTANT PROFESSOR, Orthopaedics Department, UNC-Chapel Hill, Chapel Hill, NC
- 2003 – 09 ASSISTANT PROFESSOR, Joint Department of Biomedical Engineering at UNC-Chapel Hill and NC State University, Raleigh, NC
- 2002 – 03 ACTING ASSISTANT PROFESSOR, Department of Mechanical Engineering, Stanford University, Stanford, CA
- 1997 – 02 RESEARCH ASSISTANT AND PH.D. CANDIDATE, Biomechanical Engineering Division, Department of Mechanical Engineering, Stanford University, Stanford, CA
- 1996 – 00 BIOMEDICAL ENGINEER, Rehabilitation Research and Development Center, Veterans Administration Health Care System, Palo Alto, CA
- 1995 – 97 RESEARCH ASSISTANT AND M.S. CANDIDATE, Biomechanical Engineering Division, Department of Mechanical Engineering, Stanford University, Stanford, CA

Invited Lectures

1. **Loboa, EG**, Panelist for University Leadership Summit (*invitation only*, October 2024). “Beyond the Balance Sheet: Fiscal Sustainability Options for Universities and Colleges.” Boston, MA
2. **Loboa, EG**, Panelist for P3-EDU (*invitation only*, October 2024). “Executive Roundtable” exploring strategies for higher ed in the future; discussing how universities might work better with the private sector, and learning how to be innovative with the structure of higher education. Denver, CO
3. **Loboa EG**. Panelist for National Academy of Inventors (June 2024). “From Vision to Value: Recognizing Women’s Impact in IP.” Raleigh, NC
4. **Loboa EG**. Panelist for CASE/Advancement Resources (July 2023). “Big Ideas and Philanthropy.” New York, NY.
5. **Loboa EG**. Keynote speaker for Global Silicon Valley Mission Summit (May 2023). “The Future of Higher Education.” Dallas, TX
6. **Loboa EG**. Panelist for University Leadership Summit (*invitation only*, March 2023) “Chancellor’s Conversations in Higher Education.” Raleigh, NC
7. **Loboa EG**. Panelist for University Leadership Summit (*invitation only*, Feb 2023). “How To Show Up As Leaders: Managing Leadership Development and the Rapidly Changing Landscape.” Westlake Village, CA.
8. **Loboa EG**. Keynote speaker for Women in Systems Engineering Panel Discussion (Oct 2022). Institute of Electrical and Electronics Engineers (IEEE) Sensors Council Conference. Dallas, TX.
9. **Loboa EG**. Invited speaker for Executive Women’s Roundtable (Sep 2022). Dallas Regional Chamber (DRC) hosted by SMU Cox School of Business. Southern Methodist University. Dallas, TX
10. **Loboa EG**. Invited speaker for ‘Universities of the Future: Building Institutional Resilience, Social Responsibility and Community Impact’ (July 2021). International Institute for Higher Education Research & Capacity Building (IIHED) of O.P. Jindal Global University (JGU). India.
11. **Loboa EG**. Q&A with Bioengineering Student Society - Lyle School of Engineering (Nov 2020) Southern Methodist University. Dallas, TX.

12. **Loboa EG.** A Conversation with Provost Loboa (Oct 2020). SMU Faculty Club. Southern Methodist University. Dallas, TX.
13. **Loboa EG.** Road to R-1 (Oct 2020). Economics Department Meeting. Southern Methodist University. Dallas, TX.
14. **Loboa EG.** Panelist for ‘Time to Lead: Women in STEM Forge the Way’ (Oct 2020). WittKieffer.
15. **Loboa EG.** Symposium on Engineering Teaching Excellence (Dec 2019). College of Engineering Dean’s Council for Teaching Excellence. University of Missouri. Columbia, MO.
16. **Loboa EG.** Importance of Tirelessly Supporting Innovation at Universities (Nov 2019). Women in Innovation and Technology Luncheon. Washington University. St. Louis, MO.
17. **Loboa EG.** Moderator, Working with Men to Change Perceptions and Break Down Barriers (Nov 2019). The Global Women in STEM Leadership Summit. Atlanta, GA.
18. **Loboa EG.** What’s Your Superpower (Nov 2019). The Global Women in STEM Leadership Summit. Atlanta, GA.
19. **Loboa EG.** Presenter and Panelist, Making Missouri a Center of Excellence for Workforce and Economic Development (Sep 2019). Governor’s Conference on Economic Development. St. Charles, MO.
20. **Loboa EG.** Engineering Biomedical Innovations for Cardiovascular Medicine (May 2019). Division of Cardiovascular Medicine Grand Rounds. University of Missouri. Columbia, MO
21. **Loboa EG.** Overview (Planning Process, TPMC Operational Plans and Expectations, Innovation Space and Corporate Relationships) (Feb 2019). Bringing the Vision to Life: Precision Medicine Initiative Progress Update. University of Missouri System. Columbia, MO.
22. **Loboa EG.** Panelist, Women in Science and Entrepreneurship (W.I.S.E.) KC Panel (Jan 2019). Women in Science & Entrepreneurship Networking Breakfast. BioNexus KC. Kansas City, MO.
23. **Loboa EG.** Critical Issue: Transformation at the University of Missouri System (Nov 2018). University of Missouri System. St. Louis, MO.
24. **Loboa EG.** Translational Precision Medicine Complex (TPMC) (Oct 2018). Missouri Community College Association’s 15th Annual Luncheon. University of Missouri System. Columbia, MO.
25. **Loboa EG.** What your resume says about you (Sep 2018). Mizzou Fall 2018 College of Engineering Career Fair. University of Missouri. Columbia, MO.
26. **Loboa EG.** Tissue Engineering and Regenerative Medicine in the Age of Multi-Drug Resistant Bacteria (July 2018). 13th Annual International Conference on Tissue Engineering and Regenerative Medicine. Paris, France.
27. **Loboa EG.** Translational Precision Medicine Complex (TPMC) (June 2018). University of Missouri Precision Medicine Summit. University of Missouri System. Columbia, MO.
28. **Loboa EG.** Functional Tissue Engineering with Fat...and MRSA (Feb 2018). Department of Biological Sciences Seminar Series. Missouri S&T. Rolla, MO.
29. **Loboa EG.** Keynote Speaker, American Council of Engineering Companies of Missouri, Inc. (ACECMO) Winter Meeting (Feb 2018). Columbia, MO.
30. **Loboa EG.** 2017 Tissue Engineering and TERMIS Americas Workshop: How to Interview Well and Negotiate a Good Position (Dec 2017). 2017 TERMIS-Americas Annual Conference and Exhibition. Charlotte, NC.
31. **Loboa EG.** Panelist, The Coming-of-Age Story of Cell Therapy; Is the Field Mature Enough for Prime Time? (Dec 2017) 2017 TERMIS-Americas Annual Conference and Exhibition. Charlotte, NC.
32. **Loboa EG.** Keynote Speaker, The Importance of Women in STEM (Oct 2017). 2017 Women in Science and Entrepreneurship Conference. Kansas City, MO.

33. **Lobao EG.** Regenerative Medicine and MRSA – We Cannot Solve Our Problems with the Same Thinking We Used When We Created Them (Sep 2017). University of Missouri–Columbia’s Medical Pharmacology and Physiology Seminar Speaker Series. University of Missouri. Columbia, MO.
34. **Lobao EG.** Reaching Your Highest Peak (Aug 2017). National Society of Black Engineers’ Region V Regional Leadership Conference. University of Missouri. Columbia, MO.
35. **Lobao EG.** Keynote Speaker, Biomedical Innovations at MU Engineering: Translating Medical Problems to Product Solutions (Aug 2017). Mizzou Tech Roadshow & Mixer. Office of Technology Management and Industry Relations of the University of Missouri-Columbia. St. Louis, MO.
36. **Lobao EG.** Panelist, Talent Management Panel (June 2017). 2017 10th Annual Shared Assessments Summit. Arlington, VA.
37. **Lobao EG.** Regenerative Medicine vs. MRSA – Battling with Biomaterials (May 2017). University of Rochester’s Biomedical Engineering Seminar Series. University of Rochester. Rochester, NY.
38. **Lobao 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.
39. **Lobao 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.
40. **Lobao EG.** Guest Speaker, Regenerative Medicine and Wound Healing; Tissue Engineering & Biomaterials (Mar 2017). Saint Teresa’s Academy. Kansas City, MO.
41. **Lobao 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.
42. **Lobao 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.
43. **Lobao EG.** Keynote Speaker, 2016 Women in Business Awards Luncheon (Oct 2016). Columbia Daily Tribune Women in Business Awards. Columbia, MO.
44. **Lobao EG.** Tissue Engineering with Multi-Drug Resistant Bacteria in the Way (Sep 2016). Saturday Morning Science. University of Missouri. Columbia, MO.
45. **Lobao 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.
46. **Lobao 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.
47. **Lobao EG.** Our Fat Future: Translating Adipose Stem Cell Therapy (Dec 2015). 11th Annual World Stem Cell Summit. Atlanta, GA.
48. **Lobao EG.** Our Fat Future: Understanding and Translating hASC for Clinical Applications (Nov 2015). International Federation of Adipose Therapeutics Symposium. New Orleans, LA.
49. **Lobao EG.** Biomimetic Material Approaches to Tissue Engineering, Regenerative Medicine, and Wound Healing (Oct 2015). AIP-AVS Industrial Physics Forum. San Jose, CA.
50. **Lobao EG.** Regenerative Medicine in Biomedical Engineering (Aug 2015). School of Medicine Annual Research Retreat. UNC-Chapel Hill. Chapel Hill, NC.
51. **Lobao EG.** Advances in Wound Care (July 2015). Johnson & Johnson. Skillman, NJ.

52. **Loboa EG.** North Carolina – the State of BME – Keynote Speaker, 2015 Life Sciences Awards (June 2015). IEEE Engineering in Medicine and Biology Society. North Carolina Biotechnology Center. Research Triangle Park. Raleigh, NC
53. **Loboa EG.** Translating Textiles to Tissues (June 2015). Techtexil North America Symposium and Exhibition. Houston, Texas.
54. **Loboa EG.** The Future of Engineering (May 2015). University of Missouri. Columbia, MO.
55. **Loboa EG.** Fantastic Fat – A Bright Future for Tissue Engineering (Apr 2015). College of Veterinary Medicine. North Carolina State University. Raleigh, NC.
56. **Loboa EG.** Addressing Infection While Engineering Biomimetic Tissues (Mar 2015). 249th American Chemical Society (ACS) National Meeting and Exposition. Denver, Colorado.
57. **Loboa EG.** Engineering Innovation: Biomimetic Approaches to Wound Care and Regenerative Medicine (Feb 2015). North Carolina State University. Raleigh, NC.
58. **Loboa EG.** Functional Applications of Electrospun Nanofibers in Tissue Engineering, Regenerative Medicine, and Wound Healing (Feb 2015). RISE Conference. Miami, Florida.
59. **Loboa EG.** Engineering Innovation – New Approaches to Wound Care (Jan 2015). Eastman Chemical Company. Kingsport, Tennessee.
60. **Loboa EG.** Regenerating and Engineering Tissues with Bacteria in the Way (Nov 2014). School of Dentistry. UNC-Chapel Hill. Chapel Hill, NC.
61. **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.
62. **Loboa EG.** Tissue Engineering in the Age of Multi-Drug Resistant Bacteria (Oct 2014). 12th NJ Symposium on Biomaterials Science. New Brunswick, NJ.
63. **Loboa EG.** Biomimicry and Mechanobiology in Wound Healing and Regenerative Medicine (July 2014). Stanford University. Stanford, CA.
64. **Loboa EG.** Biomimetic Forces and Fibers for Wound Healing and Regenerative Medicine Applications (July 2014). Santa Clara University. Santa Clara, CA.
65. **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.
66. **Loboa EG.** Partnerships of Necessity: Regenerative Medicine, Tissue Engineering, and Wound Healing (May 2014). Regenerative Medicine Foundation 2014 Conference. San Francisco, CA.
67. **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.
68. **Loboa EG.** Biomimetic Materials and Mechanics to Regulate Stem Cell Fate (Apr 2014). UNC Stem Cell Symposium. UNC-Chapel Hill. Chapel Hill, NC.
69. **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.
70. **Loboa EG.** Biomimetic Smart Bandages for Wound Healing and Tissue Engineering Applications (Jan 2014). Engineer’s Council Seminar. Raleigh, NC.
71. **Loboa EG.** Matrices and Mechanics to Direct hASC Fate (Nov 2013). 2013 SESAPS Conference. Bowling Green, KY.
72. **Loboa EG.** BME, Mechanobiology, Biomimicry, Wound Healing, and Regenerative Medicine (Oct 2013). Joint UNC-NCSU Regenerative Medicine Symposium. Raleigh, NC.

73. **Lobao EG.** Biomimetic Forces and Fibers for Osteochondral Tissue Engineering using Human Adipose-Derived Stem Cells (Oct 2013). 2013 North Carolina Cartilage-Arthritis Research Alliance (NC-CARA) Meeting. Winston-Salem, NC.
74. **Lobao EG.** Biomimetic Smart Bandages for Wound Healing and Tissue Engineering Applications (Aug 2013). Johnson & Johnson. Philadelphia, PA.
75. **Lobao EG.** Biomimetic Forces and Fibers to Regulate Human Stem Cell Fate for Functional Tissue Engineering and Regenerative Medicine Applications (Aug 2013). 2nd International Conference on Tissue Science & Regenerative Medicine. Raleigh, NC.
76. **Lobao EG.** Fabulous Fat! Tissue Engineering using Stem Cells from Love Handles (Aug 2013). National Science Foundation Summer Undergraduate Research Symposium. Raleigh, NC.
77. **Lobao 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.
78. **Lobao EG.** Biomimetic Forces and Fibers: Improving Success in Functional Tissue Engineering, Regenerative Medicine, and Wound Healing (Apr 2013). University of Texas. Dallas, TX.
79. **Lobao EG.** From College to Grad School to Professorship and Motherhood. A Guide (Sort of...) (Apr 2013). The Hockaday School. Dallas, TX.
80. **Lobao EG.** Functional Tissue Engineering: Converting Fat to Bone and Cartilage (Mar 2013). Texas Tech University. Lubbock, TX.
81. **Lobao EG.** How to Make Bone and Cartilage: Start with Fat (Feb 2013). Scholars Forum. North Carolina State University. Raleigh, NC.
82. **Lobao EG.** Biomimetic Approaches for Functional Tissue Engineering Using Human Stem Cells (Nov 2012). Texas A&M University. College Station, TX.
83. **Lobao EG.** Biomimetic Materials and Mechanobiology: Tissue Engineering using Human Adipose-Derived Stem Cells (Oct 2012). Johns Hopkins University. Baltimore, MD.
84. **Lobao EG.** Regenerative Medicine: Can Fat Derived Stem Cells Rebuild Bone and Muscle (Oct 2012). New Horizons in Science Conference. Raleigh, NC.
85. **Lobao EG.** Bioactive Scaffolds to Control Human Stem Cell Fate (Oct 2012). 11th NJ Symposium on Biomaterials Science. New Brunswick, NJ. Podium Presentation (Plenary Session).
86. **Lobao EG.** Biomimetic Stimuli to Regulate Stem Cell Fate (Sep 2012). European Materials Research Society 2012 Meeting. Warsaw, Poland.
87. **Lobao EG.** Tissue Engineering Using Stem Cells (Aug 2012). Gordon Research Conference on Musculoskeletal Biology and Bioengineering. Proctor Academy. Andover, NH.
88. **Lobao EG.** The Use of Electrospun Nonwoven Fibers/Fabrics for Tissue Engineering, Wound Healing, and Regenerative Medicine Applications (June 2012). Cotton, Incorporated. Cary, NC.
89. **Lobao EG.** Osteochondral Tissue Engineering using Human Adipose-Derived Stem Cells and Biomimetic Stimuli (May 2012). Tulane University. New Orleans, LA.
90. **Lobao EG.** Higher Education Perspective on the Common Good (Apr 2012). North Carolina State Board of Education. Raleigh, NC.
91. **Lobao EG.** Biomimetic Materials for Functional Tissue Engineering using Human Adipose-Derived Stem Cells (Apr 2012). Duke University. Durham, NC.
92. **Lobao EG.** Functional Musculoskeletal Tissue Engineering. (Apr 2012). Keynote Speaker, MARC Seminar. Delaware State University. Dover, DE.
93. **Lobao EG.** Functional Tissue Engineering and Regenerative Medicine using Stem Cells from Human Fat (Apr 2012). Park Scholars Seminar. NC State University. Raleigh, NC.

94. **Loboa EG.** Today's Stem Cell Discoveries (Apr 2012). "Salons 2012" – series of six presentations hosted by private citizens in Research Triangle Park. Cary, NC.
95. **Loboa EG.** Functional Tissue Engineering using Human Adipose-Derived Stem Cells and Biomimetic Stimuli (Feb 2012). Rehabilitation Engineering Center Seminar. UNC-Chapel Hill & NC State University. Raleigh, NC.
96. **Loboa EG.** Functional Bone Tissue Engineering Using Human Adipose-Derived Stem Cells and Biomimetic Physical Stimuli (Jan 2012). 2nd BMES-SPRBM Conference on Cellular and Molecular Bioengineering (30th SPRBM Scientific Conference). San Juan, Puerto Rico.
97. **Loboa EG.** Biomaterials, Biomechanics, and Biomimcry – Keys to Success in Regenerative Medicine (Dec 2011). Orthopaedic Grand Rounds. UNC-Chapel Hill. Chapel Hill, NC.
98. **Loboa EG.** Material Stimuli to Regulate Stem Cell Fate (Nov 2011). Materials Research Society. Raleigh, NC.
99. **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.
100. **Loboa EG.** Advances in Biomedical Engineering – Bone (Oct 2011). HESI/CAAT Workshop on Testicular Toxicology In Vitro Models. Baltimore, MD.
101. **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.
102. **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.
103. **Loboa EG.** Nanofibrous and Nanocomposite Nonwovens for Bone Tissue Engineering Applications Using Human Stem Cells (Sep 2011). NETInc Innovative Nonwovens Conference. Atlanta, GA.
104. **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.
105. **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.
106. **Loboa EG.** Biomimetic Material and Mechanical Stimuli to Regulate Stem Cell Fate (May 2011). The 2011 Cell-Based Therapies and Tissue Engineering (CTTE) Short Course. Cleveland, OH.
107. **Loboa EG.** Functional Bone Tissue Engineering using Human Adipose-Derived Stem Cells and Biomimetic Physical Stimuli (Mar 2011). 15th Annual Hilton Head Workshop. Regenerative Medicine Innovations for Clinical Applications. Hilton Head Island, SC.
108. **Loboa EG.** Nanofibrous and Nanocomposite Materials for Functional Bone Tissue Engineering (Sep 2010). Nanofibers for the 3rd Millennium: A Summit of the World's Leaders in Nanofibers, 2010. Raleigh, NC.
109. **Loboa EG.** Mechanical and Material Stimuli for Functional Bone Tissue Engineering Using Human Adipose-Derived Stem Cells (Aug 2010). Musculoskeletal Biology & Bioengineering Gordon Research Conference. Andover, NH.
110. **Loboa EG.** Functional Bone Tissue Engineering using Human Adipose-Derived Stem Cells (Oct 2010). Building Bone-A-Fide Networks: Evaluating Musculoskeletal Health Promotion in North Carolina. Raleigh, NC.
111. **Loboa EG.** Stem Cells and Polymeric Biomaterials for Patient Specific Tissue Engineering (May 2010). Triangle Soft Matter Workshop. Duke University. Durham, NC.

112. **Loboa EG.** Stem Cells and Biotextiles for Patient-Specific Tissue Engineering (Apr 2010). Biotextiles, Biomaterials, and Biomanufacturing Seminar. North Carolina State University. Raleigh, NC.
113. **Loboa EG.** Mechanobiology, Nanomaterials, and Stem Cells: an Engineer's Approach to Regenerative Medicine (Apr 2010). National Science Foundation. Arlington, VA.
114. **Loboa EG.** Nanomaterials and Stem Cells (Mar 2010). Nanotech Integration Forum. North Carolina State University. Raleigh, NC.
115. **Loboa EG.** Control of Stem Cell Fate via Mechanical Stimulation (Mar 2010). UNC-Chapel Hill. Chapel Hill, NC.
116. **Loboa EG.** Control of Stem Cell Fate via Mechanical Stimulation (Jan 2010). Imperial College. London, UK.
117. **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.
118. **Loboa EG.** Functional Tissue Engineering and Regenerative Medicine of Musculoskeletal Tissues (Aug 2009). National Veterinary Scholars Symposium. Raleigh, NC.
119. **Loboa EG.** Stem Cells & Tissue Engineering (Mar 2009). ONE HEALTH Intellectual Exchange Group. North Carolina Biotechnology Center. Research Triangle Park. Raleigh, NC.
120. **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.
121. **Loboa EG.** Stem Cells and Functional Tissue Engineering (Nov 2008). Durham Technical Community College. Durham, NC.
122. **Loboa EG.** Functional Tissue Engineering Methodologies for Adult Stem Cells (Nov 2008). Wake Forest Institute for Regenerative Medicine. Wake Forest University. Winston-Salem, NC.
123. **Loboa EG.** Mechanobiology of Adult Stem Cells: Orthopaedic Applications (Nov 2008). Orthopaedic Grand Rounds. Department of Orthopaedic Surgery. UNC-Chapel Hill. Chapel Hill, NC.
124. **Loboa EG.** Mechanical Loads and Stem Cell Differentiation (May 2008). Carolina Workshop on Force Measurement and Manipulation in Biological Microscopy. UNC-Chapel Hill. Chapel Hill, NC.
125. **Loboa EG.** Approaches for Investigating Mechanobiology of Adult Stem Cells (Mar 2008). Duke University. Durham, NC.
126. **Loboa EG.** Fantastic Fat – Functional Tissue Engineering with Human Adipose-Derived Stem Cells (Mar 2008). North Carolina State University. Raleigh, NC.
127. **Loboa EG.** Nano – Biomedical Engineering and Mechanobiology (Feb 2008). NC State Nanotechnology Integration Forum. Raleigh, NC.
128. **Loboa EG.** Mechanobiology and Functional Tissue Engineering with Adult Stem Cells (Nov 2007). NC State Zoology Department Seminar Series. Raleigh, NC.
129. **Loboa EG.** Mechanical Loads and Stem Cell Differentiation (May 2007). Workshop on Force Measurement and Manipulation in Biological Microscopy. Computer Integrated Systems for Microscopy and Manipulation. NIH NIBIB Biotechnology Resource Center. UNC-Chapel Hill. Chapel Hill, NC.
130. **Loboa EG.** Stem Cells: An Introduction and Brief History (Apr 2007). Stem Cells: Diffusing the Rhetoric Symposium. NCCU School of Law, Biotechnology & Pharmaceutical Law Institute. Durham, NC.
131. **Loboa EG.** Stem Cells: What's All the Hubhub (Mar 2007)? "In The Know" Lecture Series. Monteith Research Center. NCSU. Raleigh, NC.
132. **Loboa EG.** Mechanobiology of Human Mesenchymal Stem Cells (June 2006). ABC Fellows. Department of Orthopaedics. UNC-Chapel Hill. Chapel Hill, NC.

133. **Loboa EG.** Ongoing Activities in the Cell Mechanics Laboratory (Aug 2005). Johnson & Johnson. Raleigh, NC.
134. **Loboa EG.** Functional Tissue Engineering (May 2005). Alfred Mann Foundation. Raleigh, NC.
135. **Loboa EG.** Mechanobiology of Human Mesenchymal Stem Cells (Mar 2005). Becton Dickinson. Raleigh, NC.
136. **Loboa EG.** Mesenchymal Tissue and Mesenchymal Stem Cell Differentiation: Functional Tissue Engineering using Mechanobiology (Sep 2004). North Carolina Tissue Engineering Interest Group (NCTEIG) meeting. Raleigh, NC.
137. **Loboa EG.** Trying to Have It All: Academia, Family, and the Pursuit of Happiness (Aug 2004). Mechanical Engineering Women's Group. Stanford University. Stanford, CA.
138. **Loboa EG, Wren TAL, Carter DR.** Mechanobiology of Soft Skeletal Tissue Regeneration (July 2004). Society for Industrial and Applied Mathematics (SIAM) Conference on the Life Sciences. Portland, OR.
139. **Loboa EG.** Mechanobiology of Mesenchymal Tissue and Mesenchymal Stem Cell Differentiation (Feb 2004). Orthopaedic Grand Rounds. UNC-Chapel Hill. Chapel Hill, NC.
140. **Loboa EG.** New Developments in Distraction Osteogenesis (2001). Surgical Grand Rounds. Stanford University. Stanford, CA.

Popular Press (Last five years only)

1. *Dallas Innovates* (Oct 2023). "Fablets' and More: How SMU snagged lead agency role in Federal Texoma Semiconductor Tech Hub."
2. *Dallas Morning News*, (Oct 2023). "Southern Methodist University tapped as one of 31 federal technology hubs."
3. *Dallas Innovates* (August 2023). "The Last Word: SMU's Elizabeth Loboa on the Impact of a \$30M Gift from The O'Donnell Foundation."
4. *Dallas Innovates* (January 2023) "Southern Methodist University announces new dean of Lyle School of Engineering."
5. *Dallas Innovates* (Nov 2022) "SMU names inaugural Vice Provost of Research, Chief Innovation Officer as it pursues R1 status."
6. *Diverse Issues in Higher Education* (May 2022) "Dr. Robin Susanne Poston named SMU dean of Moody School of Graduate and Advanced Studies and associate provost for Graduate Education."
7. *Dallas Morning News* (April 2022) "History-making women at SMU lead with commitment, academic strength."
8. *Dallas Business Journal* (Nov 2021) "SMU invests in AI with new supercomputer."
9. *HPCWire.com* (Nov 2021) "SMU launches powerful new supercomputing research system with NVIDIA."
10. *Dallas Innovates* (Nov 2021) "\$11.5M NVIDIA collaboration will put SMU 'in the Fast Lane for Artificial Intelligence.'"
11. *Dallas Morning News* (March 2021) "SMU meets the opportunities of the data-driven world with cutting-edge research and data science programs."
12. *FOX3 KDFW* (Aug 10, 2020). "SMU planning to welcome students back in two weeks."
13. *DiverseEducation.com* (February 2020) "Elizabeth Loboa."
14. *Wiareport.com* (January 2020) "Southern Methodist University in Dallas names its next provost."
15. *Inside Columbia's CEO* (Winter 2019). "Looking Ahead – Business developments and concerns for 2020."
16. *Katy Trail Weekly* (December 2019) "New Provost and Vice President named at SMU."
17. *People Newspapers* (Dec 2019) "Elizabeth Loboa named new SMU Provost."
18. *Virgin Hyperloop One (VHO)* (Dec 2019). "Missouri roadshow recap."
19. *The Maneater* (Dec 2019). "MU makes three-year commitment to Aspire to diversify STEM faculty, teaching."
20. *KOPN 89.5 FM: Mid-MO Freedom Forum* (Nov 2019). (Audio) "Hyperloop Transportation System."
21. *YouTube* (Oct 2019). "Hyperloop Press Conference at Mizzou."

22. *Missourian* (Oct 2019). “Couple gives \$1.7 million, split between engineering and veterinary programs.”
23. *Mizzou News – University of Missouri* (Oct 2019). “Mizzou alumnus honors family with \$1.7 million in recent gifts.”
24. *Columbia Daily Tribune* (Oct 2019). “MU alum donates \$6M for new institute.”
25. *Missourian* (Oct 2019). “MU receives \$6 million for NextGen building construction.”
26. *Mizzou News – University of Missouri* (Oct 2019). “Mizzou alumnus gives \$6 million gift to precision health institute.”
27. *The Maneater* (Oct 2019). “Hyperloop visits campus, brings bright future to Missouri transportation.”
28. *Fox2Now* (Oct 2019). “Hyperloop test pod on display at Mizzou.”
29. *Columbia Daily Tribune* (Oct 2019). “Virgin touts hyperloop technology in visit to MU.”
30. *KFRU News Talk 98.9FM/1400AM* (Oct 2019). “Hyperloop One.”
31. *KOMU 8 (NBC)* (Oct 2019). “Virgin Hyperloop One officials and test pod set for appearance in Columbia.”
32. *GlobeNewswire* (Sep 2019). “Five New Stops Added to Virgin Hyperloop One U.S. Roadshow.”
33. *The Maneater* (Sep 2019). “Camp COE enables students to have reliable support system for their time at MU.”
34. *KFRU News Talk 98.9FM/1400AM* (Aug 2019). “Sunday Morning Roundtable: NextGen Precision Health Institute.”
35. *St. Louis Post-Dispatch* (July 2019). “University of Missouri and Siemens pair up to bolster research, train biomedical engineers.”
36. *KOMU 8 (NBC) News at Noon* (July 2019). “UM System: New alliance to bring opportunities to Missouri.”
37. *Missourian* (July 2019). “UM System, MU Health Care, creates \$133 million partnership with Siemens.”
38. *Eagle 93.9: Hot Talk of Mid-Missouri* (June 2019). (Audio) “Elizabeth Loba on New Mizzou Health Institute.”
39. *Missourinet* (June 2019). “University of Missouri System building “NextGen” research hub to accelerate disease treatment, cures.”
40. *Mizzou News – University of Missouri* (June 2019). “NextGen Precision Health: University of Missouri celebrates official launch of new health research center.”
41. *University of Missouri System – Precision Health Initiative* (June 2019). “Launch and Groundbreaking.”
42. *American Society for Engineering Education (ASEE)* (June 2019). “The College of Engineering at the University of Missouri.”
43. *Missouri Flagship Council Weekly Update* (May 2019). “Elizabeth G. Loba, Vice Chancellor for Strategic Partnerships and Dean of the College of Engineering.” (Feature)
44. *Congressional Record – Extensions of Remarks* (Apr 2019). “Extensions of Remarks: Honoring the 148 Inventors Inducted as the 2018 Fellows of the National Academy of Inventors.”
45. *All Together, Society of Women Engineers* (Apr 2019). “Podcast: Elizabeth Loba, Mizzou’s First Female Dean of Engineering.”
46. *YouTube* (Apr 2019). “Women in Engineering: Elizabeth Loba.”
47. *All Together, Society of Women Engineers* (Apr 2019). “Five Fearless Women Engineers on Fighting Impostor Syndrome.”
48. *Eagle 93.9: Hot Talk of Mid-Missouri* (Feb 2019). (Audio) “MU Engineering Dean Elizabeth Loba on TPMC.”
49. *Inside UM System* (Feb 2019). “Bringing the Vision to Life: Precision Medicine Initiative Progress Update.”
50. *Columbia Daily Tribune* (Feb 2019). “University of Missouri targets July start for research center work.”
51. *KOMU 8 (NBC) News at Four* (Feb 2019). “UM unveils design for new quarter-billion dollar medical complex.”
52. *BioNexus KC* (Jan 2019). “Sponsorship Crucial for Next Generation of Women in STEM.”

Inclusive Excellence Initiatives

Established Access SMU to create more funding for need-based scholarships, 2021.
 Instituted policies and procedures to ensure transparent, fair and equitable workloads for all SMU faculty, 2020.
 Created Provost Faculty Fellows to provide leadership opportunities to broader SMU faculty community, 2020.
 Launched leading practice faculty hiring procedures, 2020

Academic Mentoring and Promotion of Diversity and Inclusion

- Presenter, Quarterly Meeting of Black Unity Forum (BUF), 2020 to present.
- Presenter, Meeting of the SMU Association of Asian, Asian American, and Pacific Islander American Scholars and Allies (AAPA, AAPASA), Dallas, TX, 2022
- Speaker, Mizzou Pursuit of Excellence Banquet, Hosted by the Diversity and Outreach Initiatives Office of the University of Missouri College of Engineering and the University of Missouri Center for Academic Success and Excellence, Columbia, MO, 2019
- Speaker, Diverse Engineering Professionals Conference, Columbia, MO, 2019
- MU College of Engineering recognized by ASEE Diversity Recognition Program with Bronze award (highest level awarded in 2019). Article at: [ASEE recognizes Mizzou Engineering for commitment to diversity, inclusion.](#)
- Speaker, Camp COE for first-year engineering students, Columbia, MO, 2019
- Speaker, Engineering Graduate Student Orientation, Columbia, MO, 2019
- Speaker, Engineering Success Bridge Program, Columbia, MO, 2019
- Speaker, College of Engineering Summer Camp of International Students, Hosted by the University of Missouri International Center and College of Engineering International Programs, Columbia, MO, 2019
- Speaker, STEMette Camp, Columbia, MO, 2019
- Speaker, Daughter Engineering Day, Columbia, MO, 2019
- Speaker, Develop[HER,] “Discussing Women in STEM,” Columbia, MO, 2019
- Presenter, MU College of Engineering Research Day, Columbia, MO, 2019
- Speaker, National Academy of Inventors (NAI) 8th Annual Meeting and Induction Ceremony: Connecting the Innovation Community, “Global innovation: creating a conference to promote diversity in STEM,” Houston, TX, 2019
- Speaker, Engineering Career Day: Employer Engagement and Professional Development with Information Technology, Computer Science and Computer Engineering Students, Columbia, MO, 2019
- Speaker, 2019 Mizzou Women’s Leadership Conference, “Women in Engineering,” Columbia, MO, 2019
- Speaker, MU Engineering High School Day, Columbia, MO, 2019
- Speaker, 42nd Annual Big XII Conference on Black Student Government, Hosted by the MU Legion of Black Collegians, Columbia, MO, 2019
- Panelist, University of Missouri Women in Engineering Week, “Preparing STEM 4 Women Session,” Columbia, MO 2019
- Panelist, Women in Science and Entrepreneurship (W.I.S.E.) KC Panel, Kansas City, MO, 2019
- Speaker, Mizzou Pursuit of Excellence Banquet, Hosted by the Diversity and Outreach Initiatives Office of the University of Missouri College of Engineering and the University of Missouri Center for Academic Success and Excellence, Columbia, MO, 2018
- Speaker, National Association of Engineering Student Councils Central Region Conference, Columbia, MO, 2018
- Keynote Speaker, Society of Women Engineers, Columbia, MO, 2018
- Panelist, University of Missouri Women in Engineering Week, “How to Avoid Burnout,” Columbia, MO, 2018
- Panelist, Women in Engineering Path to Success: Lunch and Panel Discussion, Columbia, MO, 2018
- Speaker, Daughter Engineering Day, Columbia, MO, 2018
- Keynote Speaker, Mizzou Non-Traditional Career Exploration Event for Middle and High School Students, Hosted by 4-H and the MU College of Education’s Heart of Missouri Regional Professional Development Center, Columbia, MO, 2018
- Speaker, University of Missouri Fall 2018 College of Engineering Career Fair, “What Your Resume Says About You,” Columbia, MO, 2018
- Keynote Speaker, MU College of Engineering Success Bridge Program, Columbia, MO, 2018
- Speaker, MU College of Engineering Summer Welcome, Columbia, MO, 2018
- Speaker, MU College of Engineering Research Day, Columbia, MO, 2018
- Speaker, MU Engineering Freshman Interest Groups, Columbia, MO, 2018
- Speaker, MU Engineering High School Day, Columbia, MO, 2018

- Keynote Speaker, Mizzou Pursuit of Excellence Banquet, Hosted by the Diversity and Outreach Initiatives Office of the University of Missouri College of Engineering and the University of Missouri Center for Academic Success and Excellence, Columbia, MO, 2017
- Mentor, Meet-the-Mentor Luncheon, 2017 TERMIS-Americas Annual Conference and Exhibition, Charlotte, NC, 2017
- Speaker, MU Chapter of the Society of Women Engineers, University of Missouri, Columbia, MO, 2017
- Roundtable Participant, National Strategies for Recruitment and Retention of Hispanics in Academia, 2017 Society of Hispanic Professional Engineers National Conference, Kansas City, MO, 2017
- Panelist, Collaborative Action at MU, Griffiths Leadership Society for Women, University of Missouri, Columbia, MO, 2017
- Speaker, Saint Teresa's Academy Open House Visit to MU College of Engineering, University of Missouri, Columbia, MO, 2017
- Keynote Speaker, The Importance of Women in STEM, 2017 Women in Science and Entrepreneurship, Kansas City, MO, 2017
- Panelist, Challenges and Opportunities for Women in STEM Field, 2017 Women in Science and Entrepreneurship, Kansas City, MO, 2017
- Speaker, Diverse Engineering Professionals Conference, Columbia, MO, 2017
- Speaker, Mizzou Engineering Student Council High School Day, Columbia, MO, 2017
- Panelist, Opportunities for Women in STEM: Leadership & Mentorship, 2017 Women in Science and Entrepreneurship and the Missouri Cures Education Foundation, St. Louis, MO, 2017
- Panelist, State of Engineering Education in Missouri, Missouri Society of Professional Engineers (MSPE) 2017 Annual Convention, Camdenton, MO, 2017
- Speaker, Reaching Your Highest Peak, National Society of Black Engineers' Region V Regional Leadership Conference, Hosted by the University of Missouri College of Engineering, Columbia, MO 2017
- Panelist, National Society of Black Engineers' Engineering Dean's and MEP Strategic Retention Forum, National Society of Black Engineers 43rd Annual Convention, Kansas City, MO, 2017
- Roundtable Participant, National Society of Black Engineers' Engineering Deans and MEP Strategic Retention Roundtable, National Society of Black Engineers 43rd Annual Convention, Kansas City, MO, 2017
- Keynote Speaker, Regenerative Medicine and Wound Healing Tissue Engineering & Biomaterials, Saint Teresa's Academy, Kansas City, MO, 2017
- Panelist, Hidden Figures Screening Panel Discussion of Women and Minority Women in STEM Fields, University of Missouri, Columbia, MO, 2017
- Keynote Speaker, A Tissue Engineered Life: From UCD to ASC then MIZ, University of California at Davis, Davis, CA, 2017
- Roundtable Participant, Advancing Women in Cybersecurity in Computer Science, 4th Annual Women of Influence Roundtable, Executive Women's Forum National Conference, Scottsdale, AZ, 2016
- Panelist, Women in Science and Entrepreneurship (WISE) Opportunities and Entrepreneurship Panel Discussion, Missouri Cures Education Foundation, Columbia, MO, 2016
- Speaker, What Does Your CV/Resume Say About You? Women's Leadership Forum and New Investigator Mentoring Committee Professional Advancement Session, Annual Meeting of the Orthopaedic Research Society, Orlando, FL, 2016
- Speaker, Women's Leadership Forum and New Investigator Mentoring Committee Professional Advancement Session, Orthopaedic Research Society Annual Meeting, Orlando, FL, 2016
- Panelist, Women in Engineering, Women & Minority Engineering Programs Faculty Panel, North Carolina State University, Raleigh, NC, 2015
- Mentor, multiple junior faculty in Biomedical Engineering and College of Veterinary Medicine, University of North Carolina Chapel Hill and North Carolina State University, Chapel Hill, NC and Raleigh, NC, 2012 – 2015
- Mentor, Abrams Scholars, North Carolina State University, Raleigh, NC, 2011 – 2015
- Chapter Advisor, Tau Beta Pi National Engineering Honor Society, North Carolina State University, Raleigh, NC, 2009 – 2015

Mentor, Initiative for Maximizing Student Diversity (IMSD) scholars, North Carolina State University, Raleigh, NC, 2007 – 2015

Mentor, Alliances for Graduate Education and the Professoriate (AGEP) scholars, North Carolina State University, Raleigh, NC, 2005 – 2015

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

Mentor, Reaching Incoming Students Enrichment (RISE) scholars, North Carolina State University, Raleigh, NC, 2004 – 2015

Mentor, Howard Hughes Medical Institute Summer Research Intern (HHMI SRI) scholars, North Carolina State University, Raleigh, NC, 2004 – 2015

Invited Panelist, Careers in Academia, Duke University, Durham, NC, 2012

Presenter, Annual Escape Summer Camp for Incoming Female Students in Engineering, North Carolina State University, Raleigh, NC, 2008 – 2011

Mentor, Stanford Association for Women in Science, Stanford University, Stanford, CA, 1999 – 2002

Presenter, California Forum for Diversity in Graduate Education introducing underrepresented college students to graduate programs in science and engineering, Stanford University, Stanford, CA, 2000

Presenter, Partners in Science College Initiative (PISCI) introducing high school students to the pursuit of studies in science, Stanford University, Stanford, CA, 2000

Panelist, Mentoring Workshop, graduate women mentoring undergraduate women on obtaining success in graduate school, Stanford University, Stanford, CA, 2000

Presenter, Expanding Your Horizons (EYH) Workshop introducing junior high school girls to science and engineering, Stanford University, Stanford, CA, 1999 – 2000

TransAccess (San Jose, CA) mentor to women with disabilities, Stanford University, Stanford, CA, 1999 – 2000

Campus and Community Involvement and Engagement

Member, Dallas Charter 100 (Invitation only 100-member women’s leadership organization representing the professional, racial and geographic diversity of the greater Dallas area), 2022 - present

Member, George W. Bush Institute Advisory Council, 2021 – Present

Member, Executive Women’s Roundtable (Executive-level networking program for women established by the Dallas Regional Chamber), 2021 – 2024

Member, Missouri Blue Ribbon Panel on Hyperloop, State of Missouri, 2019 – 2020

Advisory Board, *Columbia Business Times*, 2019 – 2020

Board of Directors, Heart of Missouri United Way, 2018 – 2020

Presenter, 8th Annual Coulter Program Awards and Mixer hosted by the Patient-Centered Care Learning Center, Columbia, MO, 2019

Presenter, Missouri’s Special Blue Ribbon Panel on Hyperloop, Columbia, MO, 2019

Panelist, *Inside Columbia’s CEO Magazine* Roundtable Luncheon, Zimmer Radio and Marketing Group, Columbia, MO, 2019

Presenter, College of Engineering Annual Scholarship Dinner, University of Missouri, 2019

Presenter, “Lunch with the Dean,” Annual Summit Conference hosted by the Office of Extension and Engagement, University of Missouri System, Columbia, MO, 2019

Presenter, MoExcels Proposal Presentation, “Imaging the Future: Clinical Service Engineering for Missouri,” Missouri Coordinating Board for Higher Education (CBHE), University of Missouri, Columbia, MO, 2019

Judge, 2019 Homecoming Parade, University of Missouri, Columbia, MO, 2019

Presenter, Virgin Hyperloop One Pod co-hosted by the College of Engineering and the Office of Research and Economic Development, University of Missouri, Columbia, MO, 2019

Presenter, Merit Badge Day for the Great Rivers Council of the Boy Scouts of America, University of Missouri Columbia, MO, 2019

Presenter, “NextGen Precision Health Initiative,” Columbia Chamber of Commerce, Columbia, MO, 2019

Co-Presenter, “NextGen Precision Health Initiative,” Missouri 100 Meeting, Columbia, MO, 2019

- Presenter, “NextGen Precision Health Initiative,” MU Retirees Association Meeting, Columbia, MO, 2019
- Presenter, “NextGen Precision Health Initiative,” Central Bank of Boone County Young Executives Lunch, Columbia, MO, 2019
- Presenter, U.S. High Performance Research Reactor Meeting, Hosted by the College of Engineering, MU Research Reactor and the National Nuclear Security Administration’s Office of Material Management and Minimization, University of Missouri, Columbia, MO, 2019
- Presenter, Groundbreaking Ceremony of the NextGen Precision Health Institute, Translational Precision Medicine Complex (TPMC), University of Missouri System, Columbia, MO, 2019
- Presenter, Caris Life Science Visit, University of Missouri, Columbia, MO, 2019
- Presenter, AmeriMech Symposium: Non-reciprocal and Topological Wave Phenomena in Solids and Fluids, University of Missouri, Columbia, MO, 2019
- Commencement Speaker, May Commencement Address, Mizzou Online, University of Missouri, Columbia, MO, 2019
- Presenter, Precision Health Initiative Reception, University of Missouri System, Columbia, MO, 2019
- Presenter, ThermAvant Technologies Grand Opening, Columbia, MO, 2019
- Presenter, Mizzou Jefferson Club Dinner, Columbia, MO 2019
- Presenter, Mizzou Shamrock Society Brunch, Columbia, MO, 2019
- Presenter, Precision Medicine Initiative Update, University of Missouri-Kansas City, Kansas City, MO, 2019
- Keynote Speaker, Tau Sigma Transfer Student Honor Society Induction, University of Missouri, Columbia, MO, 2019
- Presenter, “College of Engineering and the University of Missouri System’s Precision Medicine Initiative,” Houston Texas Tigers Chapter, Mizzou Alumni Association, Houston, TX, 2019
- Panelist, Leadership Columbia Development and Industry Day, Columbia Chamber of Commerce, Columbia, MO, 2019
- Presenter, Translational Precision Medicine Complex (TPMC), Truman Memorial VA Medical Center, Columbia, MO, 2019
- Presenter, “Precision Medicine at MU: An Economic Driver for Columbia,” Sunrise Southwest Rotary, Columbia, MO, 2019
- Presenter, “Translating Precision Medicine: Transforming the future of healthcare,” MU School of Medicine Research Council, University of Missouri, Columbia, MO, 2019
- Showcase Exhibitor, TPMC-PMI UM System, 2019 UM System Legislative Showcase Exhibits: Workforce Development, Jefferson, MO, 2019
- Presenter, “Bringing the Vision to Life: Precision Medicine Initiative Progress Update,” University of Missouri System, Columbia, MO, 2019
- Keynote Speaker, Translational Precision Medicine Complex (TPMC), Regional Economic Development, Inc. (REDI) Board of Directors Meeting, Columbia, MO, 2018
- Keynote Speaker, Translational Precision Medicine Complex (TPMC), Commerce Bank Regional Advisory Board, Columbia, MO, 2018
- Presenter, Non-Traditional Career Exploration Day, sponsored by MU Extension, hosted by the College of Engineering, University of Missouri, Columbia, MO, 2018
- Presenter, Translational Precision Medicine Complex (TPMC), MU Staff Advisory Council, University of Missouri, Columbia, MO, 2018
- Presenter, Translational Precision Medicine Complex (TPMC), Advancement Divisional Meeting, University of Missouri, Columbia, MO, 2018
- Presenter, Translational Precision Medicine Complex (TPMC), Missouri 100 Reception and Meeting, University of Missouri, Columbia, MO, 2018
- Presenter, College of Engineering Annual Scholarship Dinner, University of Missouri, Columbia, MO, 2018
- Speaker Virgin Hyperloop One Project with Black & Veatch and Virgin Hyperloop One, University of Missouri, Columbia, MO, 2018
- Beyond Campus, M-I-Z in K.C. Alumni Event co-hosted by the College of Engineering and College of Arts & Sciences, University of Missouri, Columbia, MO, 2018
- Honorary Co-Chair, 19th Annual Tiger Ball, Kansas City Chapter of the Mizzou Alumni Association and University of Missouri, Columbia, MO, 2018

Presenter, Mizzou Shamrock Society Brunch, Columbia, MO, 2018

Judge, Reynolds Journalism Institute Student Competition, University of Missouri, Columbia, MO, 2018

Keynote Speaker, Tau Sigma Transfer Student Honor Society Induction, University of Missouri, Columbia, MO, 2018

Presenter, Merit Badge University for the Great Rivers Council of the Boy Scouts of America, University of Missouri, Columbia, MO, 2017

Presenter, College of Engineering Annual Scholarship Dinner, University of Missouri, Columbia, MO, 2016

Honors and Awards

Honorary Inductee, Phi Beta Kappa Society, 2023

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 (AAAS), 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

Stanford Graduate Service Recognition Award, 2000

UC Davis Outstanding Senior of the Year, 1994 – 1995

President's Undergraduate Fellowship, 1994 – 1995

Tau Beta Pi National Engineering Honor Society, 1994 – present

Golden Key National Honor Society, 1993 – present

Phi Kappa Phi National Honor Society, 1993 – present

Peer-Reviewed Journal Articles (*Last author position is corresponding author unless otherwise noted.*)

1. Nordberg RC, Magalhaes RS, Cervello I, Williams JK, Atala A, **Loboa EG**. A biomechanical assessment of tissue-engineered polymer neo-uteri after orthotopic implantation. *F&S Science*. 2024 Feb;5(1):58-68. Epub 2023 Dec 23.
2. Nordberg RC, Huebner P, Schuchard KG, Mellor LF, Shirwaiker, RA, **Loboa, EG**, Spang, JT. The evaluation of a multiphasic 3D-bioplotted scaffold seeded with adipose-derived stem cells to repair osteochondral defects in a porcine model. *Journal of Biomedical Materials Research: Part B – Applied Biomaterials*. 2021 Dec;109(12):2246-2258. Epub 2021 Jun 10.
3. Seyedmahmoud R, Messler MJ, **Loboa EG**. 3D Bioprinting Technologies for Tissue Engineering: A Mini Review. *HSOA Journal of Stem Cells Research, Development and Therapy*. <https://doi.org/10.22466/sdrt-2060/100046>. Epub 2020 August 17
4. Rahhal TB, Devlin SL, **Loboa EG**. Inclusive innovation: creating a conference to promote diversity in science, technology, engineering, and math. *Technology & Innovation, Journal of the National Academy of Inventors*. 2020;21:1-2.
5. Mellor LF, Nordberg RC, Huebner P, Mohiti-Asli M, Taylor MA, Efird W, Oxford JT, Spang J, Shirwaiker RA, **Loboa EG**. Investigation of multiphasic 3D-bioplotted scaffolds for site-specific chondrogenic and osteogenic differentiation of human adipose-derived stem cells for osteochondral tissue engineering applications. *Journal of Biomedical Materials Research: Part B – Applied Biomaterials*. <https://doi.org/10.1002/jbm.b.34542>. Epub 2019 Dec 27.
6. Nordberg RC, Mellor LF, Krause AR, Donahue HJ, **Loboa EG**. LRP receptors in chondrocytes are modulated by simulated microgravity and cyclic hydrostatic pressure. *PLOS ONE*. 2019 Oct 4;14(10):e0223245. <https://doi.org/10.1371/journal.pone.0223245>. Epub 2019 Oct 4.

7. Bodle JC, Hamouda MS, Cai S, Williams RB, Bernacki SH, **Loboa EG**. Primary cilia exhibit mechanosensitivity to cyclic tensile strain and lineage-dependent expression in adipose-derived stem cells. *Scientific Reports*. 2019 May 29;9(1):8009. <https://doi.org/10.1038/s41598-019-43351-y>. Epub 2019 May 29.
8. Cai S, Pourdeyhimi B, **Loboa EG**. Industrial-scale fabrication of an osteogenic and antibacterial PLA/silver-loaded calcium phosphate composite with significantly reduced cytotoxicity. *Journal of Biomedical Materials Research: Part B – Applied Biomaterials*. 2019 May;107(4):900-910. <https://doi.org/10.1002/jbm.b.34185>. Epub 2018 Sep 19.
9. Watson ATD, Nordberg RC, **Loboa EG**, Kullman SW. Evidence for aryl hydrocarbon receptor-mediated inhibition of osteoblast differentiation in human mesenchymal stem cells. *Toxicological Sciences*. 2019 Jan 1;167(1):145-156. <https://doi.org/10.1093/toxsci/kfy225>. Epub 2018 Sep 7.
10. Nordberg RC, Wang H, Wu Q, **Loboa EG**. Corin is a key regulator of endochondral ossification and bone development via modulation of vascular endothelial growth factor A expression. *Journal of Tissue Engineering and Regenerative Medicine*. 2018 Dec;12(12):2277-2286. <https://doi.org/10.1002/term.2760>. Epub 2018 Nov 22.
11. Wall M, Butler D, El Haj A, Bodle J, **Loboa EG**, Banes A. Key developments that impacted the field of mechanobiology and mechanotransduction. *Journal of Orthopaedic Research*. 2018 Feb;36(2):605-619. <https://doi.org/10.1002/jor.23707>. Epub 2017 Sep 5.
12. Mohiti-Asli M, Risselada M, Jacob M, Pourdeyhimi B, **Loboa EG**. Creation and evaluation of new porcine model for investigation of treatments of surgical site infection. *Tissue Engineering Part C: Methods*. 2017 Nov;23(11):795-803. <https://doi.org/10.1089/ten.TEC.2017.0024>. Epub 2017 Sep 19.
13. Cai S, Pourdeyhimi B, **Loboa EG**. High-throughput fabrication method for producing a silver-nanoparticles-doped nanoclay polymer composite with novel synergistic antibacterial effects at the material interface. *ACS Applied Materials & Interfaces*. 2017 June 28;9(25):21105-21115. <https://doi.org/10.1021/acsami.7b03793>. Epub 2017 June 15.
14. Mellor LF, Huebner P, Cai S, Mohiti-Asli M, Taylor MA, Spang J, Shirwaiker RA, **Loboa EG**. Fabrication and evaluation of electrospun, 3D-bioplotted, and combination of electrospun/3D-bioplotted scaffolds for tissue engineering applications. *BioMed Research International*. 2017;2017(article ID 6956794):1-9. <https://doi.org/10.1155/2017/6956794>. Epub 2017 Apr 27.
15. Mehendale SV, Mellor LF, Taylor MA, **Loboa EG***, Shirwaiker RA*. Effects of 3D-bioplotted polycaprolactone scaffold geometry on human adipose-derived stem cell viability and proliferation. *Rapid Prototyping Journal*. 2017 Apr 18;23(3):534-542. <https://doi.org/10.1108/RPJ-03-2016-0035>. (*co-corresponding authors)
16. Mellor LF, Steward AJ, Nordberg RC, Taylor MA, **Loboa EG**. Comparison of simulated microgravity and hydrostatic pressure for chondrogenesis of haSC. *Aerospace Medicine and Human Performance*. 2017 Apr 1;88(4):377-384(8). <https://doi.org/10.3357/AMHP.4743.2017>.
17. Nordberg RC, Zhang J, Griffith EH, Frank MW, Starly B, **Loboa EG**. Electrical cell-substrate impedance spectroscopy can monitor age-grouped human adipose stem cell variability during osteogenic differentiation. *Stem Cells Translational Medicine*. 2017 Feb;6(2):502-511. <https://doi.org/10.5966/sctm.2015-0404>. Epub 2016 Sep 7.

18. Mohiti-Asli M, Saha S, Murphy SV, Gracz H, Pourdeyhimi B, Atala A, **Loboa EG**. Ibuprofen loaded PLA nanofibrous scaffolds increase proliferation of human skin cells in vitro and promote healing of full thickness incision wounds in vivo. *Journal of Biomedical Materials Research Part B: Applied Biomaterials*. 2017 Feb;105(2):327-339. <https://doi.org/10.1002/jbm.b.33520>. Epub 2015 Oct 28.
19. Cai S, Bodle JC, Mathieu PS, Amos A, Hamouda M, Bernacki S, McCarty G, **Loboa EG**. Primary cilia are sensors of electrical field simulation to induce osteogenesis of human adipose-derived stem cells. *The FASEB Journal*. 2017 Jan;31(1):346-355. <https://doi.org/10.1096/fj.201600560R>. Epub 2016 Oct 19.
20. Nordberg RC, Bodle JC, **Loboa EG**. Primary cilia and canonical Wnt-signaling crosstalk to modulate osteogenic differentiation in human adipose stem cells in 3D loading conditions. *Tissue Engineering Part A*. 2016 Dec 1;22:S40-S40.
21. Sheets KT, Ewend MG, Mohiti-Asli M, Tuin SA, **Loboa EG**, Aboody KS, Hingtgen SD. EXTH-58. Developing implantable scaffolds to enhance neural stem cell therapy for post-operative glioblastoma. *Neuro-Oncology*. 2016 Nov 1;18(6):vi71-vi72. <https://doi.org/10.1093/neuonc/nov212.300>. Epub 2016 Nov 7.
22. 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://doi.org/10.1089/ten.tea.2016.0063>. Epub 2016 Oct 25.
23. Wall ME, Dymont NA, Bodle J, Volmer J, **Loboa E**, Cederlund A, Fox AM, Banes AJ. Cell Signaling in Tenocytes: Response to Load and Ligands in Health and Disease. *Adv Exp Med Biol*. 2016; 920:79-95. Doi: 10.1007/978-3-319-33943-6_7.
24. Nordberg RC, Charoenpanich A, Vaughn CE, Griffith EH, Fisher MB, Cole JH, Spang JT, **Loboa EG**. 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://doi.org/10.1186/s13018-016-0467-x>. Epub 2016 Oct 28.
25. Nasrollahzadeh M, Ganji F, Taghizadeh SM, Daraei B, **Loboa EG**, Vasheghani Farahani, E. Development and optimization of cephalixin-loaded solid lipid nanoparticles using D-optimal design. *Advanced Science, Engineering and Medicine*. 2016 Sep 1;8(9):695-704. <https://doi.org/10.1166/asem.2016.1917>.
26. Steward AJ, Cole JH, Ligler FS, DPhil, **Loboa EG**. Mechanical and vascular cues synergistically enhance osteogenesis in human mesenchymal stem cells. *Tissue Engineering Part A*. 2016 Aug;22(15-16):997-1005. <https://doi.org/10.1089/ten.tea.2015.0533>. Epub 2016 July 29.
27. Bodle JC and **Loboa EG**. Concise review: primary cilia: control centers for stem cell lineage specification and potential targets for cell-based therapies. *Stem Cells* 2016 June;34(6):1445-1454. <https://doi.org/10.1002/stem.2341>. Epub 2016 Mar 28.
28. Bago JR, Pegna GJ, Okolie O, Mohiti-Asli M, **Loboa EG**, Hingtgen SD. Electrospun nanofibrous scaffolds increase the efficacy of stem cell-mediated therapy of surgically resected glioblastoma. *Biomaterials*. 2016 June;90:116-125. <https://doi.org/10.1016/j.biomaterials.2016.03.008>. Epub 2016 Mar 9.
29. Bago J, Okolie O, Mohiti-Asli M, **Loboa EG**, Hingtgen S. Developing polymeric bio-scaffolds that increase the efficacy of stem cell-mediated therapy for brain tumors. *Molecular Therapy*. 2016 May 1;24(1):S175. [https://doi.org/10.1016/s1525-0016\(16\)33251-8](https://doi.org/10.1016/s1525-0016(16)33251-8).

30. Tuin SA, Pourdeyhimi B, **Loboa EG**. Fabrication of novel high surface area mushroom gilled fibers and their effects on human adipose derived stem cells under pulsatile fluid flow for tissue engineering applications. *Acta Biomaterialia*. 2016 May;36:220-230. <https://doi.org/10.1016/j.actbio.2016.03.025>. Epub 2016 Mar 15.
31. Mohiti-Asli M, Risselada M, Jacob M, Pourdeyhimi B, **Loboa EG**. In vivo evaluation of silver ion-releasing scaffolds for treatment of infected wounds in a porcine model. *Wound Repair and Regeneration*. 2016 Mar 1;24(2):A18-A18.
32. Tuin SA, Pourdeyhimi B, **Loboa EG**. Creating tissues from textiles: scalable nonwoven manufacturing techniques for fabrication of tissue engineering scaffolds. *Biomedical Materials*. 2016 Feb 23;11(1):015017. doi: 10.1088/1748-6041/11/1/015017.
33. Huang W, Kim J, Kim K, Bakshi S, Williams J, Matthieu P, **Loboa EG**, Shung KK, Zhou Q, Jiang X. A novel ultrasound technique for non-invasive assessment of cell differentiation. *IEEE Sensors Journal*. 2016 Jan 1;16(1):61-68. <https://doi.org/10.1109/JSEN.2015.2477340>. Epub 2015 Sep 16.
34. 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.
35. 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.
36. 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.
37. 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.
38. 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: Applied Biomaterials*. 2015 July;103(5):1050-1058. <https://doi.org/10.1002/jbm.b.33291>. Epub 2014 Sep 17.
39. Wolf MT, Dearth CL, Sonnenberg SB, **Loboa EG**, Badylak SF. Naturally derived and synthetic scaffolds for skeletal muscle reconstruction. *Advanced Drug Delivery Reviews*. 2015 Apr;84:208-221. <https://doi.org/10.1016/j.addr.2014.08.011>. Epub 2014 Aug 29.
40. Bodle JC, Teeter SD, Hluck BH, Hardin JW, Bernacki SH, **Loboa EG**. Age-related effects on the potency of human adipose-derived stem cells: creation and evaluation of superlots and implications for musculoskeletal tissue engineering applications. *Tissue Engineering Part C Methods*. 2014 Dec;20(12):972-983. <https://doi.org/10.1089/ten.TEC.2013.0683>. Epub 2014 May 1.
41. Mohiti-Asli M, Pourdeyhimi B, **Loboa EG**. Skin tissue engineering for the infected wound site: biodegradable PLA nanofibers and a novel approach for silver ion release evaluated in a 3D coculture system of keratinocytes and staphylococcus aureus. *Tissue Engineering Part C Methods*. 2014 Oct;20(10):790-797. <https://doi.org/10.1089/ten.TEC.2013.0458>. Epub 2014 Mar 21.
42. Tuin SA, Pourdeyhimi B, **Loboa EG**. Interconnected, microporous hollow fibers for tissue engineering: commercially relevant, industry standard scale-up manufacturing. *Journal of Biomedical Materials Research Part A*. 2014 Sep;102(9):3311-3323. <https://doi.org/10.1002/jbm.a.35002>. Epub 2013 Oct 28.

43. Mathieu PS, Bodle JC, **Loboa EG**. Primary cilium mechanotransduction of tensile strain in 3D culture: finite element analyses of strain amplification caused by 10% tensile strain applied to a primary cilium embedded in a collagen matrix. *Journal of Biomechanics Special Issue on Functional Tissue Engineering* (feature article). 2014 June 27;47(9):2211-2217. <https://doi.org/10.1016/j.jbiomech.2014.04.004>. Epub 2014 Apr 24. Invited submission.
44. Mohiti-Asli M, Pourdeyhimi B, **Loboa EG**. Novel, silver-ion-releasing nanofibrous scaffolds exhibit excellent antibacterial efficacy without the use of silver nanoparticles. *Acta Biomaterialia*. 2014 May;10(5):2096-2104. <https://doi.org/10.1016/j.actbio.2013.12.024>. Epub 2013 Dec 21.
45. Charoenpanich A, Wall ME, Tucker CJ, Andrews DM, Lalush DS, Dirschl DR, **Loboa EG**. Cyclic tensile strain enhances osteogenesis and angiogenesis in mesenchymal stem cells from osteoporotic donors. *Tissue Engineering Part A*. 2014 Jan;20(1-2):67-78. <https://doi.org/10.1089/ten.TEA.2013.0006>. Epub 2013 Sep 19.
46. Pederson RO, **Loboa EG**, LaBean TH. Sensitization of transforming growth factor- β signaling by multiple peptides patterned on DNA nanostructures. *Biomacromolecules*. 2013 Dec 9;14(12):4157-4160. <https://doi.org/10.1021/bm4011722>. Epub 2013 Nov 8.
47. Lim JH, McCullen SD, Piedrahita JA, ***Loboa EG**, *Olby NJ. Alternating current electric fields of varying frequencies: effects on proliferation and differentiation of porcine neural progenitor cells. *Cellular Reprogramming*. 2013 Oct;15(5):405-412 (*co-corresponding authors). <https://doi.org/10.1089/cell.2013.0001>. Epub 2013 Aug 20.
48. Parks Saldutti L, Beyer BK, Breslin W, Brown TR, Chapin RE, Champion S, Enright B, Faustman E, Foster PM, Hartung T, Kelce W, Kim JH, **Loboa EG**, Piersma AH, Seyler D, Turner KJ, Yu H, Yu X, Sasaki JC. In vitro testicular toxicity models: opportunities for advancement via biomedical engineering techniques. *ALTEX – Alternatives to Animal Experimentation*. 2013;30(3):353-377. <https://doi.org/10.14573/altex.2013.3.353>. Epub 2013 Aug 1.
49. Bodle JC, Rubenstein CD, Phillips ME, Bernacki SH, Qi J, Banes AJ, **Loboa EG**. Primary cilia: the chemical antenna regulating human adipose-derived stem cell osteogenesis. *PLOS ONE*. 2013 May 17;8(5):e62554. doi: 10.1371/journal.pone.0062554.
50. Puetzer J, Williams J, Gillies A, Bernacki S, **Loboa EG**. The effects of cyclic hydrostatic pressure on chondrogenesis and viability of human adipose-and bone marrow-derived mesenchymal stem cells in three-dimensional agarose constructs. *Tissue Engineering Part A*. 2013 Jan;19(1-2):299-306. <https://doi.org/10.1089/ten.TEA.2012.0015>. Epub 2012 Sep 26.
51. Mathieu PS, **Loboa EG**. Cytoskeletal and focal adhesion influences on mesenchymal stem cell shape, mechanical properties, and differentiation down osteogenic, adipogenic, and chondrogenic pathways. *Tissue Engineering Part B Reviews*. 2012 Dec;18(6):436-444. <https://doi.org/10.1089/ten.TEB.2012.0014>. Epub 2012 Aug 6.
52. Samberg ME, **Loboa EG**, Oldenburg SJ, Monteiro-Riviere NA. Silver nanoparticles do not influence stem cell differentiation but cause minimal toxicity. *Nanomedicine (Lond)*. 2012 Aug;7(8):1197-1209. <https://doi.org/10.2217/nmm.12.18>. Epub 2012 May 14.
53. Mohiti-Asli M, Pourdeyhimi B, **Loboa EG**. Release profiles of tricalcium phosphate nanoparticles from poly(L-lactic acid) electrospun scaffolds with single component, core-sheath, or porous fiber morphologies: effects on haSC viability and osteogenic differentiation. *Macromolecular Bioscience*. 2012 July;12(7):893-900. <https://doi.org/10.1002/mabi.201100470>. Epub 2012 May 30. Invited submission.
54. McCullen SD, Gittard SD, Miller PR, Pourdeyhimi B, Narayan RJ, **Loboa EG**. Laser ablation imparts controlled micro-scale pores in electrospun scaffolds for tissue engineering applications. *Annals of Biomedical Engineering*. 2011 Dec;39(12):3021-3030. <https://doi.org/10.1007/s10439-011-0378-2>. Epub 2011 Aug 17.

55. Charoenpanich A, Wall ME, Tucker CJ, Andrews DM, Lalush DS, **Loboa EG**. Microarray analysis of human adipose-derived stem cells in three-dimensional collagen culture: osteogenesis inhibits bone morphogenic protein and Wnt signaling pathways, and cyclic tensile strain causes upregulation of pro-inflammatory cytokine regulators and angiogenic factors. *Tissue Engineering Part A*. 2011 Nov;17(21-22):2615-2627. <https://doi.org/10.1089/ten.tea.2011.0107>. Epub 2011 July 18.
56. Bodle JC, Hanson AD, **Loboa EG**. Adipose-derived stem cells in functional bone tissue engineering: lessons from bone mechanobiology. *Tissue Engineering Part B Reviews*. 2011 June;17(3):195-211. <https://doi.org/10.1089/ten.TEB.2010.0738>. Epub 2011 Apr 8.
57. Mahajan A, Alexander LS, Seabolt BS, Catrambone DE, McClung JP, Odle J, Pfeiler TW, **Loboa EG**, Stahl CH. Dietary calcium restriction affects mesenchymal stem cell activity and bone development in neonatal pigs. *The Journal of Nutrition*. 2011 Mar;141(3):373-379. <https://doi.org/10.3945/jn.110.131193>. Epub 2011 Jan 19.
58. Haslauer CM, Moghe AK, Osborne JA, Gupta BS, **Loboa EG**. Collagen-PCL sheath-core bicomponent electrospun scaffolds increase osteogenic differentiation and calcium accretion of human adipose-derived stem cells. *Journal of Biomaterials Science, Polymer Edition*. 2011;22(13):1695-1712. <https://doi.org/10.1163/092050610X521595>. Epub 2010 Sep 10.
59. McCullen SD, McQuilling JP, Grossfeld RM, Lubischer JL, Clarke LI, **Loboa EG**. Application of low-frequency alternating current electric fields via interdigitated electrodes: effects on cellular viability, cytoplasmic calcium, and osteogenic differentiation of human adipose-derived stem cells. *Tissue Engineering Part C, Methods*. 2010 Dec;16(6):1377-1386. <https://doi.org/10.1089/ten.TEC.2009.0751>. Epub 2010 May 10.
60. Moody B, Haslauer CM, Kirk E, Kannan A, **Loboa EG**, McCarty GS. In situ monitoring of adipogenesis with human-adipose-derived stem cells using surface-enhanced Raman spectroscopy. *Applied Spectroscopy*. 2010 Nov;64(11):1227-1233. doi: 10.1366/000370210793335106.
61. Wang Y, Yao HL, Cui CB, Wauthier E, Barbier C, Costello MJ, Moss N, Yamauchi M, Sricholpech M, Gerber D, **Loboa EG**, Reid LM. Paracrine signals from mesenchymal cell populations govern the expansion and differentiation of human hepatic stem cells to adult liver fates. *Hepatology*. 2010 Oct;52(4):1443-1454. <https://doi.org/10.1002/hep.23829>. Epub 2010 June 30.
62. McCullen SD, Miller PR, Gittard SD, Gorga RE, Pourdeyhimi B, Narayan RJ, **Loboa EG**. In situ collagen polymerization of layered cell-seeded electrospun scaffolds for bone tissue engineering applications. *Tissue Engineering Part C, Methods*. 2010 Oct;16(5):1095-1105. <https://doi.org/10.1089/ten.tec.2009.0753>. Epub 2010 Mar 2.
63. Sumanasinghe RD, Haslauer C, Pourdeyhimi B, **Loboa EG**. Melt spun microporous fibers using poly(lactic acid) and sulfonated copolyester blends for tissue engineering applications. *Journal of Applied Polymer Science*. 2010 Sep 15;117(6):3350-3361. <https://doi.org/10.1002/app.32025>. 2010 May 11.
64. Marvel S, Okrasinski S, Bernacki SH, **Loboa EG***, Dayton PA*. The development and validation of a LIPUS system with preliminary observations of ultrasonic effects on human adult stem cells. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*. 2010 Sep 27;57(9):1977-1984. (*co-corresponding authors.) <https://doi.org/10.1109/TUFFC.2010.1645>.
65. McCullen SD, Haslauer CM, **Loboa EG**. Fiber-reinforced scaffolds for tissue engineering and regenerative medicine: use of traditional textile substrates to nanofibrous arrays. *Journal of Materials Chemistry* (feature article). 2010;20(40):8776-8788. <https://doi.org/10.1039/C0JM01443E>. Epub 2010 Aug 27. Invited submission.

66. Puetzer JL, Petite JN, **Loboa EG**. Comparative review of growth factors for induction of three-dimensional *in vitro* chondrogenesis in human mesenchymal stem cells isolated from bone marrow and adipose tissue. *Tissue Engineering Part B, Reviews*. 2010 Aug;16(4):435-444. <https://doi.org/10.1089/ten.TEB.2009.0705>. Epub 2010 Apr 13.
67. Haslauer CM, Springer JC, Harrysson OL, **Loboa EG**, Monteiro-Riviere NA, Marcellin-Little DJ. In vitro biocompatibility of titanium alloy discs made using direct metal fabrication. *Medical Engineering & Physics*. 2010 July;32(6):645-652. <https://doi.org/10.1016/j.medengphy.2010.04.003>. Epub 2010 May 6.
68. McCullen SD, Zhan J, Onorato ML, Bernacki SH, **Loboa EG**. Effect of varied ionic calcium on human adipose-derived stem cell mineralization. *Tissue Engineering Part A*. 2010 June;16(6):1971-1981. <https://doi.org/10.1089/ten.TEA.2009.0691>. Epub 2010 Mar 1.
69. McCullen SD, Haslauer CM, **Loboa EG**. Musculoskeletal mechanobiology: interpretation by external force and engineered substratum. *Special issue on Cell Mechanobiology of the Journal of Biomechanics* (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.
70. 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.
71. 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.
72. 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>.
73. 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.
74. 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*. 2009 Apr;219(1):77-83. <https://doi.org/10.1002/jcp.21653>. Epub 2008 Dec 16.
75. Sumanasinghe RD, Osborne JA, **Loboa EG**. Mesenchymal stem cell-seeded collagen matrices for bone repair: effects of cyclic tensile strain, cell density, and media conditions on matrix contraction in vitro. *Journal of Biomedical Materials Research, Part A*. 2009 Mar 1;88(3):778-786. <https://doi.org/10.1002/jbm.a.31913>. Epub 2008 Mar 20.
76. Pfeiler TW, Sumanasinghe RD, **Loboa EG**. Finite element modeling of 3D human mesenchymal stem cell-seeded collagen matrices exposed to tensile strain. *Journal of Biomechanics*. 2008 July 19;41(10):2289-2296. <https://doi.org/10.1016/j.jbiomech.2008.04.007>. Epub 2008 Jun 9.
77. Mauldin FW Jr., Haider MA, **Loboa EG**, Behler RH, Euliss LE, Pfeiler TW, Gallippi CM. Monitored steady-state excitation and recovery (MSSER) radiation force imaging using viscoelastic models. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*. 2008 July 15;55(7):1597-1610. <https://doi.org/10.1109/TUFFC.2008.836>.

78. van Aalst JA, Reed CR, Han L, Andrady T, Hromadka M, Bernacki S, Kolappa K, Collins JB, **Loboa EG**. Cellular incorporation into electrospun nanofibers: retained viability, proliferation, and function in fibroblasts. *Annals of Plastic Surgery*. 2008 May;60 (5):577-583. <https://doi.org/10.1097/SAP.0b013e318168db3e>.
79. Rouse JG, Haslauer CM, **Loboa EG**, Monteiro-Riviere NA. Cyclic tensile strain increases interactions between human epidermal keratinocytes and quantum dot nanoparticles. *Toxicology in Vitro*. 2008 Mar;22(2):491-497. <https://doi.org/10.1016/j.tiv.2007.10.010>. Epub 2007 Oct 30.
80. Bernacki SH, Wall ME, **Loboa EG**. Isolation of human mesenchymal stem cells from bone and adipose tissue. *Methods in Cell Biology*. 2008;86:257-278. [https://doi.org/10.1016/S0091-679X\(08\)00011-3](https://doi.org/10.1016/S0091-679X(08)00011-3). Invited submission.
81. Yan D, Gurumurthy A, Wright M, Pfeiler TW, **Loboa EG**, Everett ET. Genetic background influences fluoride's effects on osteoclastogenesis. *Bone*. 2007 Dec; 41 (6):1036-1044. <https://doi.org/10.1016/j.bone.2007.07.018>. Epub 2007 Aug 8.
82. Wall ME, Rachlin A, Otey CA, **Loboa EG**. Human adipose-derived adult stem cells upregulate palladin during osteogenesis and in response to cyclic tensile strain. *American Journal of Physiology, Cell Physiology*. 2007 Nov 1;293(5):C1532-C1538. <https://doi.org/10.1152/ajpcell.00065.2007>. Epub 2007 Aug 8.
83. Finger AR, Sargent CY, Dulaney KO, Bernacki SH, **Loboa EG**. Differential effects on messenger ribonucleic acid expression by bone marrow-derived human mesenchymal stem cells seeded in agarose constructs due to ramped and steady applications of cyclic hydrostatic pressure. *Tissue Engineering*. 2007 June 19;13(6):1151-1158. <https://doi.org/10.1089/ten.2006.0290>. Epub 2007 Apr 18.
84. Wall ME, Bernacki SH, **Loboa EG**. Effects of serial passaging on the adipogenic and osteogenic differentiation potential of adipose-derived human mesenchymal stem cells. *Tissue Engineering*. 2007 June 19;13(6):1291-1298. <https://doi.org/10.1089/ten.2006.0275>. Epub 2007 Mar 29.
85. McCullen SD, Stevens DR, Roberts WA, Clarke LI, Bernacki SH, Gorga RE, **Loboa EG**. Characterization of electrospun nanocomposite scaffolds and biocompatibility with adipose-derived human mesenchymal stem cells. *International Journal of Nanomedicine*. 2007 June;2(2):253-263. Invited submission.
86. Pfeiler TW, Lalush DS, **Loboa EG**. Semiautomated finite element mesh generation methods for a long bone. *Computer Methods and Programs in Biomedicine*. 2007 Mar;85(3):196-202. <https://doi.org/10.1016/j.cmpb.2006.10.009>. Epub 2007 Jan 4.
87. Hanson AD, Wall ME, Pourdeyhimi B, **Loboa EG**. Effects of oxygen plasma treatment on adipose-derived human mesenchymal stem cell adherence to poly(L-lactic acid) scaffolds. *Journal of Biomaterials Science, Polymer Edition*. 2007 Feb;18(11):1387-400. <https://doi.org/10.1163/156856207782246812>.
88. Sumanasinghe RD, Bernacki SH, **Loboa EG**. Osteogenic differentiation of human mesenchymal stem cells in collagen matrices: effect of uniaxial cyclic tensile strain on bone morphogenetic protein (BMP-2) mRNA expression. *Tissue Engineering*. 2006;12(12):3459-3465.
89. **Loboa EG**, Fang TD, Parker DW, Warren SM, Fong KD, Longaker MT, Carter DR. Mechanobiology of mandibular distraction osteogenesis: finite element analyses with a rat model. *Journal of Orthopaedic Research*. 2005 May;23(3):663-670. <https://doi.org/10.1016/j.orthres.2004.09.010>. Epub 2005 Jan 18.
90. Warren SM, Fong KD, Chen CM, **Loboa EG**, Cowan CM, Lorenz HP, Longaker MT. Tools and techniques for craniofacial tissue engineering. *Tissue Engineering*. 2004 July 9;9(2):187-200. <https://doi.org/10.1089/107632703764664666>. Epub 2003 Apr.
91. **Loboa EG**, Fang TD, Warren SM, Lindsey DP, Fong KD, Longaker MT, Carter DR. Mechanobiology of mandibular distraction osteogenesis: experimental analyses with a rat model. *Bone*. 2004 Feb;34(2):336-343. <https://doi.org/10.1016/j.bone.2003.10.012>.

92. **Loboa EG**, Wren TA, Beaupré GS, Carter DR. Mechanobiology of soft skeletal tissue differentiation – a computational approach of a fiber-reinforced poroelastic model based on homogeneous and isotropic simplifications. *Biomechanics and Modeling in Mechanobiology*. 2003 Nov;2(2):83-96. <https://doi.org/10.1007/s10237-003-0030-7>. Epub 2003 July 17.
93. Fong KD, Warren SM, **Loboa EG**, Henderson JH, Fang TD, Cowan CM, Carter DR, Longaker MT. Mechanical strain affects dura mater biological processes: implications for immature calvarial healing. *Plastic and Reconstructive Surgery*. 2003 Oct;112(5):1312-1327. <https://doi.org/10.1097/01.PRS.0000079860.14734.D6>.
94. Fong KD, Nacamuli RP, **Loboa EG**, Henderson JH, Fang TD, Song HM, Cowan CM, Warren SM, Carter DR, Longaker MT. Equibiaxial tensile strain affects calvarial osteoblast biology. *Journal of Craniofacial Surgery*. 2003 May;14(3):348-355. <https://doi.org/10.1097/00001665-200305000-00013>.
95. **Loboa EG**, Beaupré GS, Carter DR. Mechanobiology of initial pseudarthrosis formation with oblique fractures. *Journal of Orthopaedic Research*. 2001 Nov;19(6):1067-1072. [https://doi.org/10.1016/S0736-0266\(01\)00028-6](https://doi.org/10.1016/S0736-0266(01)00028-6).
96. Sarin VK, **Loboa Polefka EG**, Beaupré GS, Kiratli BJ, Carter DR, and van der Meulen MC. DXA-derived section modulus and bone mineral content predict long-bone torsional strength. *Acta Orthopaedica Scandinavica*. 1999;70(1):71-76. <https://doi.org/10.3109/17453679909000962>. Epub 2009 July 8.

Book Chapters

1. Nordberg RC, Bodle JC, **Loboa EG**. Mechanical stimulation of adipose-derived stem cells for functional tissue engineering of the musculoskeletal system via cyclic hydrostatic pressure, simulated microgravity, and cyclic tensile strain. In: *Adipose-Derived Stem Cells: Methods and Protocols, Third Edition, Part IV Analytical Assays and Applications of ASC*, Chapter 25, pp. 349-365. Humana Press, New York, NY (2024). <https://doi.org/10.1007/978-1-0716-3762-3>. Invited submission
2. Nordberg RC, Bodle JC, **Loboa EG**. Mechanical stimulation of adipose-derived stem cells for functional tissue engineering of the musculoskeletal system via cyclic hydrostatic pressure, simulated microgravity, and cyclic tensile strain. In: *Adipose-Derived Stem Cells: Methods in Molecular Biology, vol 1773*. Bruce A. Bunnell and Jeffrey M. Gimble, Chapter 18, pp. 215-230. Humana Press, New York, NY (2018). https://doi.org/10.1007/978-1-4939-7799-4_18. Invited submission.
3. Charoenpanich A, Bodle J, **Loboa EG**. The role of cyclic tensile strain on osteogenesis and angiogenesis in human mesenchymal stem cells. In: *The Biology and Therapeutic Application of Mesenchymal Cells*, ed. M. Kerry Atkinson, pp. 208-221. John Wiley Publishers (2016). Invited submission.
4. Wall ME, Dymont NA, Bodle J, Volmer J, **Loboa EG**, Cederlund A, Fox AM, Banes AJ. Cell signaling in tenocytes: response to load and ligands in health and disease. *Metabolic Influences on Risk for Tendon Disorders (Part of the Advances in Experimental Medicine and Biology – Volume 920)*, ed. Cham Springer, pp. 79-95. Springer International Publishing, Switzerland (2016). <https://doi.org/10.1007/978-3-319-33943-6>. Epub 2016 Aug 18.
5. Mohiti-Asli M, **Loboa EG**. Nanofibrous smart bandages for wound care. In: *Wound Healing Biomaterials, Volume 2*, ed. Magnus Agren, pp. 481-497. Elsevier Ltd. (2016). Invited submission.
6. McCullen SD, Hanson AD, Lucia LA, **Loboa EG**. Development and application of naturally-renewable scaffold materials for bone tissue engineering. In: *The Nanoscience and Technology of Renewable Biomaterials*, ed. L Lucia, O Rojas, pp. 293-306. Blackwell Publishing Ltd. (2009). Invited submission.
7. Bernacki SH, Wall ME, **Loboa EG**. Isolation of human mesenchymal stem cells from bone and adipose tissue. In: *Stem Cell Culture (Methods in Cell Biology, Volume 86)*, pp. 257-278 (2008). Invited submission.

8. van Aalst JA, Kollapa KK, **Loboa EG**, Sadove AM. Alveolar bone grafting. In: *Current Reconstructive Surgery*, ed. Joseph Serletti, Joseph Losee, (2007).
9. Wren TAL, **Loboa EG**, Beaupré GS, and Carter DR. Mechanobiology of skeletal tissue differentiation and regeneration. In: *Recent Research Developments in Biomechanics*. Transworld Research Network, Kerala, India (2003).
10. Carter DR, **Loboa Polefka EG**, and Beaupré GS. Mechanical influences on skeletal regeneration and bone resorption. In: *Bone Engineering*, ed. JE Davies, pp. 358-368. University of Toronto, Toronto, Canada (2000).
11. Carter DR, **Loboa Polefka EG**, and Beaupré GS. Mechanical influences on skeletal regeneration. In: *Human Biomechanics and Injury Prevention*, ed. J Kajzer, E Tanaka, H Yamada, pp. 129-136. Springer-Verlag, Tokyo (2000).

Refereed Conference Proceedings

1. Mellor LF, Nordberg RC, Huebner P, Mohiti-Asli M, Taylor MA, Efirid W, Oxford JT, Spang J, Shirwaiker RA, **Loboa EG** (Aug 2018). Investigation of multi-phasic 3D-bioplotted scaffolds for site-specific chondrogenic and osteogenic differentiation of human adipose derived stem cells for osteochondral tissue engineering application. Musculoskeletal Biology and Bioengineering Gordon Research Seminar (GRS) Frontiers of Science at Proctor Academy: Insight into Musculoskeletal Tissue Interfaces in Homeostasis and Disease. Andover, NH.
2. Bago JR, Pegna GJ, Okolie O, Mohiti-Asli M, **Loboa EG**, Hingtgen SD, Moore K, Ainslie K (Oct 2017). Biocompatible electrospun nanofibrous scaffolds enhance tumoricidal stem cell therapy in surgical model of glioblastoma resection and recurrence. 2017 Biomedical Engineering Society (BMES) Annual Meeting. Phoenix, AZ.
3. Nordberg R, Wang H, Wu Q, **Loboa EG** (Sep 2017). Corin is a key regulator of endochondral ossification and bone development via modulation of VEGF-A expression. American Society for Bone and Mineral Research (ASBMR) 2017 Annual Meeting. Denver, CO. Podium Presentation.
4. Huebner P, Spang JT, **Loboa EG**, Shirwaiker RA (May 2017). Optimizing the macro-scale geometry of 3D biofabricated osteochondral scaffolds to match the implantation characteristics of native tissue autografts. Institute of Industrial & Systems Engineers Annual Conference and Expo 2017. Pittsburgh, PA.
5. Nordberg RC, Mellor LF, Huebner P, Sonnenberg S, Taylor MA, Efirid W, Spang J, Shirwaiker RA, **Loboa EG** (Mar 2017). A novel 3D-bioplotted osteochondral scaffold for site specific human adipose stem cell differentiation. Orthopaedic Research Society (ORS) 2017 Annual Meeting. San Diego, CA.
6. Nordberg RC, Bodle JC, **Loboa EG** (Dec 2016). Primary cilia and canonical Wnt-signaling crosstalk to modulate osteogenic differentiation in human adipose stem cells in 3D loading conditions. 2016 TERMIS Americas Annual Conference and Exhibition. San Diego, CA. Podium Presentation.
7. Mohiti-Asli M, Pourdeyhimi B, **Loboa EG** (Apr 2016). In vivo evaluation of silver ion releasing scaffolds for treatment of infected wounds using a porcine model. 28th Annual Meeting of the Wound Healing Society. Atlanta, GA. Podium Presentation.
8. Mellor LF, Trevisan B, Taylor MA, Karus AR, Donahue H, Oxford JT, **Loboa EG** (Feb 2016). Sclerostin inhibition in hindlimb unloading model: good news for bone, bad news for cartilage. 2016 NASA Human Research Program IWS Meeting. Houston, TX. Podium Presentation.

9. Mohiti-Asli M, Molina C, Pourdeyhimi B, **Loboa EG** (Nov 2015). Silver releasing scaffolds for treatment/prevention of osteomyelitis. 2015 Annual Meeting of the North Carolina Tissue Engineering and Regenerative Medicine Society. Winston-Salem, NC. Podium Presentation.
10. Steward A, Cole J, Ligler F, **Loboa EG** (Nov 2015). Cyclic tensile strain and co-culture of human MSCs with HUVECs synergistically enhance osteogenesis. 2015 Annual Meeting of the North Carolina Tissue Engineering and Regenerative Medicine Society. Winston-Salem, NC. Podium Presentation.
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). Using human adipose derived stem cells and optimized 3D bioprinted scaffolds for osteochondral tissue engineering. 2015 4th TERMIS World Congress. Boston, MA.
17. Nordberg RC, Matthew FW, Zhang J, Starly B, **Loboa EG** (Sep 2015). Age-dependent regulation of hASC osteogenesis quantified via electrical cell-substrate impedance spectroscopy. 2015 4th TERMIS World Congress. Boston, MA.
18. Sonnenberg S, Taylor MA, Mellor L, Mehendale S, Shirwaiker R, **Loboa EG** (Apr 2015). Hybrid scaffold-reinforced extracellular matrix hydrogels for cartilage tissue engineering. 2015 Annual Meeting of the Society for Biomaterials. Charlotte, NC.
19. Mohiti-Asli M, Molina C, Rietzler K, Pourdeyhimi B, **Loboa EG** (Apr 2015). Highly elastic nanofibrous scaffolds for skin tissue engineering applications. 2015 Annual Meeting of the Society for Biomaterials. Charlotte, NC.
20. Mellor LF, Mehendale S, Mohiti-Asli M, Taylor MA, Pedersen C, Shirwaiker RA, **Loboa EG** (Mar 2015). Evaluation of micro and nano-scale scaffold architectures for osteochondral tissue engineering. 2015 Annual Meeting of the Orthopaedic Research Society. Las Vegas, NV.
21. Mellor LF, Taylor MA, Baker T, Hiremath M, Oxford JT, **Loboa EG** (Jan 2015). Crosstalk between subchondral bone and articular cartilage in reduced gravity may contribute to catastrophic joint damage. NASA HRP (Human Research Project) 2015 Annual Meeting. Galveston, TX.

22. Nordberg R, Mellor L, Orndorff D, **Lobao EG** (Jan 2015). LRP receptors in canonical Wnt signaling are responsive to microgravity and regulate cartilage homeostasis. NASA HRP (Human Research Project) 2015 Annual Meeting. Galveston, TX.
23. Nordberg R, Mellor L, Orndorff D, **Lobao EG** (Jan 2015). The roles of LRP4/5/6 in the regulation of cartilage homeostasis in unloading conditions – elucidating cartilage degeneration in disuse osteoarthritis. Biomedical Engineering Society: Cellular and Molecular Bioengineering 2015 Annual Meeting. St. Thomas, USVI.
24. Mellor LF, Taylor MA, Baker T, Hiremath M, Oxford JT, **Lobao 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. Sonnenberg, S, Mellor L, Taylor, MA, **Lobao EG** (Jan 2015). Thermo-responsive, injectable extracellular matrix scaffold for cartilage regeneration. Biomedical Engineering Society: Cellular and Molecular Bioengineering 2015 Annual Meeting. St. Thomas, USVI.
26. Mohiti-Asli M, Murphy S, Saha S, Pourdeyhimi B, Atala A, **Lobao EG** (Jan 2015). Commercial translation of novel biomaterials: development of analgesic, anti-inflammatory bandages and evaluation of industry standard scale-up. Biomedical Engineering Society: Cellular and Molecular Bioengineering 2015 Annual Meeting. St. Thomas, USVI. Podium Presentation.
27. Tuin SA, Pourdeyhimi B, **Lobao EG** (Jan 2015). From textiles to tissues: economical, scalable, textile industry standard nonwovens for tissue engineering applications. Biomedical Engineering Society: Cellular and Molecular Bioengineering 2015 Annual Meeting. St. Thomas, USVI. Podium Presentation.
28. Cai S, Bodle J, Mathieu PS, Hamouda M, McCarty G, **Lobao EG** (Jan 2015). Are primary cilia sensors of electric field stimulation? Biomedical Engineering Society: Cellular and Molecular Bioengineering 2015 Annual Meeting. St. Thomas, USVI.
29. Mohiti-Asli M, Saha S, Pourdeyhimi B, **Lobao EG** (Dec 2014). High throughput electrospinning of anti-inflammatory nanofibers for wound healing applications. 2014 Annual Meeting of the Tissue Engineering and Regenerative Medicine International Society (TERMIS). Washington, DC.
30. Cai S, Sheshadri P, Shirwaiker RA, **Lobao EG** (Dec 2014). Novel three dimensional polycaprolactone/hydroxyapatite scaffold with a shifted structure for bone tissue engineering applications. 2014 Annual Meeting of the Tissue Engineering and Regenerative Medicine International Society (TERMIS). Washington, DC.
31. Mellor LF, Williams J, Guilak F, Koh S, Piedrahita J, **Lobao EG** (Dec 2014). Effects of extracellular calcium in human and porcine adipose derived stem cell differentiation. 2014 Annual Meeting of the Tissue Engineering and Regenerative Medicine International Society (TERMIS). Washington, DC.
32. Tuin SA, Pourdeyhimi B, **Lobao EG** (Oct 2014). Economical, scalable, textile industry standard nonwoven manufacturing for tissue engineering. Proceedings of the 16th Annual North Carolina Tissue Engineering and Regenerative Medicine Society Conference. Durham, NC. Podium Presentation.
33. Mellor L, Williams J, Guilak F, Koh S, Piedrahita J, **Lobao EG** (Sep 2014). Effects of extracellular calcium in human and porcine adipose derived stem cell differentiation for osteochondral tissue engineering. 2014 Annual Meeting of the American Society of Bone and Mineral Research. Houston, TX.

34. Mellor L, Baker TL, Hiremath JM, Oxford JRT, **Loboa EG** (Sep 2014). The effects of reduced gravity on subchondral bone and articular cartilage: are they good neighbors? 2014 Annual Meeting of the American Society of Bone and Mineral Research. Houston, TX.
35. Mellor LF, Baker T, Hiremath M, **Loboa EG**, Oxford JT (Apr 2014). Effects of spaceflight on subchondral bone and articular cartilage health: are they good neighbors? World Congress on Osteoporosis, Osteoarthritis and Musculoskeletal Diseases. Seville, Spain.
36. Bodle JC, Tuin S, Charoenpanich A, McCullen S, Marvel S, **Loboa EG** (Mar 2014). Functional tissue engineering: mechanobiology of adipose derived stem cells. 18th Annual Regenerative Medicine Workshop. Hilton Head Island, SC. Podium Presentation.
37. Mellor L, Catlin L, Baker T, Hiremath M, **Loboa EG**, Oxford JT (Feb 2014). Sclerostin is up-regulated in articular chondrocytes exposed to simulated microgravity. 2014 NASA Human Research Program Investigators' Workshop. Houston, TX.
38. Mohiti-Asli M, Pourdeyhimi B, **Loboa EG** (Nov 2013). Skin tissue engineering for the infected wound site: evaluations of PLA nanofibers and novel approach for silver ion release in a co-culture system of keratinocytes and Staphylococcus aureus. TERMIS 2013 Annual Meeting. Atlanta, GA.
39. Teeter SD, Charoenpanich A, **Loboa EG** (Nov 2013). PDLIM4 and Corin are key regulators of hMSC osteogenesis and terminal differentiation in hypoxic conditions. TERMIS 2013 Annual Meeting. Atlanta, GA.
40. Tuin SA, Cunningham DJ, Pfeiler TW, Bernacki SH, Pourdeyhimi B, **Loboa EG** (Nov 2013). 3-D computational modeling of fluid flow over winged fibers: winged fibers enhance shear stress and Runx2 expression in hASC. Proceedings of the 2013 Annual Joint Meeting of the Materials Research Society and Materials Information Society. Raleigh, NC.
41. Mellor L, Catlin L, Baker T, Hiremath M, **Loboa EG**, Oxford JT (Oct 2013). Sclerostin is up-regulated in articular chondrocytes exposed to simulated microgravity. American Society of Bone and Mineral Research 2013 Annual Meeting. Baltimore, MD.
42. Mohiti-Asli M, Murphy S, Saha S, Pourdeyhimi B, Atala A, **Loboa EG** (Oct 2013). Anti-inflammatory nanofibers for wound healing applications. 2013 North Carolina Tissue Engineering and Regenerative Medicine Society Conference. Winston-Salem, NC. Podium Presentation.
43. Cai S, Asli M, Yang Y, **Loboa EG** (Oct 2013). Pure (100%) soyprotein electrospun fibers for wound healing applications. 2013 North Carolina Tissue Engineering and Regenerative Medicine Society Conference. Winston-Salem, NC.
44. Bodle J, Williams R, Atchison L, Bernacki S, **Loboa EG** (Oct 2013). The combined effects of simulated microgravity and radiation on cartilage health. 2013 NC Cartilage-Arthritis Research Alliance (NC-CARA) Meeting. Winston-Salem, NC.
45. Mellor L, Willey J, Hiremath M, **Loboa EG**, Oxford JT (Oct 2013). Effects of extracellular calcium in human and porcine adipose derived stem cell differentiation. 2013 North Carolina Tissue Engineering and Regenerative Medicine Society Conference. Winston-Salem, NC. Podium Presentation.
46. Tuin SA, Cunningham DJ, Pfeiler TW, Bernacki SH, Pourdeyhimi B, **Loboa EG** (Oct 2013). 3-D computational modeling of fluid flow over winged fibers: winged fibers enhance shear stress and Runx2 expression in hASC. 2013 North Carolina Tissue Engineering and Regenerative Medicine Society Conference. Winston-Salem, NC.

47. Mellor L, Williams J, Guilak F, Koh S, Piedrahita J, **Loboa EG** (Oct 2013). Effects of extracellular calcium in human and porcine adipose derived stem cell differentiation. 2013 North Carolina Tissue Engineering and Regenerative Medicine Society Conference. Winston-Salem, NC. Podium Presentation.
48. Tuin S, Miller S, Cunningham D, Pfeiler TW, Bernacki SH, Pourdeyhimi B, **Loboa EG** (Sep 2013). Winged fiber scaffolds enhance hASC proliferation, osteogenesis, and mechanosensitivity. BMES 2013 Annual Meeting. Seattle, WA. Podium Presentation.
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** (Sep 2013). Finite element model exploring the role of primary cilia length adaptation on hASC in response to mechanical load. BMES 2013 Annual Meeting. Seattle, WA.
52. Bodle JC, Williams RB, Rubenstein CD, **Loboa EG** (Feb 2013). Adipose stem cell primary cilia exhibit conformational changes in response to chemical and mechanical stimulation. 2013 Annual Meeting of the Nordic Cilia and Centrosome Network. Sigtuna, Sweden. Podium Presentation.
53. Tuin SA, Williams J, Mohiti-Asli M, Dent M, Kannan A, Hluck B, **Loboa EG** (Jan 2013) Osteochondral tissue engineering using human adipose derived stem cells. 2013 Annual Meeting of the Orthopaedic Research Society. San Antonio, TX.
54. Lott LQ, Mohiti-Asli M, **Loboa EG** (Nov 2012). Electrospinning PLA nanofibers containing ibuprofen for wound healing applications. 2012 Annual Biomedical Research Conference for Minority Students (ABRCMS).
55. Mohiti-Asli M, Pourdeyhimi B, **Loboa EG** (Oct 2012). Antimicrobial PLA nanofibers releasing silver ions as a skin substitute for burn wound healing applications. 2012 Annual Meeting of the Biomedical Engineering Society. Atlanta, GA. Podium Presentation.
56. Czernuszewicz T, Charoenpanich A, **Loboa EG**, Gallippi CM (Oct 2012). Nondestructive mechanical testing of human knee meniscus allografts using MSSER ultrasound. 2012 IEEE International Ultrasonics Symposium. Dresden, Germany.
57. Bodle JC, Mathieu PS, Phillips ME, Rubenstein C, Bernacki SH, **Loboa EG** (Oct 2012). Primary cilia on adipose-derived stem cells in 3D culture: what is the structure-function relationship? 2012 Annual Meeting of the Biomedical Engineering Society. Atlanta, GA. Podium Presentation.
58. Bodle JC, Phillips ME, Rubenstein C, **Loboa EG** (Sep 2012). Primary cilia: does cilium architecture predict lineage specification in adipose-derived stem cells. TERMIS World 2012 Conference. Vienna, Austria. Podium Presentation.
59. Charoenpanich A, Wall ME, Tucker CJ, Andrews DMK, Lalush DS, Dirschl DR, **Loboa EG** (Sep 2012). Microarray analysis of human MSC in 3D collagen culture: 10% uniaxial cyclic tensile strain upregulates genes associated with musculoskeletal and cardiovascular development. TERMIS World 2012 Conference. Vienna, Austria.
60. Mohiti-Asli M, Pourdeyhimi B, **Loboa EG** (Sep 2012). Silver releasing nanofibrous skin substitute. 2012 Annual Meeting of the North Carolina Tissue Engineering and Regenerative Medicine Society. Raleigh, NC.

61. Williams RB, Bodle JC, Rubenstein CD, **Loboa EG** (Sep 2012). Adipose stem cell primary cilia exhibit conformational changes in response to chemical and mechanical stimulation. 2012 Annual Meeting of the North Carolina Tissue Engineering and Regenerative Medicine Society. Raleigh, NC.
62. Mathieu PS, Bodle JC, **Loboa EG** (Sep 2012). Computational modeling of primary cilia of various conformation on cells exposed to 3D tensile strain. 2012 Annual Meeting of the North Carolina Tissue Engineering and Regenerative Medicine Society. Raleigh, NC.
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 Regenerative Medicine Conference. Hilton Head Island, SC. Podium Presentation.
67. Charoenpanich A, Wall ME, Tucker CJ, Andrews D, Lalush DS, **Loboa EG** (Feb 2012). Microarray analysis of human mesenchymal stem cells in 3D collagen culture: 10% uniaxial cyclic tensile strain upregulates genes associated with differentiation of bone cell lines in the absence of soluble osteogenic inductive factors. ORS 2012 Annual Meeting. San Francisco, CA. Podium Presentation.
68. Mohiti-Asli M, Pourdeyhimi B, **Loboa EG** (Feb 2012). Creation of core-sheath PLA nanofibers doped with tricalcium phosphate as a controlled release system for bone tissue engineering applications. ORS 2012 Annual Meeting. San Francisco, CA.
69. Bodle JC, Rubenstein CD, Phillips ME, Charoenpanich A, Bernacki SH, **Loboa EG** (Feb 2012). Primary cilia exhibit 2D and 3D sensitivity to substrate environment: implications for adipose stem cells in musculoskeletal tissue engineering. ORS 2012 Annual Meeting. San Francisco, CA.
70. Charoenpanich A, Bodle JC, McCullen SD, Bernacki SH, **Loboa EG** (Jan 2012). Functional bone tissue engineering using human adipose derived stem cells and biomimetic physical stimuli. 2012 BMES-SPRBM Conference on Cellular and Molecular Bioengineering. San Juan, Puerto Rico. Podium Presentation.
71. Charoenpanich A, Williams J, Spang J, Bernacki SH, **Loboa EG** (Dec 2011). Proliferation and chondrogenic differentiation of human adipose-derived stem cells in a needle-punched, porous, decellularized human allograft-derived meniscus. The TERMIS North America 2011 Annual Conference & Exposition. Houston, TX.
72. Bodle JC, Williams JM, Phillips ME, SooHoo JR, Sakhare AR, Bernacki SH, **Loboa EG** (Dec 2011). Novel tensile strain bioreactor for analysis of primary cilia-extracellular matrix interactions in adipose-derived stem cells. The TERMIS North America 2011 Annual Conference & Exposition. Houston, TX.

73. Charoenpanich A, Spang J, **Loboa EG** (Nov 2011). Cell seeding, migration, proliferation and alignment of human adipose derived stem cells in a decellularized needle punched porous human allograft meniscus. 2011 Annual Meeting of the North Carolina Tissue Engineering and Regenerative Medicine Society. Winston-Salem, NC. Podium Presentation.
74. Shi H, Charoenpanich A, Pourdeyhimi B, **Loboa EG** (Nov 2011). Human adipose derived stem cell migration and proliferation in stacked, porous, poly(L-lactic acid) scaffolds. 2011 Annual Meeting of the North Carolina Tissue Engineering and Regenerative Medicine Society. Winston-Salem, NC.
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 Annual Meeting of the North Carolina Tissue Engineering and Regenerative Medicine Society. Winston-Salem, NC.
80. Mohiti-Asli M, Pourdeyhimi B, **Loboa EG** (Nov 2011). Development of antimicrobial electrospun scaffolds for wound healing applications. 2011 Annual Meeting of the North Carolina Tissue Engineering and Regenerative Medicine Society. Winston-Salem, NC.
81. Bodle JC, Phillips ME, Rubenstein C, Charoenpanich A, Bernacki SH, **Loboa EG** (Oct 2011). Primary cilia modulate induction of osteogenic differentiation in adipose derived stem cells. 2011 Annual Meeting of the Biomedical Engineering Society. Hartford, CT. Podium Presentation.
82. Mohiti-Asli M, Pourdeyhimi B, **Loboa EG** (Oct 2011). Creation of porous PLA nanofibers doped with tricalcium phosphate for bone tissue engineering applications. 2011 Annual Meeting of the Biomedical Engineering Society. Hartford, CT.
83. Charoenpanich A, Spang J, **Loboa EG** (Oct 2011). Human adipose derived stem cell seeding, migration, and proliferation in a needle punched porous human allograft meniscus. 2011 Annual Meeting of the Biomedical Engineering Society. Hartford, CT.
84. Mohiti-Asli M, Saha S, Pourdeyhimi B, **Loboa EG** (Oct 2011). Incorporation of different drugs in PLA electrospun nanofibers for drug delivery applications. 2011 Annual Meeting of the Biomedical Engineering Society. Hartford, CT.
85. Bakshi S, Jiang X, **Loboa EG** (Oct 2011). Cell characterization using high frequency ultrasound. 2011 IEEE International Ultrasonics Symposium. Orlando, FL. Podium Presentation.

86. **Loboa EG** (Aug 2011). Nanofibrous and Nanocomposite Materials and Human Adipose-Derived Stem Cells: Functional Bone Tissue Engineering Applications. Nanofibers for the 3rd Millennium Conference. Raleigh, NC. Podium Presentation.
87. Charoenpanich A, Bodle JC, McCullen SD, Pfeiler TW, Bernacki SH, **Loboa EG** (Apr 2011). Human adipose derived stem cells in functional bone tissue engineering. 2nd Annual Translational Regenerative Medicine Forum. Washington, DC.
88. Charoenpanich A, Bodle JC, McCullen SD, Pfeiler TW, Bernacki SH, **Loboa EG** (Mar 2011). Functional bone tissue engineering using human adipose-derived stem cells and biomimetic physical stimuli. 15th Annual Hilton Head Workshop: Regenerative Medicine Innovations for Clinical Applications. Hilton Head, SC. Podium Presentation.
89. Charoenpanich A, Bodle JC, McCullen SD, Pfeiler TW, Bernacki SH, **Loboa EG** (Jan 2011). Functional bone tissue engineering using human adipose-derived stem cells and biomimetic physical stimuli. 2011 Annual Meeting of the BMES-SPRBM Society. Miami, FL.
90. Charoenpanich A, Wall ME, Tucker CJ, Andrews DMK, Lalush DS, **Loboa EG** (Dec 2010). Microarray analysis of human adipose-derived stem cells in 3D collagen scaffolds undergoing osteogenic differentiation in the presence and absence of cyclic tensile strain. The TERMIS North America 2010 Annual Conference & Exposition. Orlando, FL. Finalist student poster competition.
91. Bodle JC, Rubenstein CD, Phillips ME, Bernacki SH, **Loboa EG** (Dec 2010). The primary cilium: a receptor mediator of osteogenesis in human adipose derived stem cells? The TERMIS North America 2010 Annual Conference & Exposition. Orlando, FL.
92. Mohiti-Asli M, Pourdeyhimi B, **Loboa EG** (Nov 2010). Manufacturing core-sheath nanofiber scaffolds containing silver nanoparticles for tissue engineering applications. Proceedings of the 12th Annual North Carolina Tissue Engineering and Regenerative Medicine Conference. Raleigh, NC. Podium Presentation.
93. Kannan A, Cunningham DJ, Bodle JC, Charoenpanich A, Miller P, Narayan R, Bernacki SH, **Loboa EG** (Nov 2010). The effect of cyclic hydrostatic pressure on chondrogenic gene expression of hASC seeded in novel 3D PLA constructs. Proceedings of the 12th Annual North Carolina Tissue Engineering and Regenerative Medicine Conference. Raleigh, NC.
94. Cunningham DJ, Jin E, Pfeiler WT, Bodle JC, Charoenpanich A, Bernacki SH, Pourdeyhimi B, **Loboa EG** (Nov 2010). Viability and differentiation of mixed donor human adipose-derived stem cells (hASC) in a fluid shear stress environment. Proceedings of the 12th Annual North Carolina Tissue Engineering and Regenerative Medicine Conference. Raleigh, NC.
95. Hardin JW, Bodle JC, Charoenpanich A, Bernacki SH, **Loboa EG** (Nov 2010). Evaluation of age-related effects on human adipose-derived stem cells osteogenic potential using age-matched superlots. Proceedings of the 12th Annual North Carolina Tissue Engineering and Regenerative Medicine Conference. Raleigh, NC.
96. Charoenpanich A, Spang J, **Loboa EG** (Nov 2010). hASC seeding, migration, and proliferation in a porous allograft-derived meniscus scaffold. Annual Proceedings of the 12th North Carolina Tissue Engineering and Regenerative Medicine Conference. Raleigh, NC.
97. Charoenpanich A, Wall ME, Tucker CJ, Andrews DMK, Lalush DS, **Loboa EG** (Nov 2010). Microarray analysis of hASC in 3D collagen culture: 10% uniaxial cyclic tensile strain causes upregulation of angiogenic factors. Annual Proceedings of the 12th North Carolina Tissue Engineering and Regenerative Medicine Conference. Raleigh, NC.

98. Bodle JC, Rubenstein CD, Phillips ME, Bernacki SH, **Loboa EG** (Nov 2010). Primary cilia critically modulate human adipose derived stem cell (hASC) proliferation and differentiation signaling. Annual Proceedings of the 12th North Carolina Tissue Engineering and Regenerative Medicine Conference. Raleigh, NC.
99. Bodle JC, Sakhare AR, Qi J, Bernacki SH, Banes AJ, **Loboa EG** (Oct 2010). The primary cilium: a potential receptor antenna in human adipose derived stem cells? Proceedings of the BMES 2010 Annual Meeting. Austin, TX. Podium Presentation.
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 Ca²⁺ 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, Banas 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. McQuilling JP, McCullen SD, Gorga RE, Grossfeld RM, Lubischer JL, Clarke LI, van Aalst JA, **Loboa EG** (Nov 2009). Electrical stimulation and ATP increase Cytoplasmic Ca²⁺ in adult human adipose derived stem cells. Proceedings of the 11th Annual North Carolina Tissue Engineering and Regenerative Medicine Conference. Winston-Salem, NC.
114. McCullen SD, Onorato ML, Bernacki SH, **Loboa EG** (Nov 2009). Effect of varied extracellular Ca²⁺ on human adipose derived stem cell mineral formation. Proceedings of the 11th Annual North Carolina Tissue Engineering and Regenerative Medicine Conference. Winston-Salem, NC.
115. Lim JH, McCullen SD, **Loboa EG**, Olby NJ (Oct 2009). Effects of Extremely Low Frequency Electric Fields on Fetal Porcine Neural Progenitor Cells. Proceedings of Neuroscience 2009, Society for Neuroscience 39th Annual Meeting. Chicago, IL. Podium Presentation.
116. Marvel S, **Loboa EG**, Dayton PA (Sep 2009). Applications of low intensity pulsed ultrasound for functional bone tissue engineering using adult stem cells. Transactions of the IEEE International Ultrasonics Symposium. Rome, Italy. Podium Presentation.
117. Haslauer CM, Springer JC, Marcellin-Little DJ, Harrysson O, **Loboa EG** (Feb 2009). In vitro response of human adipose-derived adult stem cells to EBM-processed titanium implants. Proceedings of the 55th Annual Meeting of the Orthopaedic Research Society. Las Vegas, NV.
118. McCullen SD, McQuilling JP, Gorga RE, Grossfeld RM, Clarke LI, **Loboa EG** (Feb 2009). Electric field exposure induces magnitude-dependent Ca²⁺ oscillations in human adipose-derived adult stem cells. Proceedings of the 55th Annual Meeting of the Orthopaedic Research Society. Las Vegas, NV.
119. McCullen SD, Zhu Y, Gorga RE, **Loboa EG** (Feb 2009). Effect of electrospun PLA/TCP scaffolds on osteogenesis of human adipose-derived adult stem cells. Proceedings of the 55th Annual Meeting of the Orthopaedic Research Society. Las Vegas, NV.
120. Pfeiler TW, Sumanasinghe RD, **Loboa EG** (Feb 2009). Computational and experimental analyses of effects of varied tensile strains on calcium production by human adipose-derived adult stem cells. Proceedings of the 55th Annual Meeting of the Orthopaedic Research Society. Las Vegas, NV.
121. Puetzer JL, Finger AR, Bernacki SH, **Loboa EG** (Feb 2009). Chondrogenic effects of cyclic hydrostatic pressure on human adipose derived stem cells in 3-D agarose constructs. Proceedings of the 55th Annual Meeting of the Orthopaedic Research Society. Las Vegas, NV.
122. McCullen SD, McQuilling JP, Gorga RE, Grossfeld RM, Clarke LI, van Aalst JA, **Loboa EG** (Nov 2008). Electric Field Exposure Induces Frequency-Dependent Ca²⁺ Oscillations in Human Adipose-Derived Adult Stem Cells. Proceedings of the 10th Annual North Carolina Tissue Engineering and Regenerative Medicine (NCTERM) Conference. Raleigh, NC. Podium Presentation.
123. Bodle JC, Vidt ME, SooHoo JR, Haslauer CM, McCulloch RC, **Loboa EG** (Nov 2008). Tensile Strain Bioreactor with Force Feedback and Custom Incubator for Straining Cells in Three-Dimensional Culture. Proceedings of the 10th Annual North Carolina Tissue Engineering and Regenerative Medicine (NCTERM) Conference. Raleigh, NC.

124. Charoenpanich A, Puvanesarajah V, Goicoechea G, Bernacki SH, Otey CA, van Aalst JA, **Loboa EG** (Nov 2008). Palladin Expression of Human Adipose-Derived Adult Stem Cells in 3D Collagen Gel Culture. Proceedings of the 10th Annual North Carolina Tissue Engineering and Regenerative Medicine (NCTERM) Conference. Raleigh, NC.
125. Haslauer CH, Pourdeyhimi B, **Loboa EG** (Nov 2008). Nonwoven Structures with Interconnected Pore Configuration for Bone Tissue Engineering. Proceedings of the 10th Annual North Carolina Tissue Engineering and Regenerative Medicine (NCTERM) Conference. Raleigh, NC.
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 Carolina Tissue Engineering and Regenerative Medicine (NCTERM) Conference. Raleigh, NC.
127. Puetzer JL, Finger AR, Bernacki SH, van Aalst J, **Loboa EG** (Nov 2008). Effects of Cyclic Hydrostatic Pressure on Human Adipose and Bone Marrow Derived Stem Cells in 3-D Agarose Constructs. Proceedings of the 10th Annual North Carolina Tissue Engineering and Regenerative Medicine (NCTERM) Conference. Raleigh, NC. Podium Presentation.
128. Springer JC, Haslauer C, Harrysson OL, **Loboa EG**, Marcellin-Little D (Nov 2008). Approach to Improving the Tissue Interfact for Load Bearing Osseointegrated Prosthesis via Cellular Response Analysis. Proceedings of the 10th Annual North Carolina Tissue Engineering and Regenerative Medicine (NCTERM) Conference. Raleigh, NC.
129. Reed CR, Han L, Caballero M, Andrady T, Saba SC, **Loboa EG**, van Aalst JA (Nov 2008). Comparison of Fat- and Umbilical Cord-Derived Mesenchymal Stem Cell Osteoinduction and Polycaprolactone and Poly(lactic-co-glycolytic) Acid Nanofibers. Proceedings of the 10th Annual North Carolina Tissue Engineering and Regenerative Medicine (NCTERM) Conference, Raleigh, NC. Podium Presentation.
130. McCullen SD, Hanson AD, Ramirez M, Cao X, **Loboa EG**, Lucia LA (Aug 2008). Renewable Biomedical Scaffolds for Tissue Augmentation. Amazon Meeting on Green Materials and Processes, Universidade Federal do Amazonas (UFAM), Manaus – Amazonas.
131. Reed CR, Han Li, Andrady A, Caballero M, Jack MC, Collins JB, Saba SC, **Loboa EG**, van Aalst JA (July 2008). Composite Tissue Engineering on Polycaprolactone Nanofiber Scaffolds. Proceedings of the 51st Annual Meeting of the Southeastern Society of Plastic and Reconstructive Surgeons, Boca Raton, FL. Podium Presentation.
132. Parsons GN, Hyde KG, McCullen SD, **Loboa EG** (June-July 2008). Atomic Layer Deposition for Biocompatible Coating and Bio-Functionalization of Fibrous Materials. Proceedings of the AVS Topical Conference on Atomic Layer Deposition (ALD 2008). Bruges, Belgium. Podium Presentation.
133. Pfeiler TW, Sumanasinghe RD, Banes AJ, **Loboa EG** (Mar 2008). Finite Element Modeling of 3D Human Mesenchymal Stem Cell-Seeded Collagen Matrices. Proceedings of the 54th Annual Meeting of the Orthopaedic Research Society. San Francisco, CA.
134. Hanson AD, Marvel SW, Bernacki SH, Banes AJ, **Loboa EG** (Mar 2008). Mechanical Loading of Adipose-Derived Adult Stem Cells Enhances Osteogenesis. Proceedings of the 54th Annual Meeting of the Orthopaedic Research Society. San Francisco, CA.
135. Sumanasinghe, RD, Qi, J, Wang, J, Tsuzaki, M, Wall, M, Pfeiler, W, **Loboa EG**, Banes, AJ (Mar 2008). Cell Orientation and Local Strain Distribution in an *In vitro* Achilles Tendon Tissue Engineering Model. Proceedings of the 54th Annual Meeting of the Orthopaedic Research Society. San Francisco, CA.
136. Pfeiler TW, Sumanasinghe RD, **Loboa EG** (Mar 2008). Comparison of applied vs. local strains in human mesenchymal stem cell seeded 3D collagen gels. Proceedings of the 2008 Annual Meeting, Institute of Biological Engineering. Chapel Hill, NC.

137. Vidt ME, SooHoo JR, Haslauer CM, McCulloch RC, **Loboa EG** (Mar 2008). Tensile strain bioreactor with force feedback and custom incubator for straining cells in three-dimensional culture. Proceedings of the 2008 Annual Meeting, Institute of Biological Engineering. Chapel Hill, NC.
138. Puetzer JL, Finger AR, Bernacki SH, **Loboa EG** (Mar 2008). Effects of cyclic hydrostatic pressure on chondrogenesis of human adipose-derived adult stem cells. Proceedings of the 2008 Annual Meeting, Institute of Biological Engineering. Chapel Hill, NC.
139. Haslauer CM, Moghe AK, Gupta BS, **Loboa EG** (Mar 2008). Evaluation of collagen coated PCL electrospun scaffold for bone tissue engineering using human adipose-derived adult stem cells. 2008 Annual Meeting, Institute of Biological Engineering. Chapel Hill, NC.
140. McCullen SD, Young DA, SooHoo JR, Walker GM, **Loboa EG** (Mar 2008). A novel microfluidic platform for application of fluid shear stresses to cells in 3D culture. Proceedings of the 2008 Annual Meeting, Institute of Biological Engineering. Chapel Hill, NC.
141. Maudlin FW, Davis OB, Haider MA, **Loboa EG**, Pfeiler TW, Gallippi CM (Oct 2007). On the potential of combined ARFI and elastography to improve differentiation of material structure in viscoelastic tissue. 2007 IEEE Ultrasonics Symposium Proceedings. Vol(1-6): 2040-2045. Transactions of the IEEE Ultrasonics Symposium. New York, NY. Podium Presentation.
142. Pfeiler TW, Sumanasinghe RD, Banes AJ, **Loboa EG**. (Sep 2007). Anchor design for an improved three dimensional tensile strain bioreactor. Proceedings of the Annual Meeting of the Biomedical Engineering Society. Los Angeles, CA.
143. Hanson AD, Wall ME, Pourdeyhimi B, **Loboa EG**. (Sep 2007). Effects of oxygen plasma treatment on adipose-derived adult stem cell adherence. Proceedings of the Annual Meeting of the Biomedical Engineering Society. Los Angeles, CA.
144. Haslauer CM, Rouse J, **Loboa EG**, Monteiro-Riviere NA. (Sep 2007). Effects of strain on quantum dot nanoparticle uptake by human epidermal keratinocytes. Proceedings of the Annual Meeting of the Biomedical Engineering Society. Los Angeles, CA.
145. Purser M, Cansizoglu O., Haslauer CM, Harrysson OLA, **Loboa EG**, (Aug 2007). The Use of Layered Freeform Fabrication Technologies to Produce Tissue Engineering Scaffolds for Skull Patches. Proceedings of the Solid Freeform Fabrication Symposium. Austin, TX.
146. Hromadka M, Collins JB, Andrady T, Han L, Kolappa KK, Bernacki S, **Loboa EG**, van Aalst JA (June 2007). Fibroblast Incorporation into Nanofiber Scaffolds for Tissue Engineering. Proceedings of the Annual Meeting of Southeastern Society of Plastic and Reconstructive Surgeons. Westin, FL. Podium Presentation.
147. Yan D, Wright M, Holland D, Pfeiler TW, **Loboa EG**, Everett ET (Mar 2007). Genetic background modifies the effects of fluoride on bone quality. Proceedings of the IADR/AADR/CADR 85th General Session and Exhibition. New Orleans, LA. Podium Presentation.
148. Hardy A, Cairns B, Hultman CS, Kidd M, **Loboa EG**, van Aalst JA (Mar 2007). Patterns of Heterotopic Ossification in Burn Patients. American Burn Association. San Diego, CA.
149. Sumanasinghe RD, **Loboa EG** (Feb 2007). Mesenchymal stem cell seeded collagen matrices for bone repair: effects of cyclic tensile strain on osteogenesis and tensile properties. Proceedings of the 53rd Annual Meeting of the Orthopaedic Research Society. San Diego, CA.
150. Wall ME, Bernacki SH, **Loboa EG** (Dec 2006). Growth and differentiation potential of adipose-derived hMSCs after subculture. Proceedings of the American Society for Cell Biology 46th Annual Meeting. San Diego, CA.

151. Losken HW, **Loboa EG**, van Aalst JA (Oct 2006). Stem Cell Research for Constructing Facial and Skull Bones. Proceedings of the South African Plastic Surgery Congress. Drakensburg, South Africa. Podium Presentation.
152. Hardy A, **Loboa EG**, Carins, B, CS Hultman, Kidd M, van Aalst JA (Aug 2006). Stem Cell Solutions to Heterotopic Ossification in Burn Patients. North Carolina Plastic Surgery Society. Pinehurst, NC. Podium Presentation.
153. Kolappa KK, **Loboa EG**, Losken HW, van Aalst JA (Aug 2006). Tissue Engineered Bone for Habilitation of the Alveolar Cleft. Proceedings of the North Carolina Plastic Surgery Society. Pinehurst, NC. Podium Presentation.
154. Kwan MD, Wan DC, **Loboa EG**, Fang TD, Longaker MT (June 2006). Murine models of mandibular distraction osteogenesis: towards defining the mechanical environment and the role of angiogenesis. Proceedings of the 5th International Congress of Maxillofacial and Craniofacial Distraction. Paris, France. Podium Presentation.
155. van Aalst JA, **Loboa EG** (Apr 2006). Tissue engineering bone for habilitation of the alveolar cleft. Proceedings of the 63rd Annual Meeting of the American Cleft Palate-Craniofacial Association. Translational Ideas: From Basic Science to Evidence Based Practice. Vancouver, British Columbia. Podium Presentation.
156. Pfeiler TW, Lalush DS, **Loboa EG** (Mar 2006). Comparison of CT-to-FEA Methods for Predicting Strains in a Long Bone. Proceedings of the 52nd Annual Meeting, Orthopaedic Research Society. Chicago, IL.
157. Sumanasinghe RD, Bernacki SH, **Loboa EG** (Sep 2005) Effect of mechanical stimulation on osteogenic differentiation of mesenchymal stem cells in 3D matrices. Proceedings of the 2005 Biomedical Engineering Society meeting. Baltimore, MD. Podium Presentation.
158. Finger AR, Bernacki SH, **Loboa EG** (Sep 2005) Application of Cyclic Hydrostatic Pressure to Promote Chondrogenesis in Human Mesenchymal Stem Cells. Proceedings of the 2005 Biomedical Engineering Society meeting. Baltimore, MD.
159. Wall ME, Otey C, **Loboa EG** (June 2005). Human mesenchymal stem cells express palladin. Proceedings of the ASME 2005 Summer Bioengineering Conference. Vail, CO. Podium Presentation.
160. Sumanasinghe RD, Bernacki SH, **Loboa EG** (June 2005). Effects of uniaxial cyclic tensile strain on osteogenic differentiation of human mesenchymal stem cells. Proceedings of the ASME 2005 Summer Bioengineering Conference. Vail, CO. Podium Presentation.
161. Pfeiler TW, Finley CW, Lalush DS, **Loboa EG** (June 2005). Comparison of semi-automated generation methods for finite element analysis of canine radius. Proceedings of the ASME 2005 Summer Bioengineering Conference. Vail, CO.
162. Hanson AD, Walker G, Sumanasinghe RD, Wall ME, **Loboa EG** (June 2005). Seeding of human mesenchymal stem cells onto poly-l-lactic acid (PLLA) scaffolds in a flow perfusion microfluidic chamber. Proceedings of the ASME 2005 Summer Bioengineering Conference. Vail, CO.
163. Sumanasinghe RD, Bernacki SH, King MW, **Loboa EG** (Apr 2005). Human mesenchymal stem cell seeded 3D collagen matrices for bone tissue engineering: effects of uniaxial cyclic tensile strain, cell density and media conditions on matrix contraction. Proceedings of the 30th Annual Meeting of the Society for Biomaterials. Memphis, TN.

164. Wang J, Kheradpir K, Qi J, **Loboa EG**, Grant E, Banes A (Apr 2005). Novel bioreactor system for long-term vascular graft culture. Proceedings of FASEB Experimental Biology 2005. San Diego, CA.
165. Sumanasinghe RD, Bernacki SH, **Loboa EG** (Feb 2005). Tensile strain induced osteogenic differentiation of mesenchymal stem cells in linear 3D matrices in vitro: effects of cell density, media, & duration of strain. Transactions of the 51st Annual Meeting of the Orthopaedic Research Society. Washington DC.
166. Yeago CA, Dulaney KO, Bernacki SH, **Loboa EG** (Feb 2005). Both ramp and steady applications of cyclic hydrostatic pressure cause a positive chondrogenic response in human mesenchymal stem cells in agarose constructs. Transactions of the 51st Annual Meeting of the Orthopaedic Research Society. Washington DC.
167. McCord MG, Blanchard SM, **Loboa EG**, Mente PL. Putting the “Engineering” into tissue engineering: Development of undergraduate tissue engineering course materials and laboratory experiments. Proceedings of the 2004 Annual Conference of the American Association for Engineering Education, Session 2109. Salt Lake City, UT. Podium Presentation.
168. Blanchard SM, McCord MG, Mente PL, Lalush DS, Abrams CF, **Loboa EG**, Nagle HT. Rubrics cubed: tying grades to assessment to reduce faculty workloads. Proceedings of the 2004 Annual Conference of the American Association for Engineering Education, Session 1609. Salt Lake City, UT. Podium Presentation.
169. Morgan EF, **Loboa EG**, Fang TD, Longaker MT, Carter DR (Sep 2003). Temporal variations in mechanical stimuli during mandibular distraction osteogenesis. Proceedings of the International Society for Craniofacial Surgery, Xth International Congress. Monterey, CA.
170. Fong KD, Warren SM, **Loboa EG**, Henderson JH, Fang TD, Nacamuli RP, Carter DR, Longaker MT (Sep 2003). Mechanical strain effects on dura mater biology: implications for understanding immature calvarial healing. Proceedings of the International Society for Craniofacial Surgery, Xth International Congress. Monterey, CA. Podium Presentation.
171. Fong KD, **Loboa EG**, Nacamuli RP, Song HM, Fang TD, Salim A, Shi YY, Longaker MT (Sep 2003). Calvarial osteoblast response to mechanical tensile strain. Proceedings of the International Society for Craniofacial Surgery, Xth International Congress. Monterey, CA.
172. **Loboa EG**, Fang TD, Parker DW, Warren SM, Fong KD, Longaker MT, Carter DR (Feb 2003). Mechanobiology of Mandibular Distraction Osteogenesis – Finite Element Analyses with a Rat Model. Proceedings of the 49th Annual Meeting, Orthopaedic Research Society. New Orleans, LA.
173. **Loboa EG**, Fang TD, Warren SM, Fong KD, Carter DR, Longaker MT (Oct 2002). Mechanobiology of Distraction Osteogenesis. Proceedings of the Surgical Forum at the 2002 Clinical Congress. San Francisco, CA. Podium Presentation.
174. Fong KD, Warren SM, Fang TD, Cowan CM, **Loboa EG**, Carter DR, Longaker MT (Oct 2002). The Effects of Mechanical Strain on Dura Mater Biology: Implications for Immature Calvarial Healing. Proceedings of the Surgical Forum at the 2002 Clinical Congress. San Francisco, CA.
175. **Loboa EG**, Fang TD, Warren SM, Fong KD, Pierre JB, Longaker MT, Carter DR (Apr 2002). Mechanical Stresses Imposed during Rat Mandibular Distraction Osteogenesis. Proceedings of the 47th Annual Meeting, Plastic Surgery Research Council. Boston, MA.
176. Song HM, Fong KD, Warren SM, Fang TD, Cowan CM, Gonzalez O, **Loboa EG**, Carter DR, Longaker MT (Apr 2002). Equibiaxial Strain Affects Dura Mater Biology. Proceedings of the 47th Annual Meeting, Plastic Surgery Research Council. Boston, MA.
177. **Loboa EG**, Wren TAL, Beaupré GS, Carter DR (Mar 2002). Mechanobiology of Cartilage, Fibrocartilage, and Fibrous Tissue Regeneration. Stanford University Bio-X Sponsored Symposium on Cartilage Tissue Engineering. Stanford, CA.

178. **Loboa EG**, Wren TAL, Carter DR (Feb 2002). Mechanobiology of Soft Skeletal Tissue Regeneration. Proceedings of the 48th Annual Meeting, Orthopaedic Research Society. Dallas, TX. Podium Presentation.
179. **Loboa EG**, Wren TAL, Beaupré GS, Carter DR (Oct 2001). Mechanobiology of Soft Skeletal Tissue Regeneration: A Mathematical Approach for Describing Material Property Changes during Soft Skeletal Tissue Formation. Biomedical Computation at Stanford. Stanford, CA. Winner, Best Poster Award.
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 (Dec 1999). Mechanical influences on skeletal regeneration. Proceedings of the Toyota International Symposium on Human Life Support Biomechanics. Nagoya, Japan. Podium Presentation.
184. Carter DR, **Loboa Polefka EG**, Beaupré GS (Dec 1999). Mechanical influences on skeletal regeneration and bone resorption. Bone Engineering Workshop. Toronto, Canada. Podium Presentation.
185. **Loboa EG**, Sarin VK, Beaupré GS, Kiratli BJ, Carter DR, van der Meulen MCH (Aug 1997). Fracture risk predictions using DXA imaging. National Bioengineering Career Symposium. Seattle, WA.

Patents Issued

1. U.S. Patent No. 9,043,156. Methods, systems and computer readable media for monitored application of mechanical force to samples using acoustic energy and mechanical parameter value extraction using mechanical response models. May 26, 2015.

Patents/Disclosures Filed

1. NCSU Disclosure No. 15069. Biodegradable nanofibers for delivery of stem cells in treatment of glioblastoma. Sept. 5, 2014.
2. NCSU Disclosure No. 15062. Fabrication of 100% pure soy protein nonwovens at large industrial scale by solution blowing technology. Aug. 25, 2014.
3. NCSU Disclosure No. 14246. Manufacture of lightweight, low density hollow mushroom-gilled fibers. Aug. 18, 2014.
4. NCSU Disclosure No. 14233. Multifunctional nanofibrous wound dressings. May 22, 2014.
5. U.S. Patent Application Serial No. 14/437,624. Nonwoven fiber materials. Nov. 21, 2012.
6. U.S. Patent Application Serial No. 12/607,986. Methods, systems and computer readable media for monitored application of mechanical force to samples using acoustic energy and mechanical parameter value extraction using mechanical response models. Oct. 28, 2009.
7. NCSU Disclosure No. 08097. Tensile strain bioreactor with force feedback and custom incubator for applying tensile strain to cell-seeded three-dimensional scaffolds. Mar. 17, 2008.
8. NCSU Disclosure No. 07050. Mold, inverted transwell, and reservoirs for novel fluid shear/flow perfusion bioreactor. Nov. 2, 2006.
9. NCSU Disclosure No. 07020. Selectively porous bicomponent fibers & fabrics. Oct. 10, 2006.

10. Dick & Marlene Daugherty Entrepreneurialism Endowment Loba (PI) 04/01/15 – 03/31/16
Precision Diagnostics/PrecisiBand start-up endeavors
Role: Company Founder & PI \$3,500 (Direct costs)
11. NSF/CBET 1133427 Loba (PI) 01/15/12 – 01/14/16
IDR: Primary Cilia as Sensors of Electric Field during Electrical Stimulation Induced hASC Osteogenesis
Investigation of role of primary cilia as mechanotransduction mechanism of AC electric fields during
electric field stimulation of hASC osteogenic differentiation.
Role: PI \$594,210
12. NSF CMMI/BMMB: Conference Support Award Loba (PI) 01/06/15 – 01/05/16
2015 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 2015 BMES Cell and Molecular Bioengineering Conference.
Role: PI \$15,000 (Direct costs)
13. NIH/NIBIB/NCI/NICHHD R13 Loba (PI) 01/06/15 – 01/05/16
2015 CMBE Conference: From Womb to Tomb: Mechanobiology of Generation, Regeneration and
Degeneration
The major goal of this project is to provide funding for students, trainees, and young faculty to attend
and present work at the 2015 BMES Cell and Molecular Bioengineering Conference.
Role: PI \$15,000 (Direct costs)
14. William R. Kenan Jr. Institute for Engineering,
Technology and Science Loba (PI) 01/03/15 – 01/02/16
The Angiogenic and Osteogenic Effects of Cyclic Tensile Strain on a Co-culture of Adipose-Derived
Stem and Endothelial Cells
Investigation of mechanical effects on paracrine signaling between adipose stem cells and endothelial
cells for enhanced bone formation
Role: PI \$15,000 (Direct costs)
15. National Space Biomedical Research Institute Mellor (PI) 12/01/14 – 11/30/15
Crosstalk between subchondral bone and articular cartilage in reduced gravity may contribute to
catastrophic joint damage.
Role: PI to Liliana Mellor, Research Assistant Professor in my lab \$50,000
16. University Faculty Scholars Program Loba 08/15/12 – 10/15/15
University Faculty Scholar Award
Recognition of emerging academic leaders. Awarded title from university to include annual supplement
of \$10,000/year for 5 years toward supplemental salary or programmatic support.
Role: Awardee \$50,000 (Direct costs)
17. NIH CTSA 550KR71418 Loba (PI) 10/01/14 – 09/31/15
Biocompatible, Biodegradable Controlled Release Smart Bandages for Regenerating Skin and Healing
Infected Wounds
Investigation of controlled-release degradable bandages for healing infected wounds.
Role: PI \$50,000 (Direct costs)
18. 2013-CFG-8008 Loba (PI) 10/01/13 – 09/31/15
NC Biotechnology Center/DOW Chemical
Development and Translation of Controlled Release Smart Bandages for Antimicrobial, Antibacterial,
and Anti-Inflammatory Wound Healing Applications
Role: PI \$120,000 (Direct costs)

19. 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)
20. NSF Graduate Research Diversity Supplement Loba (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
21. NIH CTSA 550KR61325 Loba (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)
22. NWI 11-136 Loba (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)
23. 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)
24. 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)
25. CCMTR Translational Research Grant Loba (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)
26. 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
27. NCRC 10-128 Loba (PI) 08/01/10 – 08/31/13
Controlled Release Systems using Core-Sheath Nanofibers for Wound Healing and Tissue Engineering Applications
Development and application of core-sheath technologies for controlled release systems.
Role: PI \$150,000 (Direct costs)

28. NIH/NIBIB 1R03EB008790 Loboa (PI) 02/01/10 – 01/31/13
Tensile Strain-Induced Osteogenesis of Human Mesenchymal Stem Cells in 3D Culture
Investigation of tensile strain effects on osteogenesis of human adipose derived adult stem cells in 3D collagen culture.
Role: PI \$144,226
29. Chancellor's Innovation Fund Loboa (PI) 07/01/11 – 01/01/13
Commercial Development of Hollow, Porous, Nonwoven Fibers as Controlled Release Systems for Wound Healing, Tissue Engineering, and Regenerative Medicine Applications
Role: PI \$85,000 (Direct costs)
30. NIH/NCRR 10KR51023 Loboa (PI) 02/01/10 – 01/31/11
Controlled AC Electric Fields for Osteogenesis of Human Adipose Derived Stem Cells
Investigation of the role of physiologic AC electric fields on bone formation by hASCs using custom interdigitated electrodes.
Role: PI \$10,000 (Direct costs)
31. North Carolina Biotechnology Center MRG Loboa (PI) 08/01/07 – 07/31/10
The Role of Palladin in the Mechanobiology of Human Mesenchymal Stem Cells
Investigation of the role that cytoskeletal protein palladin plays in mechanotransduction of hMSCs during tensile strain induced osteogenic differentiation of hMSCs.
Role: PI \$275,000 (Direct costs)
32. UK-US Stem Cell Collaboration Development Award Loboa (PI) 12/01/09 – 03/15/10
Travel funds for visit and presentation at Imperial College, London on Loboa lab research and to develop collaboration with Prof. Molly Stevens (Materials Dept., Imperial College) regarding stem cell based approaches to functional bone tissue engineering.
Role: PI £3860 (~\$6,600) (Direct costs)
33. Nonwovens Cooperative Research Center Loboa (PI) 08/15/05 – 08/15/09
Hollow Fiber Nonwoven Structures with Interconnected Pore Configuration
Studies to determine means to create hollow fibers with interconnected pores for use in tissue engineering applications.
Role: PI \$135,000 (Direct costs)
34. Center for Comparative Medicine and Translational Research Loboa (PI) 07/01/08 – 06/31/09
Effects of Electrical Stimulation on Neuronal and Glial Differentiation of Fetal Porcine Neural Stem Cells Seeded in Three-Dimensional Poly-L-Lactic Acid Scaffolds
Investigation of electrical stimulation to control differentiation of neural stem cells.
Role: PI \$25,000 (Direct costs)
35. Veterinary Practice Plan, CVM, NCSU Marcellin (PI) 04/01/08 – 03/31/09
In Vitro Response to TiAl6V4 and EBM made Titanium on Human Adipose Derived Stem Cell Culture
Determination of titanium processing on viability and proliferation of adipose-derived adult stem cells.
Role: Co-PI \$15,000 (Direct costs)
36. National Textile Center Gupta (PI) 05/01/05 – 03/31/09
Electrospun Core-Sheath Fibers for Soft Tissue Engineering
Project to create and utilize novel bi-axial syringe to electrospin scaffolds for tissue engineering cartilage and other soft tissues.
Role: Co-I \$318,488

37. Veterinary 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)
38. UNC-CH/NCSU BME Research Initiation Project Loba (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 electrospun nanocomposite conductive scaffolds (multi-walled carbon nanotubes embedded within PLA fibers) to investigate electrical stimulation of adipose-derived adult stem cells to initiate osteogenesis.
 Role: PI \$50,000 (Direct costs)
39. UNC-CH/NCSU BME Research Initiation Project Banes (PI) 09/01/07 – 06/30/08
 Fabrication of a Venous Valve Replacement Device (VVRD)
 Development of device to correct venous valvular insufficiencies.
 Role: Co-I \$50,000 (Direct costs)
40. NCSU Internal Mini Grant – Wood and Paper Science Lucia (PI) 08/01/06 – 07/31/07
 Novel fibrous biomaterial scaffolds for tissue engineering using human adipose-derived adult stem cells
 Investigation of cellulose as potential substrate for tissue engineering with human adipose derived adult stem cells.
 Role: Co-PI \$15,000 (Direct costs)
41. National Institutes of Health Banes (PI) 11/01/05 – 04/31/07
 Bioreactor for Engineered Bioartificial Tissues
 Analysis and revamp of Flexcell TissueTrain system with finite element analysis of new anchor designs.
 Role: Co-PI \$100,000 (*Phase I STTR: Loba academic lead; Banes (Flexcell) industry lead*)
42. NCSU Multi-Disciplinary FRPD Lucia (PI) 03/01/06 – 2/28/07
 Novel Fibrous Biomaterial Scaffolds for Tissue Engineering using Human Adipose-Derived Adult Stem Cells
 Investigation of cellulose as potential substrate for tissue engineering with hASCs.
 Role: Co-PI \$5,333 (Direct costs)
43. Ralph E. Powe Junior Faculty Award Loba (PI) 05/01/05 – 04/30/06
 Tissue Engineering Bone using Osteoporotic Mesenchymal Stem Cells
 Project to promote osteogenesis of mesenchymal stem cells from osteoporotic patients.
 Role: PI \$10,000 (Direct costs)
44. North Carolina Biotechnology Center IDG Loba (PI) 03/01/05 – 02/28/06
 Tissue Mechanics Laboratory for Enhancing Biotechnology in North Carolina
 Equipment and facilities upgrade grant to obtain and install MTS 858 axial torsional test system for Tissue Mechanics Laboratory at NCSU.
 Role: PI \$200,015 (Direct costs)
45. NCSU Multi-Disciplinary FRPD Loba (PI) 03/01/04 – 02/28/05
 Noninvasive Pre-Surgical Planning for Mandibular Reconstruction in a Canine Model using a Computed Tomography-Finite Element Analysis Approach
 Project to arrive at a semi-automated means to convert CT image data into functional finite element models for pre-surgical planning prior to initiating mandibular distraction osteogenesis procedures.
 Role: PI \$20,000 (Direct costs)

Granting Agency Reviewer

Army Research Office, Multidisciplinary University Research Initiative (ARO-MURI), 2014 - 2020
 South Carolina EPSCoR/IDeA, 2013 – 2020
 National Institutes of Health (NIH) P41 Site Visit Team, 2012 – 2020
 American Institute of Biological Sciences, 2011 – 2020
 Orthopaedic Research UK (previously Furlong Foundation), 2011 – 2020
 National Science Foundation Engineering Research Center (NSF ERC) Site Visit Teams, 2009 – 2020
 Pennsylvania Department of Health, 2009 – 2020
 National Institutes of Health (NIH), 2008 – 2020
 New York State Stem Cell Science (NYSTEM) and the Empire State Stem Cell Board, 2008 – 2020
 Canada Foundation for Innovation, 2006 – 2020
 National Science Foundation (NSF), 2005 – 2020

Teaching Experience

PROFESSOR, JOINT DEPARTMENT OF BIOMEDICAL ENGINEERING AT UNC-CHAPEL HILL AND NC STATE UNIVERSITY & MATERIALS SCIENCE & ENGINEERING AT NC STATE UNIVERSITY, RALEIGH, NC

Spr 2015 BME 302 Human Physiology for Engineers II

Spr 2015 BME 802/BMME 890 Coulter Seminar Series

ASSOCIATE PROFESSOR, JOINT DEPARTMENT OF BIOMEDICAL ENGINEERING AT UNC-CHAPEL HILL AND NC STATE UNIVERSITY & MATERIALS SCIENCE & ENGINEERING AT NC STATE UNIVERSITY, RALEIGH, NC

Spr 2014 BME 302 Human Physiology for Engineers II

Spr 2014 BME 802/BMME 890 Coulter Seminar Series

Spr 2013 BME 302 Human Physiology for Engineers II

Spr 2012 BME 302 Human Physiology for Engineers II

Fall 2011 BME/MSE 790 Mechanobiology of Skeletal Regeneration

Spr 2011 BME 302 Human Physiology for Engineers II

Spr 2010 BME 302 Human Physiology for Engineers II

ASSISTANT PROFESSOR, JOINT DEPARTMENT OF BIOMEDICAL ENGINEERING AT UNC-CHAPEL HILL AND NC STATE UNIVERSITY, RALEIGH, NC

Spr 2009 BME 302 Human Physiology for Engineers II

Spr 2008 BME 302 Human Physiology for Engineers II

Spr 2007 BME 302 Human Physiology for Engineers II

Spr 2005 BME 302 Human Physiology for Engineers II

Spr 2004 BAE382 Biomedical Engineering Applications

GUEST LECTURER, UNC-CHAPEL HILL, CHAPEL HILL, NC

2014 MOPH 864: Nanomedicine

2013 MOPH 864: Nanomedicine

2012 MOPH 864: Nanomedicine

2009 BMME 400: Introduction to Biomedical Engineering

2007 Phys 625/Phys 755 Stem Cells and Maturational Lineage Biology Seminar Series

2005-2007 BMME 400: Introduction to Biomedical Engineering

2006 ABC Fellows, Orthopaedic Grand Rounds, June 10, 2006

2005 MTSC 200: Principals of Tissue Engineering

2004, 2005 BMME 100: Introduction to Biomedical Engineering

2004 BME 251: From Genes to Tissues

GUEST LECTURER, NC STATE UNIVERSITY, RALEIGH, NC

2004 Biomathematics Seminar

ACTING ASSISTANT PROFESSOR, STANFORD UNIVERSITY, STANFORD, CA
2002-2003 ME80 Stress, Strain, and Strength

GUEST LECTURER, STANFORD UNIVERSITY, STANFORD, CA
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'Connor*, 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
4. 2005-9 *Avanika Mahajan*, Ph.D. Candidate, Animal Science, NCSU
5. 2005-9 *Richard Shoge*, Ph.D. Candidate, Joint Dept. of Biomedical Eng., UNC-CH/NCSU
6. 2006-10 *Ben Moody*, Ph.D. Candidate, Joint Dept. of Biomedical Eng., UNC-CH/NCSU
7. 2006-10 *Jessica Springer*, Ph.D. Candidate, Dept. of Industrial Eng., NCSU
8. 2006-10 *Russ Behler*, Ph.D. Candidate, Joint Dept. of Biomedical Eng., UNC-CH/NCSU
9. 2006-11 *Brandon Conover*, Ph.D. Candidate, Dept. of Electrical and Computer Eng., NCSU
10. 2007-11 *Rachael Turner*, Ph.D. Candidate, Joint Dept. of Biomedical Eng., UNC-CH/NCSU
11. 2007-11 *Fatih Canbolat*, Ph.D. Candidate, Fiber and Polymer Science, NCSU
12. 2008-9 *Maria Ina*, M.S. Candidate, Textile Eng., NCSU
13. 2008-10 *Aaron Richardson*, M.S. Candidate, Joint Dept. of Biomedical Eng., UNC-CH/NCSU
14. 2008-12 *Mallory Scola*, Ph.D. Candidate, Joint Dept. of Biomedical Eng., UNC-CH/NCSU
15. 2008-13 *Joao Ferreira*, Ph.D. Candidate, Dental School, UNC-Chapel Hill
16. 2009-14 *Shoeb Ahmed*, Ph.D. Candidate, Chemical and Biomolecular Eng., NCSU
17. 2009-14 *Ben Roberston*, Ph.D. Candidate, Joint Dept. of Biomedical Eng., UNC-CH/NCSU
18. 2009-14 *Jacob Thomas*, M.S. Candidate, Dept. of Physiology, NCSU
19. 2009-14 *Bruce Wiggin*, Ph.D. Candidate, Joint Dept. of Biomedical Eng., UNC-CH/NCSU
20. 2010-14 *Saurabh Bakshi*, M.S. Candidate, Dept. of Mechanical Eng., NCSU
21. 2010-15 *Ariel Hanson*, Ph.D. Candidate, Joint Dept. of Biomedical Eng., UNC-CH/NCSU
22. 2012-15 *Avinav Nandgaonkar*, Ph.D. Candidate, Fiber and Polymer Science, NCSU
23. 2012-15 *Robert Soto*, Ph.D. Candidate, Chemistry, UNC-Chapel Hill
24. 2012-16 *Astor Liu*, Ph.D. Candidate, Chemical & Biomolecular Eng., NCSU
25. 2012-17 *Asad Ahmad*, Ph.D. Candidate, Joint Dept. of Biomedical Eng., UNC-CH/NCSU
26. 2015-16 *Michael Collier*, Ph.D. Candidate, Pharmaceutical Sciences, UNC-Chapel Hill
27. 2013-18 *Rahim Jindani*, Ph.D. Candidate, Fiber & Polymer Science & Biomedical Eng., NCSU

Undergraduates Supervised in Laboratory Research

1. 2003-6 *Carolyn Yeago*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
2. 2004-5 *Ethan Azarsoon*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
3. 2004-5 *Stephanie Coates*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
4. 2004-5 *Penney Martin*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
5. 2004-5 *Amanda Walls*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
6. 2004-5 *Sarah Brumbaugh*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
7. 2004-6 *Katherine Dulaney*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
8. 2004-7 *Jennifer Jassawalla*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
9. 2004-7 *Tabitha Staniszewski*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
10. 2004-7 *Eric Rush*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
11. 2004-7 *Neil Shah*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
12. 2004-7 *Jillian Rouse* Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
13. 2004-8 *Allison Finger*, HHMI SRI intern and Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
14. 2005-7 *Catherine Ward*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
15. 2006-8 *Ben Shillinglaw*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
16. 2006-8 *Meghan Vidt*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
17. 2006-7 *Weldon Whitener*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.

18. 2006-9 *Jennifer Puetzer*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
19. 2007-9 *Maureen Onorato*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
20. 2007-9 *Adam Young*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
21. 2007-9 *Jen Bland*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
22. 2007-10 *JP McQuilling*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
23. 2008-9 *Ashwin Sakhare*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
24. 2008-10 *Elizabeth Kirk*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
25. 2008-10 *John Petite*, 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 *Casey Molina*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
54. 2014-15 *Toluwalope Oyelowo*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
55. 2014-15 *Devin Orndorff*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
56. 2014-15 *Christian Pedersen*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.
57. 2015-16 *Brady Trevisan*, Candidate for B.S., Dept. of Biomedical Eng., NC State Univ.

Service to the Profession: Professional Society Memberships

American Institute for Medical and Biological Engineering, 2015 – present
 American Association for the Advancement of Science, 2015 – present
 London Regenerative Medicine Network, 2010 – present
 Tissue Engineering and Regenerative Medicine International Society, 2010 – 2020
 Society for Physical Regulation in Biology and Medicine, 2007 – 2020
 Biomedical Engineering Society, 2004 – present
 Orthopaedic Research Society, 2004 – present

American Society of Mechanical Engineers, 2004 – present
 Sigma Xi Scientific Research Society, 2004 – 2010
 American Society for Engineering Education, 2003 – 2020
 Association for Women in Science, 2002 – 2020

Service to the Profession: Journal Reviewer

1. *Acta Biomaterialia*
2. *Advanced Biomaterials*
3. *Annals of Biomedical Engineering*
4. *Biomacromolecules*
5. *Biomaterials*
6. *Biomechanics and Modeling in Mechanobiology*
7. *Biomedical Materials*
8. *Biophysical Reviews*
9. *BioResources*
10. *BioTechniques*
11. *Biotechnology and Bioengineering*
12. *BMC Biotechnology*
13. *Bone*
14. *Cartilage*
15. *Cells, Tissues, Organs*
16. *Cellulose*
17. *Journal of Biomaterials Science – Polymer Edition*
18. *Computer Methods in Biomechanics and Biomedical Engineering*
19. *Journal of Biomechanical Engineering*
20. *Journal of Biomechanics*
21. *Journal of Biomedical Materials Research, Part A*
22. *Journal of Biomedical Materials Research, Part B*
23. *Journal of Bone and Joint Surgery*
24. *Journal of Bone and Mineral Research*
25. *Journal of Cellular Biochemistry*
26. *Journal of Dental Research*
27. *Journal of Materials Research*
28. *Journal of Orthopaedic Research*
29. *Journal of Tissue Engineering and Regenerative Medicine*
30. *Medical and Biological Engineering and Computing*
31. *Nature Materials*
32. *PLoS One*
33. *PNAS*
34. *Stem Cells*
35. *Stem Cell Reports*
36. *Stem Cell Research & Therapy*
37. *The Open Orthopaedic Journal*
38. *Tissue Engineering*

References Available Upon Request