Kristin S. Miller, Ph.D.

Tulane University
Department of Biomedical Engineering
New Orleans, LA 70118
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AREA OF SPECIALIZATION AND INTERESTS

Biomechanics; Growth & Remodeling; Women's Reproductive Health; Extracellular Matrix; Tendon; Collagen; Elastin; Constitutive Modeling

EDUCATION & TRAINING

Yale University, New Haven, CT, USA (2012-2014)
NIH T32 Postdoctoral Fellow, Department of Biomedical Engineering with Jay D. Humphrey, Ph.D.

University of Pennsylvania, Philadelphia, PA, USA (2007-2012)
Ph.D. in Bioengineering, with Louis J. Soslowsky, Ph.D.
Thesis title: Collagen Fiber Re-Alignment and Uncrimping in Response to Loading: Determining Structure-Function Relationships Using a Developmental Tendon Mouse Model

Texas A&M University, College Station, TX, USA (2003-2007)
B.S. in Biomedical Engineering. Magna Cum Laude

PROFESSIONAL APPOINTMENTS

Assistant Professor of Biomedical Engineering 2014 – present
Department of Biomedical Engineering
Tulane University, New Orleans, LA

HONORS & AWARDS

2018, Society for Pelvic Research Best Paper Competition, 1st Place
2018, Tulane BIRCWH Award for Research in Women's Health and Sex Differences, 1st Place
2018, National Science Foundation Faculty Early Career Development Award
2016, Tulane School of Science and Engineering Research Symposium, 1st Place
2015, Journal of Biomechanical Engineering Editor's Choice Paper
2012, University of Pennsylvania Bioengineering Symposium Poster Competition, 1st Place
2011, Penn Center for Musculoskeletal Disorders Symposium Poster Competition, 3rd Place
2010, Penn Center for Musculoskeletal Disorders Symposium Poster Competition, 1st Place
2010, ASME Summer Bioengineering Conference Masters Poster Competition, 1st Place

Honor Societies: Tau Beta Phi, Phi Kappa Phi, Alpha Eta Mu Beta, Golden Key

PROFESSIONAL ACTIVITIES

----	Member, ASME, BMES, ORS, Society for Pelvic Research, Sigma Xi
2014	Reviewer, World Congress of Biomechanics, Boston, MA
2015-	Advisor, BMEN Tulane Student Branch
2015-17	Reviewer, Summer Biomechanics, Bioengineering & Biotransport Conference
2015	Reviewer, Biomedical Engineering Society Meeting
2015-17	Judge, Student Paper Competition, Summer Biomechanics, Bioengineering & Biotransport Conference
2016	Grant Reviewer, Institute for Bioinformatics Pilot Program, University of Idaho
2016	Session Chair, Summer Biomechanics, Bioengineering & Biotransport Conference
2017	Symposium Session Chair, International Conference on Computational and Mathematical Biomedical Engineering
2017	Session Chair, Summer Biomechanics, Bioengineering & Biotransport Conference
2018	Grant Reviewer, Nevada-INBRE, NIH/NIGMS IDeA program
2018	Session Chair, World Congress of Biomechanics
2018	Reviewer and Judge of Student Paper Competition, World Congress of Biomechanics
2018	Session Chair, Society of Engineering Sciences
2018	Panelist, NSF CAREER Award Review Panel
2018	Panelist, NSF BMMB Unsolicited Grant Review Panel
2019	Panelist, Paracelsus Medical University Research Fund
2019	Guest editor, Special Issues on Bioengineering in Women's Health, *Royal Society Interface Focus*
2019	Reviewer and Session Chair, Summer Biomechanics, Bioengineering & Biotransport Conference
2019	Session Chair, International Symposium on Computer Methods in Biomechanics and Biomedical Engineering

SCIENTIFIC PRODUCTIVITY

26 peer-reviewed research publications; >692 citations; h-index 13

GRANT SUPPORT

Active Support

FDA CDRH Critical Path Application

Title: "Establishing acceptance criteria for flexural stiffness and evaluating the influence of the inflammatory oxidative environment on surgical mesh"
Status: Awarded
Role: Co-Investigator
Project Period: 04/01/19-03/31/20
Total Award: $110,000 (Direct Costs: $110,000 Indirect Costs: $0)

National Science Foundation

BMMB-1751050
Title: “CAREER: Determining the Dynamic Role of Elastic Fibers in Cervovaginal Adaptations”
Status: Awarded
Role: Principal Investigator
Project Period: 07/01/18-06/30/23
Total Award: $500,000 (Direct Costs: $332,223 Indirect Costs: $167,772)

National Institutes of Health
P20 GM103629
Title: “Multiscale Computational Tool to Reduce the Prevalence of Age-Related Tendinopathy by Resolving the Key Mechanisms of Tendon Dynamics”
Status: Awarded
Role: Principal Investigator
Project Period: 06/01/19-05/31/2020
Total Award: $242,248 (Direct Costs: $160,962 Indirect Costs: $81,286)

National Institutes of Health
R01 HL133619
Title: “Eliciting Estrogen’s Protective Vascular Effects”
Status: Awarded
Role: Co-Investigator
Project Period: 02/01/17-01/31/22
Total Award: $1,888,575 (Direct Costs: $1,250,000 Indirect Costs: $613,575)

Completed Support
National Institutes of Health
P20 GM103629
Title: “Multiscale Computational Tool to Reduce the Prevalence of Age-Related Tendinopathy by Resolving the Key Mechanisms of Tendon Dynamics”
Status: Awarded
Role: Principal Investigator
Project Period: 06/01/18-05/31/19
Total Award: $257,054 (Direct Costs: $170,800 Indirect Costs: $86,254)

Department of Defense
OR140380
Title: “Manufacture Articular Cartilage from Human Adipose-Derived Stromal/Stem Cells for Cartilage Repair”
Status: Awarded
Role: Co-Investigator
Project Period: 10/01/15-09/30/18
Total Award: $1,645,663 (Direct Costs: $1,094,989 Indirect Costs: $550,674)

National Institutes of Health
P20 GM103629

Title: “Multiscale Computational Tool to Reduce the Prevalence of Age-Related Tendinopathy by Resolving the Key Mechanisms of Tendon Dynamics”
Status: Awarded
Role: Principal Investigator
Project Period: 07/01/17-05/31/18
Total Award: $261,322 (Direct Costs: $173,636 Indirect Costs: $87,686)

Ochnser Clinical School
Ochsner Translational Medicine Research Initiative (OTMRI)
Title: “An interdisciplinary approach to elucidate the association between social factors and load-bearing capacity, with and without compromise of structural integrity, on pelvic organ support”
Status: Awarded
Role: Co-Principal Investigator
Project Period: 08/01/16-01/30/18
Total Award: $50,000 (Direct Costs: $50,000 Indirect Costs: $0)

National Institutes of Health
P20 GM103629
Title: “Multiscale Computational Tool to Reduce the Prevalence of Age-Related Tendinopathy by Resolving the Key Mechanisms of Tendon Dynamics”
Status: Complete
Role: Principal Investigator
Project Period: 11/01/16-05/30/17
Total Award: $106,217 (Direct Costs: $70,576 Indirect Costs $35,641)

Newcomb College Institute
Faculty Research Grant
Title: “Evaluating the role of load-bearing proteins to vaginal mechanical properties: Implications for pelvic organ prolapse”
Status: Complete
Role: Principal Investigator
Project Period: 05/01/16-12/30/16
Total Award: $6080 (Direct Costs: $6080 Indirect Costs: $0)

PEER-REVIEWED JOURNAL ARTICLES

https://scholar.google.com/citations?user=vHN9guYAAAAJ&hl=en

https://www.ncbi.nlm.nih.gov/sites/myncbi/kristin.miller.1/bibliography/47537464/public/?sort=date&direction=descending

In Review

1. Cassandra K. Conway*, Shelby E. White*, Rachel Russell*, Claire Sentilles*, Gabrielle L. Clark*, **Kristin S. Miller**, Laurephile Desrosiers, Leise R. Knoepp: Pelvic Organ Prolapse: A Review of In Vitro Testing of Pelvic Support Mechanisms. *Ochsner Journal Women's Health Issue.* In Review.
2. Nicholas C. Pashos, David M. Graham, Brian Burkett, Ben O'Donnell, Rachel Sabol, Joshua Helm, Elizabeth Martin, Annie Bowles, William Helm, Vince Caronna, **Kristin S. Miller**, Brooke Grasperge, Scott Sullivan, Abigail Chaffin, Bruce A. Bunnell: An Acellular Tissue Graft for Regeneration of the Nipple-Areolar Complex: In vivo Murine and Non-Human Primate Models of Biocompatibility and Neovascularization. *Tissue Engineering Part A*. In Review.

Published

Since arriving at Tulane

1. **Kristin S. Miller,** Kristin M. Myers, Michelle L. Oyen: Bioengineering in women's health: part II. *Royal Society Interface Focus.* 9(5):20190081. 2019.
2. Benard O. Ogola, Margaret A. Zimmerman, Venkata N. Sure, Kaylee M. Gentry, Jennifer L. Duong, Gabrielle L. Clark*, **Kristin S. Miller**, Prasad V. G. Katakam, Sarah H. Lindsey: G Protein-Coupled Estrogen Receptor Protects from Angiotensin II-Induced Increases in Pulse Pressure and Oxidative Stress. *Frontiers Endocrinology*. In Press.
3. Cassandra K. Conway*, Hamna J. Qureshi, Victoria L. Morris*, Elvis Danso*, Laurephile Desrosiers, Leise R. Knoepp, Craig J. Goergen, **Kristin S. Miller**: Biaxial Biomechanical Properties of the Nonpregnant Murine Cervix and Uterus, *Journal of Biomechanics*. In Press. PMID31353018.
4. Shelby E. White*, Cassandra K. Conway*, Gabrielle L. Clark*, Dylan J. Lawrence, Carolyn L. Bayer, **Kristin S. Miller**: Biaxial Basal Tone and Passive Testing of the Murine Reproductive System Using a Pressure Myograph. *Journal of Visual Experiments*. 150:e60125. 2019.
5. **Kristin S. Miller**, Kristin M. Myers, Michelle L. Oyen: Bioengineering in women's health: part I. *Royal Society of Interface Focus,* 9:20190042. 2019.
6. Gabrielle L. Clark*, Anastassia P. Pokutta-Paskaleva, Dylan J. Lawrence, Sarah H. Lindsey, Leise R. Knoepp, Laurephile Desrosiers, Carolyn L. Bayer, Rudolph L.Gleason III, **Kristin S. Miller**: Smooth Muscle Basal Contribution to Biaxial Mechanical Response of Murine Vagina. *Royal Society of Interface Focus,* 9:20190025*.* 2019. PMC6597518.
7. Akinjide R. Akintunde*, **Kristin S. Miller,** Daniele Schiavazzi: Bayesian Inference of Constitutive Model Parameters from Uncertain Uniaxial Experiments on Murine Tendons. *Journal of the Mechanical Behavior of Biomedical Materials.* 96:285-300. 2019. PMC6561498.
8. Daniel J. Capone*, Gabrielle L. Clark*, Derek J. Bivona*, Bernard Ogola, Leise R. Knoepp, Laurephile Desrosiers, Sarah H. Lindsey, **Kristin S. Miller**: Residual Strain in the Female Murine Reproductive System, *Journal of Biomechanics*. 82:299-306. 2019. PMC6501196.
9. Akinjide R. Akintunde*, Katy M. Robison*, Daniel J. Capone*, Laurephile Desrosiers, Leise R. Knoepp**,** **Kristin S. Miller**: Biaxial Mechanical Response of the Murine Vagina Before and After Elastase Digestion. *Journal of Biomechanical Engineering*. 141(2):021011. 2019. PMC6298538.
10. Bernard Ogola, Margaret Zimmerman, Gabrielle Clark*, Caleb Abshire*, Kaylee Gentry, **Kristin S. Miller**, Sarah H. Lindsey: New Insights into Arterial Stiffness: Does Sex Matter? *American Journal of Physiology – Heart and Circulatory Physiology*, 315: H1073-87. 2018. PMC6415742.
11. Emily W. Harville, Leise R. Knoepp, Mauve E. Wallace, **Kristin S. Miller**: Cervical Pathways for Racial Disparities in Preterm Birth: The Preterm Prediction Study. *Journal of Maternal-Fetal & Neonatal Medicine,* Jul 1:1-7. 2018. PMID29852821.

12. Margarite D. Matossian, Hope E Burks, Annie C Bowles, Steven Elliott, Van T. Barnes, Rachel A. Sabol, Nicholas Pashos, Benjamen O'Donnell, **Kristin S. Miller**, Bahia Wahba, Bruce A Bunnell, Krzysztof Moroz, Arnold H Zea, Steven D. Jones, Adam I. Riker, Lyndsay V Rhodes, Elizabeth Martin, Lucio Miele, Matthew E Burow, and Bridgette M Collins-Burow: A Novel Patient-Derived Xenograft Model for Claudin-Low Triple Negative Breast Cancer. *Breast Cancer Research and Treatment*. 169(2):381-390. 2018. PMC5948145.
13. Akinjide R. Akintunde*, **Kristin S. Miller**: Microstructurally Motivated Model of Age-Specific Murine Patellar Tendon Healing, *Biomechanics and Modeling in Mechanobiology*, 17(3):793-814*.* 2018. PMC5948310.
14. Katy M. Robison*, Cassandra K. Conway*, Laurephile Desrosiers, Leise R. Knoepp**, Kristin S. Miller**: Biaxial Mechanical Assessment of the Murine Vaginal Wall, ASME *Journal of Biomechanical Engineering*, 139(10). 2017. PMC5573019.
15. Emily Harville, **Kristin S. Miller**, Leise R. Knoepp: Racial and Social Predictors of Longitudinal Cervical Measures: The Cervical Ultrasound Study. *Journal of Perinatology*, 37(4):335-339. 2017. PMID28079869.
16. Liu Liu, Shreya Kashyap, Brennah Murphy, Dillon Hutson, Rebecca Budish, Emma Trimmer, Margaret Zimmerman, Aaron Trask, **Kristin S. Miller**, Mark Chappell, Sarah Lindsey: GPER Activation Ameliorates Aortic Remodeling Induced by Salt-Sensitive Hypertension*. American Journal of Physiology- Heart and Circulatory Physiology*, 310(8):H9533-61. 2016. PMC4867339.
17. Ramak Khosravi, **Kristin S. Miller**, Cameron A. Best, Yushane C. Shih, Yong-Ung Lee, Tai Yi, Christopher K. Breuer, Jay D. Humphrey: Differential Ratios of Type I to III Collagen Result in Biomechanical Diversity in 2-Year Tissue Engineered Vascular Grafts. *Tissue Engineering A* 21(9-10):1529-38. 2015. PMC4416307.
18. Thomas A. Sorrentino, Lara Fourman, Jacopo Ferruzzi, **Kristin S. Miller**, Jay D. Humphrey, Sara Roccabianca: Local Versus Global Mechanical Effects of Glycosaminoglycans in Carotid Arteries. *ASME Journal of Biomechanical Engineering* 137(4):041008. 2015. PMC4340201.
19. **Kristin S. Miller,** Ramak Khosravi, Christopher K. Breuer, Jay D. Humphrey: A Hypothesis-Driven Parametric Study of Effects of Polymeric Scaffold Properties on Tissue Engineered Neovessel Formation. *Acta Biomaterialia* 11(1):283-294*.* 2015. PMC4256111.

Prior to arriving at Tulane

20. Brooks V. Udelsman, Ramak Khosravi, **Kristin S. Miller**, Ethan W. Dean, Matthew R. Bersi, Kevin Rocco, Tai Yi, Jay D. Humphrey, Christopher K. Breuer: Characterization of Evolving Biomechanical Properties of Tissue Engineered Vascular Grafts in the Arterial Circulation. *Journal of Biomechanics* 47(9):2070-2079. 2014. PMC4747059.
21. **Kristin S. Miller,** Yong-Ung Lee, Yuji Naito, Christopher K. Breuer, Jay D. Humphrey: Computational Model of the In Vivo Development of a Tissue Engineered Vein from an Implanted Polymeric Construct. *Journal of Biomechanics* 47(9):2080-2087.2014. PMC3994188.
22. **Kristin S. Miller**, Elizabeth Feeney, Brianne K. Connizzo, Louis J. Soslowsky: Characterizing Local Collagen Fiber Re-Alignment and Crimp Behavior Throughout Mechanical Testing in a Mature Mouse Supraspinatus Tendon Model. *Journal of Biomechanics* 45(12):2061-2065. 2012. PMC22776688.
23. **Kristin S. Miller,** Brianne K. Connizzo, Elizabeth Feeney, Jennica J. Tucker, Louis J. Soslowsky: Examining Difference in Local Collagen Fiber Crimp Frequency Throughout Mechanical Testing in a Developmental Mouse Supraspinatus Tendon Model. *ASME Journal of Biomechanical Engineering* 134(4):041004. 2012. PMC22667679.

24. David P. Beason, Andrew F. Kuntz, Jason E. Hsu, **Kristin S. Miller**, Louis J. Soslowsky: Development and Evaluation of Multiple Tendon Injury Models in the Mouse. *Journal of Biomechanics* 45(8):1550-1553. 2012. PMC3335972.
25. **Kristin S. Miller,** Brianne K. Connizzo, Louis J. Soslowsky: Collagen Fiber Re-Alignment in a Neonatal Developmental Mouse Supraspinatus Tendon Model. *Annals of Biomedical Engineering* 40(5):1102-1110. 2012. PMC3336024.
26. Stephen J. Thomas, **Kristin S. Miller**, Louis J. Soslowsky: The Upper Band of the Subscapularis Tendon in the Rat has Inferior Mechanical Properties. *Journal of Shoulder & Elbow Surgery* 21(12):1687-93. 2012. PMC3393832.
27. **Kristin S. Miller**, Lena Edelstein, Brianne K. Connizzo, Louis J. Soslowsky: Effect of Preconditioning and Stress Relaxation on Local Collagen Fiber Re-Alignment: Inhomogeneous Properties of Rat Supraspinatus Tendon. *ASME Journal of Biomechanical Engineering* 134(13):031007. 2012. PMC3644292.
28. Spencer P. Lake, **Kristin S. Miller**, Dawn M. Elliott, Louis J. Soslowsky: Tensile properties and fiber alignment of human supraspinatus tendon in the transverse direction demonstrate inhomogeneous, nonlinearity, and regional anisotropy. *Journal of Biomechanics* 43(3):727-32. 2010. PMC2823853.
29. Spencer P. Lake, **Kristin S. Miller**, Dawn M. Elliott, Louis J. Soslowsky: Effect of fiber distribution and realignment on the nonlinear and inhomogeneous mechanical properties of human supraspinatus tendon under longitudinal tensile loading. *Journal of Orthopaedic Research* 27(12):1596-1602. 2009. PMC2813200.

BOOK CHAPTERS

1. Ramak Khosravi, Christopher K. Breuer, Jay D. Humphrey, **Kristin S. Miller**. (2017) Computational Model-Driven Design of Tissue-Engineered Vascular Grafts. In, Biomaterial Mechanics (H. Aranda-Espinoza, H. Hayenga, eds.), CRC Press, Baco Raton, 148-172.
2. **Kristin S. Miller,** Jason E. Hsu, Louis J. Soslowsky. (2011) Materials in Tendon and Ligament Repair. IN:P. Ducheyne, K.E. Healy, D.W. Hutmacher, D.W. Grainger, C.J. Kirpatrick (eds.) Comprehensive Biomaterials, vol. 6, pp.257-279 Elsevier.

INVITED NATIONAL AND INTERNATIONAL CONFERENCE PRESENTATIONS

2019, **Kristin S. Miller:** Biaxial Active and Passive Properties of Fibulin-5 Deficient Murine Vagina. 17th International Conference on Biomedical Engineering, Singapore.
2019, Leise R. Knoepp, **Kristin S. Miller:** Characterization of Biaxial Biomechanical Properties of Human Postmenopausal Uterosacral Ligament, 17th International Conference on Biomedical Engineering, Singapore.
2019, **Kristin S. Miller:** Microstructurally-Motivated Model of Age-Specific Tendon Healing, International Symposium on Computer Methods in Biomechanics and Biomedical Engineering, New York, New York.
2018, **Kristin S. Miller**: Contribution of Basal Smooth Muscle Tone to Biaxial Mechanical Response and Remodeling of Murine Vagina, Society of Engineering Science, Madrid, Spain.
2018, **Kristin S. Miller**: Effects of Elastase Digestion on Vaginal Wall Biaxial Mechanical Response, World Congress of Biomechanics, Dublin, Ireland.
2018, **Kristin S. Miller**: Engineering in Female Pelvic Health. Young Researchers Conference, New Orleans, LA.

2017, **Kristin S. Miller:** Towards a Microstructurally-Motivated Model of the Murine Vaginal Wall. 5th International Conference on Computational and Mathematical Biomedical Engineering, Pittsburgh, Pennsylvania.
2014, **Kristin S. Miller:** Hypothesis-Driven Parametric Study to Demonstrate the Predictive Capability of a Computational Model of In Vivo Tissue Engineered Vascular Grafts. World Congress of Biomechanics, Boston, MA.
2014, Ramak Khosravi, **Kristin S. Miller**, Cameron A. Best, Yushane C. Shih, Yong-Ung Lee, Tai Yi, Christopher K. Breuer, Jay D. Humphrey: Biomechanical Characterization of Tissue-Engineered Vascular Grafts: Using a Murine Model to Understand Venous Adaptation and Remodeling. World Congress of Biomechanics, Boston, MA.

INVITED INSTITUTIONAL SEMINARS

2019, Department of Biomedical Engineering, University of Texas (Host M. Sacks)
2019, Department of Orthopaedic Surgery, University of Pennsylvania (Hosts S. Levin, L. Soslowsky, R. Mauck)
2019, Department of Mechanical and Aerospace Engineering Seminar Series, Cornell University (Host N. Andarawis-Puri)
2018, Department of Mechanical Engineering Seminar Series, Michigan State University (Host S. Roccabianca)
2018, Department of Reproductive and Developmental Sciences Program Seminar Series, Michigan State University (Host C. Chan)
2018, Department of Mechanical Engineering and Material Science Seminar Series, Washington University in Saint Louis (Host S. Lake)
2017, Department of Physics Seminar Series, University of Louisiana Lafayette (Host A. Petculescu)
2017, Department of Structural and Cellular Biology Seminar Series, Tulane University (Host Z. You)
2017, Department of Biomedical Engineering, Yale University (Host J. Humphrey)
2016, Center for Computational Science Seminar Series, Tulane University (Host R. Cortez)
2016, Newcomb College Institute Seminar Series, Tulane University
2014, Department of Pharmacology Seminar Series, Tulane University
2014, Department of Biomedical Engineering, University of Arkansas
2014, Department of Mechanical Engineering, University of North Caroline Charlotte (Host C. Lee)
2014, Department of Mechanical Engineering, Baylor University (Host S. McClain)
2014, Department of Biomedical Engineering, Tulane University
2014, School of Mechanical Engineering, Georgia Tech (Host A. Garcia)
2014, Department of Engineering and Science Mechanics, Virginia Tech (Host R. De Vita)
2014, Department of Engineering, Messiah College

CONFERENCE PROCEEDINGS AND ABSTRACTS

Since joining Tulane

In Review

1. Elvis K. Danso*, Jason D Schuster*, Lyndsey Buckner-Baiamonte, Laurephile Desrosiers, Leise R Knoepp, **Kristin S. Miller**: Characterization of Biaxial Biomechanical Properties of Human Post-

menopausal Uterosacral Ligament – Importance of Collagen on Biomechanical Anisotropy. *The 17th International Conference on Biomedical Engineering*, Singapore, 2019.

2. Gabrielle L Clark*, Laurephile Desrosiers, Leise R Knoepp, **Kristin S. Miller:** Biaxial Active and Passive Mechanical Properties of Fibulin-5 Deficient Murine Vagina. The *17th International Conference on Biomedical Engineering*, Singapore, 2019.

Published

1. Gabrielle L. Clark*, Laurephile Desrosiers, Leise R, Knoepp, **Kristin S. Miller**: The Effect of Fibulin-5 Haploinsufficiency on Vaginal Mechanical Behavior Using Extension-Inflation Testing. 44th Annual *American Urogynecology Society and International Urogynecological Association,* Nashville, TN, 2019.
    a. Selected for oral presentation
2. Elvis K. Danso*, Jason D. Schuster*, Lyndsey R. Buckner, Emily W Harville, Laurephile Desrosiers, Leise R. Knoepp, **Kristin S. Miller**: Biaxial Biomechanical Properties of Post-Menopausal Prolapsed and Non-Prolapsed Uterosacral Ligament. 44th Annual *American Urogynecology Society and International Urogynecological Association,* Nashville, TN, 2019.
3. Gabrielle L. Clark*, Laurephile Desrosiers, Leise R. Knoepp, **Kristin S. Miller**: Murine Vaginal Wall Biaxial Contractile Response Following Elastase Digestion. *Summer Biomechanics, Biotransport, and Bioengineering,* Seven Springs, PA, 2019.
4. Akinjide R. Akintunde*, Gabrielle L. Clark*, **Kristin S. Miller**: Towards the Development of a Growth and Remodeling Model to Elucidate Vaginal Prolapse. *15th US National Congress on Computational Mechanics*, Austin, TX, 2019.
    a. Selected for oral presentation
5. Cassandra K. Conway*, Gabrielle L. Clark*, Mala Mahendroo, **Kristin S. Miller:** Longitudinal and Circumferential Smooth Muscle Contractility of the Murine Cervix In Vitro. *Society of Reproductive Investigation*, Paris, France, 2019.
6. Cassandra K. Conway*, Gabrielle L. Clark*, Mala Mahendroo, **Kristin S. Miller:** Determination of the Active and Passive Mechanical Properties of the Non-Pregnant Murine Cervix. *Summer Biomechanics, Biotransport, and Bioengineering,* Seven Springs, PA, 2019.
7. Elvis Danso* Jason Schuster*, Isabella Johnson*, Emily Harville, Laurephile Desrosiers, Leise R. Knoepp, **Kristin S. Miller**: Effects of Pelvic Organ Prolapse on the Biaxial Mechanical Behavior of Post-Menopausal Uterosacral Ligament. *Summer Biomechanics, Biotransport, and Bioengineering,* Seven Springs, PA, 2019.
    a. Selected for oral presentation
8. Gabrielle L. Clark*, Rachel Russell*, Laurephile Desrosiers, Leise R. Knoepp, **Kristin S. Miller**: Effect of Parity on Vaginal Wall Elastic Fiber Structure and Mechanical Function. *Society for Pelvic Research*, New Orleans, LA, 2018.
9. Akinjide R. Akintunde, Laurephile Desrosier, Leise R, Knoepp, **Kristin S. Miller**: Effects of elastase digestion on the murine vaginal wall biaxial mechanical response. *Society for Pelvic Research*, New Orleans, LA, 2018.
10. Elvis K. Danso*, Jason Schuster*, Laurephile Desrosiers, Leise R. Knoepp, **Kristin S. Miller**: Characterization of Human Post-Menopausal Prolapsed and Non-Prolapsed Uterosacral Ligament. *Society for Pelvic Research*, New Orleans, LA, 2018.
    a. Selected for oral presentation
11. Gabrielle L. Clark*, Dylan J. Lawrence, Sarah H. Lindsey, Laurephile Desrosiers, Leise R. Knoepp, Carolyn L. Bayer, **Kristin S. Miller**: Role of Circumferential and Longitudinal Smooth Muscle in Murine Vaginal Tissue. *International Mechanical Engineering Congress & Exposition*, Pittsburgh, PA, 2018.

12. Gabrielle L. Clark*, Dylan J. Lawrence, Sarah H. Lindsey, Laurephile Desrosiers, Leise R. Knoepp, Carolyn L. Bayer, **Kristin S. Miller**: Biaxial Contractile Response of Murine Vaginal Smooth Muscle. *American Urogynecology Society Pelvic Floor Disorders Week*, Chicago, IL, 2018.
    a. Selected for oral presentation
13. Jason D. Schuster*, Laurephile Desrosiers, Leise R. Knoepp, **Kristin S. Miller**: Biaxial Mechanical Properties of Human Post-Menopausal Prolapsed Uterosacral Ligament Insertion. *American Urogynecology Society Pelvic Floor Disorders Week*, Chicago, IL, 2018.
    a. Selected for oral presentation
14. Gabrielle L. Clark*, Dylan J. Lawrence, Sarah H. Lindsey, Laurephile Desrosiers, Leise R. Knoepp, Carolyn L. Bayer, **Kristin S. Miller**: Contribution of Basal Smooth Muscle Tone to Biaxial Mechanical Response and Remodeling of the Murine Vagina. *55th Annual Technical Meeting of the Society of Engineering Science*, Leganes, Madrid, Spain, 2018.
    a. Selected for oral presentation
15. Bernard O. Ogola, Caleb M. Abshire*, Gabrielle L. Clark*, Kaylee M. Gentry, Dylan J. Lawrence, Margaret A. Zimmerman, **Kristin S. Miller,** Carolyn L. Bayer, Sarah H. Lindsey: Ultrasound-Derived Local Pulse Wave Velocity Predicts Ex Vivo Unloaded Thickness in Mouse Carotid Arteries. *International Vascular Biology*, Helsinki, Finland, 2018.
16. Akinjide R. Akintunde*, Daniele E. Schiavazzi, **Kristin S. Miller**: Towards the Development of a Growth and Remodeling Model for Tendon Aging and Healing. *18th U.S. National Congress for Theoretical and Applied Mechanics*, Rosemont, IL, 2018.
    a. Selected for oral presentation
17. **Kristin S. Miller**, Christopher K. Breuer, Jay D. Humphrey: Computational Model of the In Vivo Development of a Tissue Engineered Vein. *18th U.S. National Congress for Theoretical and Applied Mechanics*, Rosemont, IL, 2018.
    a. Selected for oral presentation
18. Jason Schuster*, Leise R. Knoepp, Laurephile Desrosiers, Emily W. Harville, J. Quincy Brown, **Kristin S. Miller**: Biaxial Mechanical Properties of Human Post-Menopausal Prolapsed Uterosacral Ligament Insertion. *World Congress of Biomechanics*, Dublin, Ireland, 2018.
19. Gabrielle L. Clark*, Dylan J. Lawrence, Sarah H. Lindsey, Leise R. Knoepp, Laurephile Desrosiers, Carolyn L. Bayer, **Kristin S. Miller**: Smooth Muscle Basal Contribution to Biaxial Mechanical Response of Murine Vagina. *World Congress of Biomechanics*, Dublin, Ireland, 2018.
    a. Selected for oral presentation
20. Akinjide R. Akintunde*, Kathryn M. Robison*, Daniel Capone*, Laurephile Desrosiers, Leise R. Knoepp, **Kristin S. Miller**: Role of Elastin in Vaginal Wall Biaxial Mechanical Response. World Congress of Biomechanics, Dublin, Ireland, 2018.
    a. Selected for oral presentation
21. Akinjide R. Akintunde*, **Kristin S. Miller**, Daniele Schiavazzi: Computational Modeling for Tendon Aging and Healing Under Uncertain Uniaxial Stress-Stretch Response. World Congress of Biomechanics, Dublin, Ireland, 2018.
    a. Selected for oral presentation
22. Jay D. Humphrey, Ramak Khosravi, Jason M. Szafron, **Kristin S. Miller**: Computational Model-Driven Design of Tissue Engineered Vascular Grafts. World Congress of Biomechanics, Dublin, Ireland, 2018.
    a. Invited presentation of Jay D. Humphrey
23. Gabrielle L. Clark*, Laurephile Desrosiers, Leise R. Knoepp, **Kristin S. Miller**: Regional Contractility of Murine Vaginal Circumferential and Longitudinal Smooth Muscle. *Society of Reproductive Investigation.* San Diego, CA, 2018.

24. Caleb M. Abshire*, Gabrielle L. Clark*, **Kristin S. Miller**, Sarah H. Lindsey: Impact of Genetic GPER Deletion on Baseline Cardiovascular Parameters. *North American Vascular Biology.* Monterrey, CA, 2017.
25. Gabrielle L. Clark*, Caleb M. Abshire*, Sarah H. Lindsey, **Kristin S. Miller**: The Effect of G-Protein Coupled Estrogen Receptor Deletion on the Common Carotid Artery Mechanical Properties. *North American Vascular Biology.* Monterrey, CA, 2017.
26. Dongxia Ge, Sen Liu, Lin Ma, Qiuyang Zhang, Victor Wi, Michael J. O'Brien, R. Nelson Mead, Felix H. Savoie, Jeffrey M. Gimble, Xiying Wu, Bruce A. Bunnell, Margaret H. Gilbert, **Kristin S. Miller**, Alun R. Wang, Leann Myers, Zongbing You: Articular Cartilage Repair Using Human Adipose Tissue-Derived Adult Stem Cells. *Military Health System Research Symposium*, 2017.
27. Cassandra K. Conway*, Hamna J. Qureshi, Leise Knoepp, Laurephile Desrosiers, Craig J. Goergen, **Kristin S. Miller**: Comparing In Vivo Ultrasound Geometry Against In Vitro Calculations for Biaxial Testing in the Nonpregnant Murine Cervix. *Summer Biomechanics, Bioengineering, and Biotransport Conference*, Tuscon, AZ, 2017.
    a. Selected for oral presentation
28. Akinjide R. Akintunde*, **Kristin S. Miller:** Evaluation of Strain Energy Functions for the Development of a Growth and Remodeling Model of Age-Specific Murine Patellar Tendon Healing. *Summer Biomechanics, Bioengineering, and Biotransport Conference*, Tuscon, AZ, 2017.
    a. Selected for oral presentation
29. Cody O'Cain*, Wendell M.R. Heard, Felix H. Savoie, Sara Roccabianca, Ronald C. Anderson, **Kristin S. Miller**: Determining the Potential Role of Glycosaminoglycan Clusters in Tendon Mechanical Homeostasis. *Summer Biomechanics, Bioengineering, and Biotransport Conference*, Tuscon, AZ, 2017.
30. Cassandra K.Conway*, Laurephile Desrosiers, Leise R. Knoepp, **Kristin S. Miller**: Biaxial Mechanical Properties of the Murine Uterus and Cervix. *Society of Reproductive Investigation*, Orlando, FL, 2017.
31. Katy M. Robison*, Laurephile Desrosiers, Leise R. Knoepp, **Kristin S. Miller**: Effect of Elastase Digestion on the Biaxial Mechanical Properties of the Murine Vagina. *43rd Annual Meeting of the Society of Gynecologic Surgeons.* San Antonio, TX, 2017.
    a. Selected for oral presentation
32. Akinjide R. Akintunde*, Wendell M.R. Heard, Felix H. Savoie III, **Kristin S. Miller**: Towards a Microstructurally-Motivated Constitutive Model of Age-Dependent Murine Patellar Tendon Healing to Elucidate Underlying Deficiencies in Extracellular Matrix Dynamics. *Orthopaedic Research Society*, San Diego, CA, 2017.
33. Madison Vanosdoll*, Wendell M.R. Heard, Felix H. Savoie III, **Kristin S. Miller**: Development of an Agent-Based Model to Predict the Salient Features of Age-Related Patellar Tendon Degeneration. *Orthopaedic Research Society*, San Diego, CA, 2017.
34. Akinjide R. Akintunde*, Wendell M. R. Heard, Felix H. Savoie III, **Kristin S. Miller**: Development of a Growth and Remodeling Model for Murine Patella Tendon Healing. *Gordon Research Seminar on Musculoskeletal Biology and Bioengineering*, Andover, NH, 2016.
35. Victoria L. Morris*, Cassandra K. Conway***, Kristin S. Miller**: Determining the Effect of Elastin Digestion on the Regional Biaxial Mechanical Properties of the Murine Cervix. *Summer Biomechanics, Bioengineering, and Biotransport Conference*, National Harbor, MD, 2016.
36. Katy M. Robison*, Derek J. Bivona*, **Kristin S. Miller**: Effect of Elastin Digestion on the Biaxial Mechanical Properties of the Murine Vagina. *Summer Biomechanics, Bioengineering, and Biotransport Conference*, National Harbor, MD, 2016.
    a. Selected for oral presentation

37. Derek J. Bivona*, **Kristin S. Miller**: Regional Variations of Residual Strain Within the Murine Female Reproductive System. *BMES Annual Meeting,* Tampa, FL, 2015.
    a. Selected for oral presentation
38. **Kristin S. Miller**, Ramak Khosravi, Christopher K. Breuer, Jay D. Humphrey: Evaluating the Growth Potential of Tissue Engineered Vascular Grafts: Role of Vasoactivity and Active Endothelium to Altered Mechanical Stimuli. *BMES/CMBE Special Interest Group*, St Thomas, USVI, 2015.

Prior to joining Tulane

39. **Kristin S. Miller**, Brooks V. Udelsman, Yong-Ung Lee, Yuji Naito, Christopher K. Breuer, Jay D. Humphrey: Computational Growth and Remodeling Model for Evolving Tissue Engineered Vascular Grafts in the Venous Circulation. *ASME/FDA Annual Frontiers in Medical Devices, Applications of Computer Modeling and Simulation,* Washington, DC., 2013.
    a. Selected for oral presentation
40. Brooks V. Udelsman, Ramak Khosravi, Ethan W. Dean, Kevin Rocco, **Kristin S. Miller**, Tai Yi, Jay Humphrey, Christopher K. Breuer: Characterization of the Biomechanical Properties of Tissue Engineered Vascular Grafts Implanted in the Arterial Circulation. *New England Surgical Society,* 2013.
41. Chi Liu, Chung Chang, Mitchel R. Stacy, **Kristin S. Miller**, Alda Bregasi, Donald Dione, Zhenwu Zhang, Albert Sinusas: Feasibility of Quantifying Intramyocardial Blood Volume using SPECT/CT. *Society of Nuclear Medicine and Molecular Imaging*, Vancouver, BC, Canada, 2013.
42. **Kristin S. Miller**, Brianne K. Connizzo, Elizabeth Feeney, Louis J. Soslowsky: Collagen Fiber Re-Alignment and Mechanical Properties in a Mouse Supraspinatus Tendon Model: Examining Changes with Age and Location. *ASME Summer Bioengineering Conference*, Fajardo, Puerto Rico, 2012.
    b. Selected for oral presentation
43. **Kristin S. Miller**, Brianne K. Connizzo, Jennica J. Tucker, Louis J. Soslowsky: Collagen Fiber Re-Alignment in a Neonatal Developmental Mouse Supraspinatus Tendon Model. *Orthopaedic Research Society*, 37:1289, 2012
44. **Kristin S. Miller**, Brianne K. Connizzo, Jennica J. Tucker, Elizabeth Feeney, Nicholas A. Trasolini, Louis J. Soslowsky: Local Differences in Collagen Fiber Crimp Throughout Mechanical Testing in a Mouse Supraspinatus Tendon Model. *Orthopaedic Research Society,* 37:1290, 2012
45. David P. Beason, Andrew F. Kuntz, Jason E. Hsu, **Kristin S. Miller**, Louis J. Soslowsky: Development and Evaluation of Multiple Tendon Injury Models in the Mouse. *Orthopaedic Research Society* 36:919, 2011.
46. **Kristin S. Miller,** Stephen J. Thomas, Nicholas A. Trasolini, Louis J. Soslowsky: The Upper Band of the Subscapularis Tendon in the Rat has Inferior Mechanical Properties. *Orthopaedic Research Society* 36: 2011.
47. **Kristin S. Miller**, Lena Edelstein, Louis J. Soslowsky: Effect of Preconditioning on Collagen Fiber Recruitment: Inhomogeneous Properties of Rat Supraspinatus Tendon. *ASME Summer Bioengineering Conference*, Naples, FL, 2010.
48. Jennifer A. Kadlowec, Spencer P. Lake**, Kristin S. Miller**, Louis J. Soslowsky, Dawn M. Elliott: A Hyperelastic Model with Distributed Fibers to Describe Human Supraspinatus Tendon Tensile Mechanics. *ASME Summer Bioengineering Conference*, Lake Tahoe, CA, 2009.
49. Spencer P. Lake, **Kristin S. Miller**, Jennifer A. Kadlowec, Dawn M. Elliott, Louis J. Soslowsky: Inhomogeneous and Nonlinear Transverse Tensile Properties and Fiber Alignment of Human Supraspinatus Tendon. *ASME Summer Bioengineering Conference,* Lake Tahoe, CA, 2009.
    c. Selected for oral presentation

50. Spencer P. Lake, **Kristin S. Miller**, Louis J. Soslowsky, Dawn M. Elliott: Fiber Alignment under Load Contributes to Human Supraspinatus Tendon Nonlinearity and Inhomogeneity. *Orthopaedic Research Society* 34: 2009.
51. Cody Schoener, **Kristin S. Miller**, Matthew Westfall, Neil Markwardt: Exercise System for the Crew Exploration Vehicle. *Houston Society for Engineering Medicine and Biology 2007: 14th Annual Houston Conference.* February 8-9, 2007.
    d. Selected for oral presentation

TEACHING

Courses Taught

BMEN 3400/6400 – Biomaterials and Tissue Engineering: **Fall 2018, Fall 2019**
BMEN 3440 - Biofluid Mechanics: **Fall 2014, Fall 2015, Fall 2016, Fall 2017**
BMEN 6340 - Soft Tissue Mechanics: **Spring 2016, Spring 2017, Spring 2019**
BMEN 3710/6710 – Departmental Seminar: **Fall 2016, Fall 2019**

Courses Developed

Soft Tissue Mechanics (BMEN 6340): This course provides an introduction to the various approaches used in modeling soft tissues, with particular attention paid to those of the cardiovascular, musculoskeletal, and reproductive systems. Particular emphasis is placed on the theoretical and experimental consequences of the large deformation behavior of these tissues. An important objective of this class is to enable the student to develop a sense for the physical and mathematical relationships between the many types of models (and the associated experiments) currently being utilized in soft tissue mechanics. The class is composed of lectures, and interactive discussions on recent papers representing the state of the art in the field.

Postdoctoral Fellows Mentored

Name	Tenure in lab
Tulane University	
Elvis Danso	2018 –

Graduate Students Mentored

Name	Degree	Tenure in lab	Current Position
Tulane University			
Akinjide Akintunde	Ph.D.	2015 – 2019	Assistant Professor, Mary Hardin-Baylor
Cassandra Conway	Ph.D.	2015 –	
Gabrielle Clark	Ph.D.	2016 –	
Shelby White	Ph.D.	2018 –	
Taylor McCrady	M.S.	2014 – 2017	Process Engineer, Applied Medical
Jonathan Nguyen	M.S.	2014 – 2017	Software Developer, Select Laboratory
Kathryn Robison	M.S.	2014 – 2017	Application Support Engineer, MathWorks
Jason Schuster	M.S.	2015 – 2018	Engineer, Wheelworks, Trek Bicycle
Daniel Capone	M.S.	2015 – 2018	Engineer, Sutro Biopharma
Caleb Abshire	M.S.	2017 – 2018	Tulane Medical School

Richard Urbanowski	M.S.	2019 –
Rachel Russell	M.S.	2019 –
Isabella Johnson	M.S.	2019 –

Mississippi College

Alexander Oldweiler	M.S.	2019 –

Undergraduate Students Mentored

Name	Degree	Tenure in lab
Tulane University		
Ben Sonin	ENGP	2014 – 2015
Kat Brocker	BME	2014 – 2016
Victoria Morris	BME	2014 – 2016
Derek Bivona	BME	2014 – 2016
Cody O'Cain	BME	2014 – 2017
Sarah Holt	BME	2015 – 2016
Avery Newsom	BME	2015 – 2016
Madison Vanosdoll	BME	2015 – 2018
Catherine Starks	BME	2016 – 2017
Taylor Sabol	BME	2016 – 2018
Erin Blake	BME/CS	2017 – 2018
Claire Sentilles	BME	2017 – 2019
Shreya Gunda	BME	2017 – 2019
Rachel Russell	BME	2017 –
Richard Urbanowski	BME	2017 –
Ellie Pepperell	BME	2017 – 2019
Isabella Johnson	BME	2017 –
Ashley Stuart	BME	2018 –
Jordan Robinson	BME	2018 –
Diego Gatica Portillo	BME	2018 –
Peyton Gibler	BME	2018 –
Katherine Mattingly	BME	2018 –
Gabbi Sherer	BME	2019 –
Sydney Siegmeister	BME	2019 –
Rey Arcenas	CMB/Classics	2019 –

SMART REU at Tulane University

Name	Institution	Major	Summer in Lab
Tyra Buckley	Prairie View A&M	Biomedical Chemistry	2019

High School Students Mentored

Name	Tenure in lab
Benjamin Franklin High School	

Kelsey Lain 2018 - 2019

St. Martin's Epsicopal School
Michaela Dennies Summer 2019

Thesis Committees

Name	Degree	Completion date
Callie Turlington	M.S. BME	2015
Shreya Kashyap	B.S.	2016
Radhika Josi	M.S. BME	2016
Keith Watza	M.S. BME	2018
Kate Elfer	Ph.D. BME	2018
Scott Hymel	Ph.D. BME	
Heng (Vivien) Yu	Ph.D. BME	

MENTEE ACHIEVEMENTS

1. Shreya Gunda, James A. Cronvitch Award, Tulane Biomedical Engineering, 2019
2. Isabella Johnson, Van Buskirk Award, Tulane Biomedical Engineering, 2019
3. Richard Urbanowski, Van Buskirk Award, Tulane Biomedical Engineering, 2019
4. Akinjide Akintunde, Dean of the School of Science and Engineering Award for Excellence in Research and Presentation by a Graduate Student, 2019
5. Shreya Gunda, First Place Winner, Tulane University School of Science and Engineering Research Day Best Undergraduate Presentation, 2019
6. Kelsey Lain, First Place at Greater New Orleans Science and Engineering Fair, Regeneron Talent Search Award, Bruce K Heim Foundation Award, Albert Habeeb Scholarship Award, 2019
7. Gabrielle Clark, Society for Pelvic Research Best Paper Competition, 1st Place, 2018
8. Akinjide Akintunde, Graduate Student Outstanding Achievement Award, Tulane Biomedical Engineering, 2018
9. Madison Vanosdoll, James A. Cronvich Award, Tulane Biomedical Engineering, 2018
10. Jason Schuster, Tulane BIRCWH Award for Research in Women's Health and Sex Differences, 2018
11. Cody O'Cain, James A. Cronvitch Award, Tulane Biomedical Engineering, 2016
12. Daniel Capone, Van Buskirk Award, Tulane Biomedical Engineering, 2016
13. Gabrielle Clark, Board of Regents Southern Regional Education Board Fellowship, 2016
14. Kathryn Robison, Van Buskirk Award, Tulane Biomedical Engineering, 2015
15. Kathryn Robison, First Place Winner, Tulane University School of Science and Engineering Research Day Best Undergraduate Presentation, 2015
16. Cassandra Conway, Board of Regents Fellowship, 2015

ACADEMIC SERVICE

Institutional Service

Biomedical Engineering Class of 2018 Advisor (2014 – 2018)
Graduate Studies Committee, Dept. of Biomedical Engineering (2014 – 2017)
Faculty Search Committee, Department of Biomedical Engineering (2014 – 2015)

Faculty Advisor, Tulane Biomedical Engineering Society (2015 – Present)
Curriculum Committee, Newcomb Tulane College-Center for Public Service Learning (2015 – Present)
Petitions Committee, Center for Public Service (2015 – Present)
Executive Committee, Center for Public Service (2015 – Present)
Faculty Search Committee, Department of Biomedical Engineering (2015 – 2016)
Matlab Curriculum Committee, Departments of Biomedical Engineering and Engineering Physics (2016)
Biomedical Engineering Seminar Series Organizer (2016 – 2017)
Faculty Search Committee, Department of Chemical and Biological Engineering (2016 – 2017)
Faculty Search Committee, Department of Biomedical Engineering (2017 – 2018)
Center for Aging and Regenerative Medicine Center Seminar Series Organizer (2017 - Present)
External Constituency Committee, Dept. of Biomedical Engineering (2017 – Present)
Team Design Mentor, Team Tendon Love and Care, Winners of Kenneth H. Kuhn Sr, Memorial Award (2017 – 2018)
Novel Tech Challenge Team Mentor, Team (2017 - 2018)
Center for Teaching and Learning Liaison (2018 – Present)
Interdisciplinary PhD Program in Aging Studies Program Committee (2018 – Present)
Faculty Search Committee, Department of Biomedical Engineering (2018-2019)
Newcomb-Tulane College Honor Board Member (2018 – Present)

Guest Editorships

Guest editor, Special Issues on Bioengineering in Women's Health, *Royal Society Interface Focus*, 2019

Editorial Board

Editorial review board member, Journal of Orthopaedic Research, 2019 - Present

Grant Proposal Review

Year	*Funding Institution and Panel*	*Proposal load*
2016	University of Idaho, Institute for Bioinformatics	2 proposals
2018	Nevada-INBRE, NIH/NIGMS IDeA program	1 proposal
2018	National Science Foundation	8 proposals
2018	National Science Foundation	1 proposal
2019	Paracelsus Medical University Research Fund, Austria	1 proposal

Ad Hoc Journal Review

Journal (# manuscripts reviewed)
Acta Biomaterialia (13)
Annals of Biomedical Engineering (13)
Biochemical Engineering Journal (1)
Biomechanics and Modeling in Mechanobiology (4)
Clinical Biomechanics (6)
International Journal for Numerical Methods in Biomedical Engineering (1)
International Journal of Plasticity (1)
Journal of Biomechanics (8)

Journal of Biomechanical Engineering (17)
Journal of the Mechanical Behavior of Biomedical Materials (1)
Journal of Orthopaedic Research (16)
Journal of Physiology (5)
Journal of the Royal Society Interface (5)
Science Translation Medicine (3)
Scientific Reports (1)
Tissue Engineering and Regenerative Medicine (1)

Conference Service

2015 **Session chair**, Summer Biomechanics, Bioengineering and Biotransport Conference, *Growth & Remodeling*, Snowbird, UT

2016 **Session chair**, Summer Biomechanics, Bioengineering and Biotransport Conference, *Reproductive Biomechanics*, National Harbor, MD

2017 **Symposium committee and chair**, Conference, 5th International Conference on Computational and Mathematical Biomedical Engineering*, Engineering in Female Pelvic Health*, Pittsburgh, PA

2017 **Session chair**, Summer Biomechanics, Bioengineering and Biotransport Conference, *Reproductive Biomechanics*, Tucson, AZ

2018 **Session committee, reviewer, and chair**, World Congress of Biomechanics, *Biomechanics in Pregnancy and Parturition*, Dublin, Ireland

2018 **Session chair**, Society of Engineering Sciences, *Growth and Remodeling of Living Matter*, Leganes, Spain

2019 **Session chair**, Summer Biomechanics, Bioengineering and Biotransport Conference, *Reproductive Biomechanics*, Seven Springs, PA

2019 **Session chair**, Summer Biomechanics, Bioengineering and Biotransport Conference, *PhD Student Paper Competition: Morphogenesis, Development, Growth, & Remodeling*, Seven Springs, PA

2019 **Session organizer and chair**, 16th International Symposium on Computer Methods in Biomechanics and Biomedical Engineering and the 4th Conference on Imaging and Visualization (CMBBE 2019), *Growth and Remodeling in Reproductive Biomechanics*, New York, New York

2019 **Session chair**, 16th International Symposium on Computer Methods in Biomechanics and Biomedical Engineering and the 4th Conference on Imaging and Visualization (CMBBE 2019), *Biomechanics of tendon and ligament*, New York, New York

2019 **Session organizer and panel member**, Biomedical Engineering Society, *Bioengineering in Women's Health*, Philadelphia, PA