

BRIAN ALBERTO AGUADO, Ph.D.

3415 Colorado Ave, UCB 596, Boulder, CO 80303

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EDUCATION

Northwestern University, Evanston, IL 9/2010 to 9/2015

Ph.D. in Biomedical Engineering

Thesis: Development of a Biomaterial Implant for Early Detection of Cancer Metastasis

Kellogg School of Business, Northwestern University, Evanston, IL 6/2014 to 8/2014

Certificate in Business Management for Scientists and Engineers

Northwestern University, Evanston, IL 9/2010 to 6/2013

M.S. in Biomedical Engineering

Thesis: Immune Cell Mediated Transcription Factor Activity in Metastatic Breast Cancer Cells

Stanford University, Stanford, CA 9/2006 to 6/2010

B.S. in Biomechanical Engineering

Project: Designing Hydrogel Cell Carriers to Improve Stem Cell Viability During Syringe Needle Flow

RESEARCH EXPERIENCE

University of Colorado, Boulder, CO 1/2016 – Present

Adviser: Kristi Anseth, Ph.D.

Position/Department: Postdoctoral Fellow, Chemical and Biological Engineering

Funding: NIH K99/R00 Pathway to Independence Award (2019 to present)

NIH F32 Postdoctoral Award (2017-2019)

Burroughs Wellcome Fund Postdoctoral Enrichment Program (2017-2020)

Howard Hughes Medical Institute (2016-2017)

Northwestern University, Chicago, IL 8/2012 – 12/2015

Adviser: Lonnie Shea, Ph.D.

Position/Department: Graduate Researcher, Biomedical Engineering

Funding: NSF Graduate Research Fellow (2012-2015)

Northwestern University, Chicago, IL 9/2010 - 8/2012

Adviser: Ramille Shah, Ph.D.

Position/Department: Graduate Researcher, Biomedical Engineering

Funding: NIH T32 Biotechnology Training Program (2011-2012)

Mayo Clinic College of Medicine, Rochester, MN 6/2008 - 9/2008

Adviser: John Henley, Ph.D.

Position/Department: Summer Undergraduate Research Fellow, Biomedical Engineering

Stanford University, Stanford, CA 9/2007 - 9/2010

Adviser: Sarah Heilshorn, Ph.D.

Position/Department: Undergraduate Researcher, Materials Science and Engineering

Funding: BioX Undergraduate Research Fellowship

RESEARCH PUBLICATIONS (*Indicates equal contribution)

Published:

1. **Aguado BA**, Schuetze KB, Grim JC, Walker CJ, Cox AC, Ceccato TL, Tan AC, Sucharov CC, Leinwand LA, Taylor MRG, McKinsey TA, Anseth KS. "Transcatheter aortic valve replacements alter circulating serum factors to mediate myofibroblast deactivation." *Science Translational Medicine*, 11, eaav3233 (2019). *Cover image selected for website banner in September 2019 issue

2. Peña B, Maldonado M, Bonham A, **Aguado BA**, Dominguez-Alfaro A, Laughter, Melissa, Rowland T, Bardill J, Farnsworth N, Alegret-Ramon N, Taylor MRG, Anseth KS, Prato M, Shandas R, McKinsey TA, Park D, Mestroni L. "Gold nanoparticle functionalized reverse thermal gel for tissue engineering applications." *ACS Applied Materials and Interfaces*, 11(20), 18671-18680 (2019).
3. Grim JC, Brown TE, **Aguado BA**, Chapnick D, Viert A, Liu X, Anseth KS. "A reversible and repeatable thiol-ene bioconjugation for dynamic patterning of signaling proteins in hydrogels." *ACS Central Science*, 4(7), 909-916 (2018).
4. **Aguado BA***, Dudek RM*, Bushnell GG, Decker JT, Azarin SM, Nanavati D, Schipma MJ, Rao SS, Oakes RS, Zhang Y, Jeruss JS, Shea LD. "Biomaterial scaffolds as pre-metastatic niche mimics systemically alter the primary tumor and tumor microenvironment." *Advanced Healthcare Materials*, adhm.1700903 (2018).
***Inside front cover article for May 2018 issue**
5. **Aguado BA**, Grim JC, Rosales AM, Watson-Capps JJ, Anseth KS. "Engineering precision biomaterials for personalized medicine." *Science Translational Medicine*, 10, eeam8645 (2018).
6. Peña B, Bosi S, **Aguado BA**, Borin D, Martinelli V, Jeong M, Taylor MRG, Long CS, Shandas R, Sbaizero O, Prato M, Anseth KS, Park D, Mestroni L. "Injectable carbon nanotube-functionalized reverse thermal gel promotes cardiomyocyte survival and maturation." *ACS Applied Materials and Interfaces*, 9(37), 31645-31656 (2017).
7. **Aguado BA***, Bushnell GG*, Rao SS, Jeruss JS, Shea LD. "Engineering the pre-metastatic niche." *Nature Biomedical Engineering*, 1, 0077 (2017). ***Cover article for June 2017 issue on "Implanted Biomaterials."**
8. Rao SS, Azarin SM, Spicer G, Bushnell GG, **Aguado BA**, Stoehr JR, Jiang EJ, Backman V, Shea LD, and Jeruss JS. "Enhanced survival with implantable scaffolds that capture metastatic breast cancer cells *in vivo*." *Cancer Research*, 76(18), 5209-5218 (2016).
9. **Aguado BA**, Caffè JR, Rao SS, Bushnell GG, Azarin SM, and Shea LD. "Extracellular matrix mediators of metastatic cell colonization identified using scaffold mimics of the pre-metastatic niche." *Acta Biomaterialia*, 33, 13-24 (2016).
10. Dubash AD*, Kam CY*, **Aguado BA**, Patel D, Delmar M, Shea LD, Green KJ. "Plakophilin-2 loss promotes TGF- β 1/p38 MAPK-dependent fibrotic gene expression in cardiomyocytes." *Journal of Cell Biology*, 15, 212(4), 425-438 (2016).
11. **Aguado BA**, Wu JJ, Azarin SM, Nanavati D, Rao SS, Bushnell GG, Medicherla CB, and Shea LD. "Secretome identification of immune cell factors mediating metastatic cell homing." *Scientific Reports*, 5, 17566; DOI: 10.1038/srep17566 (2015).
12. Azarin SM, Yi J, Gower RM, **Aguado BA**, Sullivan ME, Goodman AG, Jiang EJ, Rao SS, Ren Y, Backman V, Jeruss JS, and Shea LD. "*In vivo* capture and label-free detection of early metastatic cells." *Nature Communications*, 8(6), 8094; DOI: 10.1038/ncomms9094 (2015).
13. Chien KB, **Aguado BA**, Bryce PJ, and Shah RN. "*In vivo* acute and humoral response to three-dimensional porous soy protein scaffolds." *Acta Biomaterialia*, 9(11), 8983-8990 (2013).
14. Chung EJ, Chien KB, **Aguado BA**, and Shah RN. "Osteogenic potential of BMP-2 releasing self-assembled membranes." *Tissue Engineering: Part A*, 19(23-24), 2664-73 (2013).
15. **Aguado BA**, Mulyasmita W, Su J, Lampe KJ, and Heilshorn SC. "Improving viability of stem cells during syringe needle flow through the design of hydrogel cell carriers." *Tissue Engineering: Part A*, 18(7-8), 806-815 (2012).
16. **Aguado BA** and Heilshorn SC. "Optimization of hydrogel viscoelasticity to improve transplanted cell viability." *Polymer Preprints*, 51(1), 670-671 (2010).

Submitted/under review:

17. Walker CJ, Killaars AR, Crocini C, Grim JC, **Aguado BA**, Leinwand LA, Anseth KS. "Mechanically tunable hydrogels reveal that chromatin condensation drives persistent myofibroblast activation." *Science Advances*, under review.
18. Caldwell AS, **Aguado BA**, Anseth KS. "Designing microgels for controlled assembly of stem cell and tissue microenvironments." *Advanced Functional Materials*, under review.

In preparation:

19. **Aguado BA***, Walker CJ*, Grim JC, Batan D, Vogt B, Leinwand LA, Anseth KS. "Sex-specific valvular fibroblast activation on engineered hydrogel substrates."
20. **Aguado BA**, Wenning MA, Grim JC, Walker CJ, Anseth KS. "Sex-specific valvular fibroblast activation in response to nano-scale stiffness cues."
21. Grim JC*, **Aguado BA***, Andrichik KL, Vogt B, Batan D, Anseth KS. "Proinflammatory macrophages inhibit valvular interstitial cell myofibroblast activation and promote osteogenic differentiation."

GRANTSMANSHIP

NIH NHLBI K99/R00 Pathway to Independence Award: "Investigating sex differences in persistent myofibroblast activation using hydrogel culture substrates" (awarded, impact score: 27, \$1,006,242 over 5 years, PI: Brian Aguado)	2019-2024
Burroughs Wellcome Fund Postdoctoral Enrichment Program: "Development of a nanotherapy for aortic valve stenosis" (awarded, \$60,000 over 3 years, PI: Brian Aguado)	2017-2020
NIH NHLBI F32 Postdoctoral Fellowship: "Development of a nanotherapy for aortic valve stenosis" (awarded, impact score: 12, \$172,926 over 3 years, PI: Brian Aguado)	2017-2020
NIH NHLBI R01 Research Award: "Synergistic effects of inflammatory and mechanobiology signals on cardiac valve disease progression" (awarded, 11 th percentile, \$225,000 annually for 5 years, PI: Kristi Anseth)	2016-2021
NSF Graduate Research Fellowship Program: "Development of a biomaterial implant for the early detection of cancer metastasis" (awarded, \$96,000 over 3 years, PI: Brian Aguado)	2012-2015

AWARDS AND HONORS

Career Development Award , Biomedical Engineering Society	2019
Best Poster Award , European Molecular Biology Organization	2019
Distinguished Young Scholars Seminar , University of Washington (voted "Best Speaker")	2019
K99/R00 Pathway to Independence Award , National Institutes of Health	2019-2024
Postdoctoral Award , American Institute of Chemists	2019
Rising Stars in Biomedical , Massachusetts Institute of Technology	2018
Invited Speaker , Gordon Research Conference: Signal Transduction in Engineered Matrices	2018
Best Poster Award , Gordon Research Seminar: Signal Transduction in Engineered Matrices	2018
Minorities in Cancer Research Award , American Association for Cancer Research	2018
Best Poster Award , Gordon Research Conference – Biomaterials and Tissue Engineering	2017
3rd Place Poster Presentation , Postdoctoral Research Day, University of Colorado	2017
Postdoctoral Enrichment Program , Burroughs Wellcome Fund	2017-2020
1st Place Poster Presentation , Heart Valve Society Annual Meeting, Monaco	2017
Travel Award , National Postdoctoral Association	2017
F32 NRSA Postdoctoral Fellowship , National Institutes of Health	2017-2020
Postdoctoral Fellowship , Howard Hughes Medical Institute	2015-2017
1st Place Poster Presentation , Postdoctoral Forum Annual Meeting, Northwestern University	2014
Communicating Science Conference (50 selected from 918 applicants), Harvard University	2014
Carl Storm Under-Represented Minority Fellowship , Gordon Research Conference	2013
Graduate Research Fellowship Program , National Science Foundation	2012-2015
Biomateriomics Travel Scholarship , Massachusetts Institute of Technology	2012
Pre-doctoral Fellowship , Biotechnology Training Program, National Institutes of Health	2011-2012
Human Embryonic Stem Cell Research Program Award , Northwestern University	2011-2012
1st Place Poster Presentation , Biomechanical Engineering Conference, Stanford University	2010
LatinX Community Award for Academic Excellence , Stanford University	2010
Undergraduate Polymer Research Award , POLY Division, American Chemical Society	2010
1st Place Poster Presentation , POLY Division, American Chemical Society	2010
BioX Undergraduate Research Fellowship , Stanford University	2009
Vice Provost for Undergraduate Education Major Grant , Stanford University	2009

1st Place Abstract, Summer Undergraduate Research Fellowship, Mayo Clinic

2008

INVITED TALKS

1. **Aguado BA.** "Precision biomaterial platforms to probe valvular myofibroblast activation." SACNAS Annual Meeting, Burroughs Wellcome Fund Special Session, Honolulu, HI, 2019.
2. **Aguado BA.** "Precision biomaterial platforms to probe valvular myofibroblast activation." Department of Chemical Engineering, University of Michigan, Ann Arbor, MI, 2019.
3. **Aguado BA.** "Precision biomaterial platforms to probe valvular myofibroblast activation." Department of Chemical Engineering (DYSS Program), University of Washington, Seattle, WA, 2019.
4. **Aguado BA.** "Introduction to Science Communication." Pathway to the Workforce, NSF Materials Research Science and Engineering Center, University of California, Santa Barbara, CA, 2019.
5. **Aguado BA.** "Serum from transcatheter aortic valve replacement patients reveals links to valvular myofibroblast activation." Gordon Research Conference – Signal Transduction in Engineered Extracellular Matrices – Andover, NH, 2018.
6. **Aguado BA.** "Serum from transcatheter aortic valve replacement patients mediate valvular myofibroblast activation." Postdoctoral Seminar Series, University of Colorado, Boulder, CO, 2018.
7. **Aguado BA.** "New Frontiers in Tissue Engineering." BMES Invited Speaker Series, University of Colorado, Boulder, CO, 2018.
8. **Aguado BA.** "Implantable materials for cancer detection." UGGS Lecture Series, University of Colorado, Boulder, CO, 2018.
9. **Aguado BA.** "Precision biomaterial platforms to probe valvular myofibroblast activation." Early Career Scientist Day, Colorado State Capitol, Denver, CO, 2018.
10. **Aguado BA.** "Building Homes for Cells." STEMinar Lecture Series, University of Colorado, Boulder, CO, 2017.
11. **Aguado BA.** "Serum from transcatheter aortic valve replacement patients mediates valvular interstitial cell activation." IQ Biology Symposium, University of Colorado, Boulder, CO, 2017.
12. **Aguado BA.** "Development of a biomaterial implant for metastasis detection." Keynote lecture, Colorado Clinical and Translational Sciences Institute Annual Summit, Longmont, CO, 2016.
13. **Aguado BA.** "Developing materials to detect metastasis." Science Communication Symposium, University of Colorado, Boulder, CO, 2016.
14. **Aguado BA.** "Implantable materials for cancer detection." TEDx Northwestern, Independently organized TED event, Evanston, IL, 2015.
15. **Aguado BA.** "Development of a biomaterial implant for the early detection of cancer metastasis." BME Department Seminar Series, Northwestern University, Evanston, IL, 2015.

SELECTED CONFERENCE PROCEEDINGS (*Indicates award)

1. **Aguado BA,** Walker CJ, Grim JC, Leinwand LA, Anseth KS. "Sex-specific Valvular Myofibroblast Activation on Engineered Hydrogel Substrates." Biomedical Engineering Society Annual Meeting – Philadelphia, PA, 2019.
2. **Aguado BA,** Wenning MA, Grim JC, Walker CJ, Anseth KS. "Sex-specific Valvular Myofibroblast Activation in Response to Nano-scale Stiffness Cues." Biomedical Engineering Society Annual Meeting – Philadelphia, PA, 2019.
3. **Aguado BA,** Schuetze KB, Grim JC, Walker CJ, McKinsey TA, Anseth KS. "Transcatheter Aortic Valve Replacements Alter Circulating Serum Factors to Mediate Valve and Cardiac Myofibroblast De-activation." Biomedical Engineering Society Annual Meeting – Philadelphia, PA, 2019.
4. **Aguado BA,** Walker CJ, Grim JC, Leinwand LA, Anseth KS. "Sex-specific valvular myofibroblast activation on engineered hydrogel culture substrates." Gordon Research Conference – Biomaterials and Tissue Engineering – Castelldefels, Spain, 2019.
5. ***Aguado BA,** Schuetze KB, Grim JC, McKinsey TA, Anseth KS. "Transcatheter aortic valve replacements alter circulating serum factors that mediate myofibroblast activation of valvular interstitial cells." European Molecular Biology Organization: Molecular Mechanisms of Tissue Injury, Repair, and Fibrosis – Spetses, Greece, 2019.

6. **Aguado BA**. "Communication and networking for biomaterials professionals." Society for Biomaterials Annual Meeting – Seattle, WA, 2019.
7. **Aguado BA**, Schuetze KB, Grim JC, McKinsey TA, Anseth KS. "Serum from transcatheter aortic valve replacement patients reveals links to valvular myofibroblast activation." Biomedical Engineering Society Annual Meeting – Atlanta, GA, 2018.
8. **Aguado BA**, Grim JC, McKinsey TA, Anseth KS, Schuetze KB. "SomaLogic scan of serum from transcatheter aortic valve replacement patients identifies novel factors mediating valvular interstitial cell activation." Gordon Research Conference – Signal Transduction in Engineered Matrices – Andover, NH, 2018.
9. ***Aguado BA**, Hartfield RM, Bushnell GG, Decker JT, Azarin SM, Nanavati D, Schipma MJ, Rao SS, Oakes RS, Zhang Y, Jeruss JS, Shea LD. "A synthetic pre-metastatic niche mimic alters the primary tumor and tumor microenvironment." American Association for Cancer Research Annual Meeting – Chicago, IL, 2018.
10. **Aguado BA**, "Careers in Biomedical Engineering." Biomedical Engineering Society Panel, University of Colorado, Boulder, CO, 2018.
11. **Aguado BA**, Schutze KB, Christensen TL, Grim JC, McKinsey TA, Anseth KS. "Serum from transcatheter aortic valve replacement patients mediates valvular interstitial cell activation." Burroughs Wellcome Fund New Fellows Meeting – Durham, NC, 2017.
12. ***Aguado BA**, Schutze KB, Christensen TL, Grim JC, McKinsey TA, Anseth KS. "Serum from transcatheter aortic valve replacement patients mediates valvular interstitial cell activation." Gordon Research Conference – Biomaterials and Tissue Engineering – Holderness, NH, 2017.
13. ***Aguado BA**, Schutze KB, Christensen TL, Grim JC, McKinsey TA, Anseth KS. "Serum from transcatheter aortic valve replacement patients mediates valvular interstitial cell activation." Postdoctoral Research Day – Denver, CO, 2017.
14. **Aguado BA**, Schutze KB, Christensen TL, Grim JC, McKinsey TA, Anseth KS. "Serum from transcatheter aortic valve replacement patients mediates valvular interstitial cell activation." Society for Biomaterials Annual Meeting – Minneapolis, MN, 2017.
15. **Aguado BA**, Schutze KB, Christensen TL, Grim JC, McKinsey TA, Anseth KS. "Serum from transcatheter aortic valve replacement patients mediates valvular interstitial cell activation." Howard Hughes Medical Institute Science Meeting – Chevy Chase, MD, 2017.
16. **Aguado BA**. "Advances in organizing the Postdoctoral Association of Colorado at Boulder." National Postdoctoral Association Annual Meeting – San Francisco, CA, 2017.
17. ***Aguado BA**, Schutze KB, Christensen TL, Grim JC, McKinsey TA, Anseth KS. "Serum from transcatheter aortic valve replacement patients reveals links to valvular interstitial cell activation." Heart Valve Society Annual Meeting – Grimaldi Forum, Monaco, 2017.
18. **Aguado BA**, Azarin SM, Schipma MJ, Rao SS, Bushnell GG, and Shea LD. "Immunomodulatory biomaterial scaffolds for reducing metastatic tumor burden." Gordon Research Conference, Biomaterials and Tissue Engineering – Girona, Spain, 2015.
19. **Aguado BA**, Caffè JR, Rao SS, Bushnell GG, Azarin SM, and Shea LD. "Modeling metastatic cell homing and colonization using biomaterial mimics of the pre-metastatic niche." Tissue Engineering and Regenerative Medicine International Society (TERMIS) – Washington, DC, 2014.
20. ***Aguado BA**, Caffè JR, Rao SS, Bushnell GG, Azarin SM, and Shea LD. "Modeling metastatic cell homing and colonization using biomaterial mimics of the pre-metastatic niche." Postdoctoral Forum Annual Meeting, Northwestern University – Chicago, IL 2014.
21. ***Aguado BA**, Azarin SM, Gower RM, Jeruss JS, and Shea LD. "Investigating the homing and colonization of metastatic cancer cells with a transcription factor cell array and biomaterials." Gordon Research Conference, Biomaterials and Tissue Engineering – Holderness, NH, 2013.
22. **Aguado BA**, Azarin SM, Gower RM, Jeruss JS, and Shea LD. "Immune cell mediated transcription factor activity in metastatic breast cancer cells." Biomedical Engineering Society Annual Meeting – Seattle, WA, 2013.

23. **Aguado BA**, Azarin SM, Gower RM, Shea LD. "Designing the pre-metastatic niche: Using biomaterials for homing and colonization of metastatic cancer cells." Biotechnology Day, Northwestern University – Evanston, IL, 2012.
24. **Aguado BA**, Shah RN. "Maintaining the pluripotency of human embryonic stem cells encapsulated in 3D hydrogels of varying stiffness" Materials Research Society (MRS) Fall Meeting – Boston, MA, 2012.
25. **Aguado BA**, Heilshorn SC. "The design of hydrogel cell carriers to improve stem cell viability during transplantation by direct injection." Materials Research Society (MRS) Fall Meeting — Boston, MA, Nov 2011.
26. ***Aguado BA** and Heilshorn SC. "Optimization of hydrogel viscoelasticity to improve transplanted cell viability." 1st Annual Biomechanical Engineering Conference at Stanford — Stanford, CA, 2010.
27. ***Aguado BA** and Heilshorn SC. "Optimization of hydrogel viscoelasticity to improve transplanted cell viability." 239th American Chemical Society National Meeting — San Francisco, CA, 2010.
28. **Aguado BA** and Heilshorn SC. "Improving cell transplantation efficiency through biomaterials development." Surfaces in Biomaterials Foundation Annual Meeting — San Mateo, CA, 2009.
29. **Aguado BA**, Henle S, and Henley JR. "Role of PI3K/AKT signaling in axon guidance." Summer Research Fellowship Symposium, Mayo Clinic— Rochester, MN, 2008.

TEACHING EXPERIENCE

University of Colorado Boulder	2016-2019
<i>Guest Lecturer</i>	
Chemical Engineering (CHEN) 4805: Biomaterials	
Molecular, Cellular, Developmental Bio (MCDB) 4201: The Role of Science in Medicine	
Bioengineering (BIOE) 3090: Introduction to Biodesign	
Summer Multicultural Access to Research Training: "Intro to Science Communication"	
Soft Matter Research Experience for Undergraduates: "Intro to Science Communication"	
Northwestern University	2012-2015
<i>Guest Lecturer</i>	
Chemical and Biological Engineering (CHBE) 475: Cell Material Interactions	
<i>Teaching Assistant</i>	
Biomedical Engineering (BME) 346: Bioregenerative Engineering	
Oncofertility Summer Academy	2010-2015
<i>Graduate Student Lecturer</i>	
Biomaterials and Bioengineering Lectures and Laboratory Modules	
Chicago Public Schools	2010-2012
<i>Instructor</i>	
Get-a-Grip: Neural Engineering and Prosthetics Design Classes	

MENTORING EXPERIENCE

Brandon Vogt , B.S. Candidate, University of Colorado – Boulder	5/2019 to present
Dilara Batan , Ph.D. Candidate, University of Colorado – Boulder	2/2018 to 4/2018
Anne Cox , B.S. Candidate, University of Colorado – Boulder	11/2017 to 5/2019
<i>Honors Thesis: "Sex-specific valvular fibroblast activation in response to interferon-gamma"</i>	
Michaela Wenning , B.S. Candidate, University of Colorado – Boulder	1/2017 to 8/2019
<i>Honors Thesis: Nanoscale stiffness cues influence valvular myofibroblast activation"</i>	
Madison Rogers , B.S. Candidate, Duke University	5/2016 to 8/2016
Tianna Edwards , B.S. Candidate, University of Massachusetts – Dartmouth	5/2016 to 8/2016
Jenna Stoehr , B.S. Candidate, Northwestern University	1/2015 to 8/2015
Jordan Caffè , B.S. Candidate, Northwestern University	1/2014 to 8/2015
Chaitanya Medicherla , M.D. Candidate, Northwestern University	6/2013 to 8/2014

Brian A. Aguado, Ph.D.

Curriculum Vitae

Kaira Lujan, B.S. Candidate, Dartmouth College

6/2013 to 8/2013

Megan Novak, Ph.D. Candidate, Northwestern University

1/2013 to 4/2013

Mirasbek Kuterbekov, B.S. Northwestern University

3/2011 to 8/2012

Rachel Edwards, B.S. Northwestern University

3/2011 to 6/2011

Kyle Johnson, B.S. Stanford University

9/2008 to 6/2010

LEADERSHIP EXPERIENCE

Young Scientist Group, Society for Biomaterials

2018-present

Chair (2019-2021), Vice Chair (2018-2019)

Gordon Research Seminar: Biomaterials and Tissue Engineering

2017-2019

Chair

Biomaterial Technologies for Precision Medicine, Society for Biomaterials

2018

Session Chair

Gordon Research Seminar: Signal Transduction in Engineered Extracellular Matrices

2018

Discussion Leader

Gordon Research Seminar: Biomaterials and Tissue Engineering

2017

Discussion Leader

Postdoctoral Association of Colorado, University of Colorado Boulder

2016-2018

President (2017-2018), Vice President (2016-2017)

Biomedical Engineering Graduate Student Society, Northwestern University

2012

President (2011-2012), Vice President (2010-2011)

SCIENCE COMMUNICATION AND PUBLIC ENGAGEMENT

Project Bridge Colorado, Colorado State Capitol

2017-2019

Executive Board – Institutional Representative

Organizer – Early Career Scientist Day

Portal to the Public, Boulder Public Libraries

2016-2017

Science Ambassador

ComSciCon – Rocky Mountain West, Colorado State University

2016-2018

Panelist

ComSciCon – Chicago, Northwestern University

2014-2015

Co-Founder

Web Writer, Royal Society of Chemistry

2013-2016

Biomaterials Science

Web Writer, Northwestern University

2013-2015

Helix Magazine

DIVERSITY AND INCLUSION

Diversity Task Force, Society for Biomaterials

2019-present

Young Scientist Representative

LatinXinBME*Co-Founder*

2019-present

CU Café, University of Colorado Boulder*Seminar Series Organizer*

2016-2018

Oncofertility Summer Academy, Northwestern University*Graduate Student Leader*

2010-2015

AFFILIATIONS

AIChE (American Institute of Chemical Engineers)	2017 to present
SfB (Society for Biomaterials)	2016 to present
AHA (American Heart Association)	2016 to present
TERMIS (Tissue Engineering and Regenerative Medicine International Society)	2014 to present
ComSciCon (Communicating Science Conferences)	2014 to present
BMES (Biomedical Engineering Society)	2012 to present
MRS (Materials Research Society)	2010 to 2012
ACS (American Chemical Society)	2010 to 2012
CLIMB (Collaborative Learning and Integrated Mentoring in the Biosciences)	2010 to 2012
SHPE (Society of Hispanic Professional Engineers)	2008 to 2009

REVIEWING ACTIVITIES

Peer-reviewed Journals:*ACS Biomaterials Science and Engineering**Acta Biomaterialia**Advanced Materials**Biomacromolecules**Materials Science and Engineering C**Tissue Engineering Part C*Conference Abstracts:*World Biomaterials Congress**American Institute of Chemical Engineers**Colorado State Capitol Early Career Scientist Day**Society for Biomaterials**Gordon Research Seminar: Biomaterials and Tissue Engineering**ComSciCon-Chicago*Fellowships/Awards:*Graduate Women in Science (GWIS) Fellowship**Postdoctoral Travel Award (University of Colorado)**Outstanding Postdoctoral Fellow Award (University of Colorado)*