

# BRIAN ALBERTO AGUADO, Ph.D.

3415 Colorado Ave, UCB 596, Boulder, CO 80303

Email: brian.aguado@colorado.edu • Mobile: (719) 447-7530 • Website: www.brianaguado.com

## EDUCATION

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**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*

## PROFESSIONAL APPOINTMENTS

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**University of California San Diego**, La Jolla, CA Starting 7/2021  
*Position/Department: Assistant Professor, Bioengineering*

**University of Colorado Boulder**, Boulder, CO 1/2016 – 5/2021  
*Adviser: Kristi Anseth, Ph.D.*  
*Position/Department: NIH and BWF Postdoctoral Fellow, Chemical and Biological Engineering*

**Northwestern University**, Chicago, IL 8/2012 – 12/2015  
*Adviser: Lonnie Shea, Ph.D.*  
*Position/Department: NSF Graduate Researcher, Biomedical Engineering*

**Northwestern University**, Chicago, IL 9/2010 - 8/2012  
*Adviser: Ramille Shah, Ph.D.*  
*Position/Department: Graduate Researcher, Biomedical Engineering*

**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*

## RESEARCH PUBLICATIONS (\*Indicates equal contribution)

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*Published/accepted for publication:*

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. Caldwell AS, **Aguado BA**, Anseth KS. "Designing microgels for controlled assembly of stem cell and tissue microenvironments." *Advanced Functional Materials*, 1907670 (2019).
3. 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).
4. 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).
  5. **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**
  6. **Aguado BA**, Grim JC, Rosales AM, Watson-Capps JJ, Anseth KS. "Engineering precision biomaterials for personalized medicine." *Science Translational Medicine*, 10, eeam8645 (2018).
  7. 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).
  8. **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."**
  9. 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).
  10. **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).
  11. Dubash AD\*, Kam CY\*, **Aguado BA**, Patel D, Delmar M, Shea LD, Green KJ. "Plakophilin-2 loss promotes TGF- $\beta$ 1/p38 MAPK-dependent fibrotic gene expression in cardiomyocytes." *Journal of Cell Biology*, 15, 212(4), 425-438 (2016).
  12. **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).
  13. 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).
  14. 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).
  15. 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).
  16. **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).
  17. **Aguado BA** and Heilshorn SC. "Optimization of hydrogel viscoelasticity to improve transplanted cell viability." *Polymer Preprints*, 51(1), 670-671 (2010).

*Under review:*

18. 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." *Nature Biomedical Engineering*, 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

<b>NIH NHLBI K99/R00 Pathway to Independence Award:</b> “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
<b>Burroughs Wellcome Fund Postdoctoral Enrichment Program:</b> “Development of a nanotherapy for aortic valve stenosis” (awarded, \$60,000 over 3 years, PI: Brian Aguado)	2017-2020
<b>NIH NHLBI F32 Postdoctoral Fellowship:</b> “Development of a nanotherapy for aortic valve stenosis” (awarded, impact score: 12, \$172,926 over 3 years, PI: Brian Aguado)	2017-2020
<b>NIH NHLBI R01 Research Award:</b> “Synergistic effects of inflammatory and mechanobiology signals on cardiac valve disease progression” (awarded, 11 <sup>th</sup> percentile, \$225,000 annually for 5 years, PI: Kristi Anseth)	2016-2021
<b>NSF Graduate Research Fellowship Program:</b> “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

<b>Career Development Award</b> , Biomedical Engineering Society	2019
<b>Best Poster Award</b> , European Molecular Biology Organization	2019
<b>Distinguished Young Scholars Seminar</b> , University of Washington (voted “Best Speaker”)	2019
<b>K99/R00 Pathway to Independence Award</b> , National Institutes of Health	2019-2024
<b>Postdoctoral Award</b> , American Institute of Chemists	2019
<b>Rising Stars in Biomedical</b> , Massachusetts Institute of Technology	2018
<b>Invited Speaker</b> , Gordon Research Conference: Signal Transduction in Engineered Matrices	2018
<b>Best Poster Award</b> , Gordon Research Seminar: Signal Transduction in Engineered Matrices	2018
<b>Minorities in Cancer Research Award</b> , American Association for Cancer Research	2018
<b>Best Poster Award</b> , Gordon Research Conference – Biomaterials and Tissue Engineering	2017
<b>3<sup>rd</sup> Place Poster Presentation</b> , Postdoctoral Research Day, University of Colorado	2017
<b>Postdoctoral Enrichment Program</b> , Burroughs Wellcome Fund	2017-2020
<b>1<sup>st</sup> Place Poster Presentation</b> , Heart Valve Society Annual Meeting, Monaco	2017
<b>Travel Award</b> , National Postdoctoral Association	2017
<b>F32 NRSA Postdoctoral Fellowship</b> , National Institutes of Health	2017-2020
<b>Postdoctoral Fellowship</b> , Howard Hughes Medical Institute	2015-2017
<b>1<sup>st</sup> Place Poster Presentation</b> , Postdoctoral Forum Annual Meeting, Northwestern University	2014
<b>Communicating Science Conference</b> (50 selected from 918 applicants), Harvard University	2014
<b>Carl Storm Under-Represented Minority Fellowship</b> , Gordon Research Conference	2013
<b>Graduate Research Fellowship Program</b> , National Science Foundation	2012-2015
<b>Biomateriomics Travel Scholarship</b> , Massachusetts Institute of Technology	2012
<b>Pre-doctoral Fellowship</b> , Biotechnology Training Program, National Institutes of Health	2011-2012
<b>Human Embryonic Stem Cell Research Program Award</b> , Northwestern University	2011-2012
<b>1<sup>st</sup> Place Poster Presentation</b> , Biomechanical Engineering Conference, Stanford University	2010
<b>LatinX Community Award for Academic Excellence</b> , Stanford University	2010
<b>Undergraduate Polymer Research Award</b> , POLY Division, American Chemical Society	2010
<b>1<sup>st</sup> Place Poster Presentation</b> , POLY Division, American Chemical Society	2010
<b>BioX Undergraduate Research Fellowship</b> , Stanford University	2009
<b>Vice Provost for Undergraduate Education Major Grant</b> , Stanford University	2009
<b>1<sup>st</sup> Place Abstract</b> , 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**, Schuetze 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**, Schuetze 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**, Schuetze 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**, Schuetze 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**, Schuetze 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**, Schuetze 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." 1<sup>st</sup> Annual Biomechanical Engineering Conference at Stanford — Stanford, CA, 2010.
27. **\*Aguado BA** and Heilshorn SC. "Optimization of hydrogel viscoelasticity to improve transplanted cell viability." 239<sup>th</sup> 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

<b>University of Colorado Boulder</b>	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"	
<b>Northwestern University</b>	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	
<b>Oncofertility Summer Academy</b>	2010-2015
<i>Graduate Student Lecturer</i>	
Biomaterials and Bioengineering Lectures and Laboratory Modules	
<b>Chicago Public Schools</b>	2010-2012
<i>Instructor</i>	
Get-a-Grip: Neural Engineering and Prosthetics Design Classes	

## MENTORING EXPERIENCE

<b>Brandon Vogt</b> , B.S. Candidate, University of Colorado – Boulder	5/2019 to present
<b>Dilara Batan</b> , Ph.D. Candidate, University of Colorado – Boulder	2/2018 to 4/2018
<b>Anne Cox</b> , 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>	
<b>Michaela Wenning</b> , B.S. Candidate, University of Colorado – Boulder	1/2017 to 8/2019
<i>Honors Thesis: Nanoscale stiffness cues influence valvular myofibroblast activation"</i>	
<b>Madison Rogers</b> , B.S. Candidate, Duke University	5/2016 to 8/2016
<b>Tianna Edwards</b> , B.S. Candidate, University of Massachusetts – Dartmouth	5/2016 to 8/2016
<b>Jenna Stoehr</b> , B.S. Candidate, Northwestern University	1/2015 to 8/2015
<b>Jordan Caffè</b> , B.S. Candidate, Northwestern University	1/2014 to 8/2015
<b>Chaitanya Medicherla</b> , M.D. Candidate, Northwestern University	6/2013 to 8/2014
<b>Kaira Lujan</b> , B.S. Candidate, Dartmouth College	6/2013 to 8/2013
<b>Megan Novak</b> , Ph.D. Candidate, Northwestern University	1/2013 to 4/2013
<b>Mirasbek Kuterbekov</b> , B.S. Northwestern University	3/2011 to 8/2012

Brian A. Aguado, Ph.D.

Curriculum Vitae

**Rachel Edwards**, B.S. Northwestern University

3/2011 to 6/2011

**Kyle Johnson**, B.S. Stanford University

9/2008 to 6/2010

## **LEADERSHIP EXPERIENCE**

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**Virtual Seminars in Biomedical Science** 2020  
*Co-chair*

**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**

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**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**

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**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**

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

**REVIEWING ACTIVITIES**

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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)*