

EVANGELIA BELLAS, Ph.D.

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A. BIOGRAPHICAL INFORMATION

Associate Professor
 Department of Bioengineering
 Temple University

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 Philadelphia, PA 19122
 P: 215.204.3301

EDUCATION

Tufts University, Medford, MA **2007-2012**

Ph.D., School of Engineering, Biomedical Engineering, May 2012

Advisor: David Kaplan, Ph.D. *Thesis:* Adipose tissue engineering: Obesity disease model and soft tissue regeneration

Syracuse University, Syracuse, NY **2000-2004**

B.S., Bioengineering, Minors in Biology and Psychology, L.C. Smith School of Engineering and Computer Science, May 2004

Advisor: Jeremy Gilbert, Ph.D., Senior Thesis: Design and testing for fretting corrosion of modular hip implants and vascular stents using electrochemical methods

APPOINTMENTS AND TRAINING

Associate Professor with Tenure **7/2023- Present**

Department of Bioengineering, **Temple University**, Philadelphia, PA

Assistant Professor **9/2016-6/2023**

Department of Bioengineering, **Temple University**, Philadelphia, PA

Affiliated Faculty, Department of Surgery, Division of Plastic and Reconstructive Surgery

Postdoctoral Fellow **2012-2016**

Wyss Institute for Biologically Inspired Engineering at Harvard University, Boston, MA

Visiting Postdoctoral Research Fellow, *Advisor:* Christopher Chen, M.D., Ph.D. (2014-16)

University of Pennsylvania, Philadelphia, PA (2012-13); **Boston University**, Boston, MA (2013-16)

Postdoctoral Fellow, Bioengineering, *Advisor:* Christopher Chen, M.D., Ph.D.

Research Technician **2004-2007**

Massachusetts Institute of Technology, Cambridge, MA

Research Assistant, *Supervisors:* Robert Langer, Sc.D., Daniel Kohane, M.D., Ph.D.

Natural Products Chemistry Intern **2002**

Cetek, Inc., Marlborough, MA

Development of natural products library for drug development

B. HONORS AND AWARDS

2023	American Society for Matrix Biology- Junior Investigator Award
2023	Biomedical Engineering Society- Cell and Molecular Bioengineering Rising Star Award
2021-2022	Temple University Faculty Merit Award for Exceptional Research, Teaching and Service
2021	Biomedical Engineering Society- Cell and Molecular Bioengineering Young Innovators Award
2021	NSF CAREER Award

2021	Temple University Faculty Service Recognition Award
2020-2021	Temple University Faculty Merit Award for Exceptional Research, Teaching and Service
2020-2021	NASA STAR Fellow
2018-2019	Temple University Faculty Merit Award for Exceptional Research, Teaching and Service
2018	Faculty Fellowship Program in Israel Award
2017-2018	Temple University Faculty Merit Award for Exceptional Research and Service
2018-2020	NIH National Center for Advancing Translational Sciences (NCATS) Loan Repayment Program Award
2016-2017	Temple University Faculty Merit Award for Exceptional Research and Service
2015	AAAS/Science Program for Excellence in Science Sponsored Membership
2013-2015	NIH NRSA Training Fellowship T32 in Translational Research in Regenerative Medicine
2013	Tufts \$100k Business Plan Competition – Finalist (4 th of > 100)
2011	Travel Award to TERMIS-NA 2010 Meeting, Armed Forces Institute of Regenerative Medicine
2011	Award to Visit US Army Institute for Surgical Research, US Dept of Defense
2010	Top 25 Poster Presentation, TERMIS-NA Annual Conference
2010	Travel Award for ATACCC Conference, Armed Forces Institute of Regenerative Medicine
2008-2012	Trainee Fellow, Armed Forces Institute of Regenerative Medicine

C. PUBLICATIONS & CREATIVE ACTIVITIES

PUBLICATIONS (Published or Accepted) [Journal Impact Factor/Citations (Google Scholar as of Jan 2024)]

1. Anvari G, **Bellas E**. Hypoxia induces stress fiber formation in adipocytes in the early stages of obesity. *Nature Scientific Reports* 2021, 11(1), 1-11. [4.996/16]
2. Berger AJ, Anvari G, **Bellas E**. Mechanical memory impairs Adipose-derived Stem Cell (ASC) adipogenic capacity after long-term in vitro expansion. *Cellular and Molecular Bioengineering* 2021, 1-12. ***CMBE Young Innovators Award*** [2.321/6]
3. Di Caprio N, **Bellas E**. Collagen Stiffness and Architecture Regulate Fibrotic Gene Expression in Engineered Adipose Tissue. *Advanced Biology*, 2020, 4(6). ***Front Page Cover. ** Top cited article in 2020-21**** [3.57/28]
4. Hammel J, **Bellas E**. Endothelial cell crosstalk improves browning but hinders white adipocyte maturation in 3D engineered adipose tissue. *Integrative Biology*, 2020, 12 (4): 81–89. [3.177/26]
5. **Bellas E** et al. Bioengineering and Metabolism Voices. *Cell Metabolism*, 2019, 29 (3): 506-512. [27.29/n/a] (only editorially reviewed)
6. Tehrani R., Kiani MF, **Bellas E**, Helferty JJ, Suh WH. A Project Based Approach To Introduction To Engineering. 2017 FYEE Conference, 2017. [n/a/2]
7. **Bellas E**, Lo T, Fournier E, Brown JE, Abbott RD, Rubin JP, Marra KG, Leisk GG, Kaplan DL. Injectable silk foams for soft tissue regeneration. *Advanced Healthcare Materials* 2015;4:452–459. [11.092/78]
8. **Bellas E**, Rollins A, Moreau JE, Lo T, Quinn KP, Fourligas N, Georgakoudi I, Mazan M, Thane KE, Hoffman AM, Kaplan DL, Kirker-Head CA. Equine model for Soft Tissue Regeneration with Silk Biomaterials. *Journal of Biomedical Materials Research Part B* 2015;103B:1217–1227. [3.368/10]
9. **Bellas E**, Chen CS. Form, Forces and Stem Cell Fate. *Current Opinion in Cell Biology*. 2014;31:92-97. [8.233/93]
10. Hoare T, Yeo Y, **Bellas E**, Bruggeman JP, Kohane DS. Prevention of Peritoneal Adhesions Using Polymeric Rheological Blends. *Acta Biomaterialia*. 2014;10(3),1187-1193. [10.63/28]
11. **Bellas E**, Marra KG, Kaplan DL. Sustainable 3D tissue model of human adipose tissue. *Tissue Eng Part C Methods*. 2013;19(10):745-54. [3.273/75]

12. Ward A, Quinn KP, **Bellas E**, Georgakoudi I, Kaplan DL. Noninvasive metabolic imaging of engineered 3D human adipose tissue in a perfusion bioreactor. *PLoS ONE*. 2013;8(2):e55696. [3.752/46]
13. **Bellas E**, Panilaitis BP, Glettig DL, Kirker-Head CA, Yoo JJ, Marra KG, Rubin JP, Kaplan DL. Sustained Volume Retention In Vivo with Adipocyte and Lipoaspirate Seeded Silk Porous Scaffolds. *Biomaterials*. 2013 Apr;34(12):2960-8. [15.3/60]
14. Gil ES, Panilaitis B, **Bellas E**, Kaplan DL. Biofunctionalized Silk Biomaterials for Wound Healing. *Adv Healthc Mater*. 2013 Jan;2(1):206-17. [11.092/327]
15. **Bellas E**, Seiberg M, Garlick JA, Kaplan DL. *In vitro* development of a 3D full thickness skin equivalent model using silk and collagen biomaterials. *Macromol Biosci*. 2012 Dec;12(12):1627-36. [4.979/161]
16. Quinn KP, **Bellas E**, Fourligas NP, Kaplan DL, Georgakoudi I. *Characterization of metabolic changes associated with the functional development of 3D engineered tissues by non-invasive, dynamic measurement of individual cell redox ratios*. 2012 Jul;33(21):5341-8. [15.3/91]
17. Choi J, **Bellas E**, Gimble J, Vunjak-Novakovic G, Kaplan DL. Lipolytic Function of Adipocyte/Endothelial Co-Cultures. *Tissue Engineering Part A*. 2011 May;17(9-10):1437-44. [4.080/33]
18. Choi J, **Bellas E**, Vunjak-Novakovic G, Kaplan DL. Adipogenic differentiation of human adipose-derived stem cells on 3D silk fibroin scaffolds. In Gimble, J.M.& Bunnell, B.A. (Eds) *Adipose Derived Stem Cells: Methods and Protocols, Methods in Molecular Biology, Vol 702*. Dec 2010. Humana Press. [1.101/41]
19. Hoare T, **Bellas E**, Zurakowski D, Kohane DS. Rheological blends for drug delivery. II. Prolongation of nerve blockade, biocompatibility, and in vitro-in vivo correlations. *J Biomed Mater Res A*. 2010 Feb;92(2):586-95. [4.854/24]
20. Simons EJ, **Bellas E**, Lawlor MW, Kohane DS. Effect of Chemical Permeation Enhancers on Nerve Blockade. *Mol Pharm*. 2009 Jan-Feb;6(1):265-73. [5.364/41]
21. Padera R, **Bellas E**, Tse JY, Hao D, Kohane DS. Local toxicity from microparticle-based prolonged duration local anesthetics. *Anesthesiology*. 2008 May; 108(5):921-8. [7.067/114]
22. Evgenov OV, Kohane DS, Bloch KD, Stasch JP, Volpato GP, **Bellas E**, Evgenov NV, Buys ES, Gnoth MJ, Graveline AR, Liu R, Hess DR, Langer R, Zapol W. Selective pulmonary vasodilation induced by inhaling microparticles containing agonists of soluble guanylate cyclase. *Am J Respir Crit Care Med*. 2007 Dec 1;176(11):1138-45. [30.53/110]
23. Tsifansky MT, Yeo Y, Evgenov OV, **Bellas E**, Benjamin J, Kohane DS. Inhalational delivery of antipseudomonal antibiotics in microparticles. *AAPS J*. 2008 Jun;10(2):254-60. [3.603/52]
24. Domnina YA, Yeo Y, Tse JY, **Bellas E**, Kohane DS. Spray-dried lipid-hyaluronan-polymethacrylate microparticles for drug delivery in the peritoneum. *J Biomed Mater Res A*. 2008 Dec 1;87(3):825-31. [4.854/14]
25. Yeo Y, Adil M, **Bellas E**, Astashkina A, Chaudhary N, Kohane DS. Prevention of peritoneal adhesions with an in situ cross-linkable hyaluronan hydrogel delivering budesonide. *J Control Release*. 2007 Jul 31;120(3):178-85. [11.47/76]
26. Ito T, Yeo Y, Highley CB, **Bellas E**, Kohane DS. Dextran-based in-situ cross-linked injectable hydrogels to prevent peritoneal adhesions. *Biomaterials*. 2007 Aug;28(23):3418-26. [15.3/171]
27. Yeo Y, **Bellas E**, Highley CB, Langer R, Kohane DS. Prevention of peritoneal adhesions with hyaluronan gel containing tissue-type plasminogen activator in a rabbit model. *Biomaterials*. 2007 Sep;28(25):3704-13. [15.3/68]

28. Ito T, Fraser IP, Yeo Y, Highley CB, **Bellas E**, Langer R, Kohane DS. Anti-inflammatory function of an in-situ cross-linkable conjugate hydrogel of hyaluronic acid and dexamethasone. *Biomaterials*. 2007 Apr;28(10):1778-86. [15.3/138]
29. Ito T, Yeo Y, Highley CB, **Bellas E**, Benitez C, Langer R, Kohane DS. The prevention of peritoneal adhesions by in situ cross-linking hydrogels of hyaluronic acid and cellulose derivatives. *Biomaterials*. 2007 Feb;28(6):975-83. [15.3/285]
30. Padera R, Tse J, **Bellas E**, Kohane DS. Tetrodotoxin for prolonged local anesthesia with minimal myotoxicity. *Muscle and Nerve*. 2006 Aug 8;34(6):747-753. [3.217/77]
31. Yeo Y, Ito T, **Bellas E**, Highley CB, Marini R, Langer R, Kohane DS. In situ cross-linkable composite hydrogels based on hyaluronic acid and PLGA nanoparticles for preventing post-operative abdominal adhesions. *Ann Surg*. 2007 May;245(5):819-24. [13.79/137]
32. Yeo Y, Highley CB, **Bellas E**, Ito T, Marini R, Langer R, Kohane DS. In situ cross-linkable hyaluronic acid hydrogels prevent post-operative abdominal adhesions in a rabbit model. *Biomaterials*. 2006 Sep; 27(27):4698-705. [15.3/243]
33. Yeo Y, **Bellas E**, Firestone W, Langer R, Kohane DS. Complex coacervates for thermally sensitive controlled release of flavor compounds. *J. Agric. Food Chem*. 2005 Sep 21;53 (19):7518-25. * **Received news recognition in August 24, 2005 issue of Institute of Food Technologists Weekly Newsletter**. [5.895/226]

MANUSCRIPTS/PREPRINTS (In revision/resubmission, Submitted or In preparation)

34. Struss M, Anvari G, **Bellas E**. Flow Cytometry Strategies for Rapidly Characterizing Heterogeneous Adipocyte Populations in 3D In Vitro Constructs. *Submitted, Cell Reports Methods*. Preprint: <https://www.biorxiv.org/content/10.1101/2024.01.30.578065v1>
35. Struss M, **Bellas E**. Design and Fabrication of a Multi-Throughput High Aspect Ratio Rotating Wall Vessel Bioreactor for 3D Tissue Culture. *In prep, Tissue Engineering Part C*.
36. **Bellas E**. Engineering Adipose Tissue for Inter-Organ Communication. *In prep, Advanced Biology*.
37. Anvari G, Struss M, **Bellas E**. Simulated Microgravity Enhances Adipocyte Maturation and Glucose Uptake via Increased Cortical Actin Remodeling. *In resubmission, Nature Microgravity*. Preprint: <https://www.biorxiv.org/content/10.1101/2024.01.30.578049v1>.
38. Berger AJ, **Bellas E**. Collagen Fiber Density Restricts Adipocyte Maturation. *In prep, Biomaterials*.
39. Taylor GA, Acevedo Jr. E, Dugue D, Deemer A, Gassman AA, **Bellas E**. Collagen VI Alpha-3 Expression Is Higher In The Superficial Epigastric Adipose Tissue Of Former Smokers Than In Non-smokers. *Resubmitted, Plastic Surgery Research*.
40. Struss M, **Bellas E**. Microphysiological Modeling of Vascular Adipose Tissue for High-Throughput Applications. *Submitted, Cell Reports*. Preprint: <https://www.biorxiv.org/content/10.1101/2024.01.30.578061v1>.
41. Hammel J, **Bellas E**. Adipocytes direct vascular network assembly via provisional matrix deposition and remodeling in 3D engineered adipose tissue. *In prep, PNAS*.
42. Anvari G, Lo A, **Bellas E**. Modeling Functional Adipose Tissue: A Review. *In prep, ACS Biomaterials*.
43. **Bellas E**, Tseng YH, Chen CS. A human disease model of vascular remodeling on a Fat-on-a-Chip device. *In prep, Lab On Chip*.
44. **Bellas E**, Alimperti S, Chen CS. Hypoxia Induces a Fibrotic Transition via Tissue Stiffening in a 3D Model of Adipose Tissue. *In prep, Integrative Biology*.

INTELLECTUAL PROPERTY

1. **Bellas E**, Baryshyan AL, Wray L, Kaplan DL. 2012. Silk fibroin-based hair and skin care products. US Patent Application 14/395,396, 2015.
2. Leisk GG, Lo TJC, Li L, **Bellas E**, Kaplan DL. 2013. Injectable silk fibroin foams and uses thereof. US Patent 9,492,504. (*Technology licensed by startup SOFREGEN Medical)
3. **Bellas E**, Marra K, Rubin JP, Kaplan DL. 2013. Injectable silk fibroin particles and uses thereof. US Patent 9,931,434. (*Technology licensed by startup SOFREGEN Medical)
4. Struss M, Hobel C, Holliday NJ, Silva C, **Bellas E**. Multi-throughput organ on chip. Invention disclosure filed.
5. Di Caprio N, Hammel J, Hunnewell C, **Bellas E**. Automated full thickness skin bioprinter. Invention disclosure filed.

D. SCHOLARLY PRESENTATIONS

INVITED PRESENTATIONS

1. *Characterization of Biotransport through Lipedemic Tissues*, Lipedema Foundation Research Retreat, Washington DC, Nov 2024
2. *Engineering Adipose Tissue (Dys)Function*, Immune Modulation & Engineering Symposium (IMES), Philadelphia PA, Nov 2024
3. *Engineering Functional Models of Adipose Tissue*, Valley Health Grand Rounds, Winchester VA, May 2024
4. *Engineering (Dys)Functional Models of Adipose Tissue*, BioE Day, Keynote Speaker (Student Invited), University of Pittsburgh, Pittsburgh PA, Apr 2024
5. *Engineering Functional Adipose Tissue Models*, Institute for Research, Maine Health, Portland ME, Mar 2024
6. *The good and bad of fat: Engineering Adipose Tissue Models to Understand Health and Disease*, TERC Tissue Talks, Columbia University, Mar 2024
7. *Engineering Functional Adipose Tissue*, Biomedical Engineering, University of Miami, Coral Gables FL, Nov 2023
8. *Engineering Functional Adipose Tissue*, Bioengineering, University of Oklahoma, Norman OK, Nov 2023
9. *Engineering Functional Adipose Tissue*, Tissue Engineering - Bioengineering, University of Pennsylvania, Philadelphia PA, Nov 2023
10. *American Society for Matrix Biology Junior Investigator Award Talk*, ASMB Annual Meeting, Salt Lake City UT, Oct 2023
11. *Engineering Endocrine Function*, Special Session, BMES Annual Meeting, Seattle WA, Oct 2023
12. *Engineering Functional Adipose Tissue*, BEAM/FBRI Special Seminar, Virginia Tech, Roanoke VA, Sept 2023
13. *A Journey into Bioengineering and Gender Equity*. Boston Scientific SWE Career Pillar Guest Speaker Series, Marlborough MA, Aug 2023.
14. *Engineering Functional Adipose Tissue*, Electrical Engineering, Villanova University, Villanova PA, March 2023
15. *Engineering Functional Adipose Tissue*, Biomedical Engineering, University of Arkansas, Fayetteville AR, March 2023
16. *Biomedical Engineering Society- Cell and Molecular Bioengineering Rising Star Award Talk*, CMBE Annual Meeting, Indian Wells CA, Jan 2023
17. *Engineering (Dys)Functional Models of Adipose Tissue*, Lipedema Foundation Retreat, Washington DC, Dec 2022
18. *Engineering Functional Adipose Tissue*, Biomedical Engineering, Johns Hopkins University, Baltimore MD, Sept 2022
19. *Engineering Functional Adipose Tissue*, Institute for Regenerative Medicine Stem Cell Club, University of Pennsylvania, Philadelphia PA, Sept 2022
20. *Engineering Functional Adipose Tissue*, Center for Biomolecular and Tissue Engineering, Duke University, Durham NC, Sept 2022
21. *Engineering Functional Adipose Tissue*, Physiology and Cell Biology, College of Medicine, Ohio State University, Columbus OH, May 2022

22. *Engineering Functional Adipose Tissue*, Michigan Integrative Musculoskeletal Health Core Center, University of Michigan, Ann Arbor MI, April 2022
23. *Engineering Functional Adipose Tissue Models of Obesity*, Biology (Student Invited), Temple University, Philadelphia PA, March 2022
24. *Engineering Functional Adipose Tissue*, Biological Sciences, University of Delaware, Newark DE, Feb 2022
25. *Engineering Functional Adipose Tissue*, Biomedical Engineering, NJIT, Jersey City NJ, Feb 2022
26. *Engineering Functional Adipose Tissue*, URISE Program @ Rowan University, Glassboro NJ, Nov 2021
27. *Engineering Functional Adipose Tissue*, School of Biomedical Engineering and Sciences, Virginia Tech/Wake Forest University, Blacksburg VA, Oct 2021
28. *Mechanical memory impairs Adipose-derived Stem Cell (ASC) adipogenic capacity after long-term in vitro expansion*. CMBE Young Innovators Award Talk, Biomedical Engineering Society, Orlando FL, Oct 2021.
29. *Fibrosis development in engineered adipose tissue models of obesity*. American Society of Matrix Biology, St. Louis MO, Sept 2021
30. *Effect of Microgravity on Adipose Tissue Remodeling and Function*. NASA Space Biology Program, Aug 2021
31. *Macrophage-adipocyte crosstalk in engineered adipose tissue model of obesity*. Immune Modulation & Engineering, Biomedical Engineering, Drexel University, Philadelphia PA, May 2021
32. *Engineering Functional Adipose Tissue*, Biomedical Engineering, Arizona State University, Scottsdale AZ, Nov 2020
33. *Engineering Functional Adipose Tissue*, Biomedical Engineering, Rowan University, Glassboro NJ, Nov 2020
34. *Engineering Functional Vascularized Adipose Tissue*, "Building the Bridge" Symposium, Lewis Katz School of Medicine and College of Engineering, Temple University, Philadelphia PA, Oct 2020
35. *Engineering Functional Adipose Tissue*, Biomedical Engineering, Washington University, St. Louis MO, Oct 2020
36. *Engineering Functional Adipose Tissue*, Biomedical Engineering, Drexel University, Philadelphia PA, Oct 2020
37. *Engineering Functional Adipose Tissue*, Chemical Engineering, University of Virginia, Charlottesville VA, Sept 2020
38. *The role of the microenvironment in adipose tissue function*, Mid-Atlantic Diabetes And Obesity Research Symposium, NIH, Bethesda, MD, Oct 2018
39. *Adipose Tissue Fibrosis*, Penn Center for Musculoskeletal Disorders, University of Pennsylvania, Philadelphia PA, Nov 2017
40. *Adipose Tissue Engineering: The Big Picture*, Cardiovascular Research Center, Temple University Lewis Katz School of Medicine, Philadelphia PA, Nov 2017
41. *Vascularizing Fat on a Chip*, Cancer Biology, Fox Chase Cancer Center, Philadelphia PA, Oct 2017
42. *Vascularizing Fat on a Chip*, The Adipose Tissue Niche: Role in Health and Diseases, NIH, Bethesda MD, Nov 2016
43. *Adipose Tissue Engineering: The Big Picture*, Musculoskeletal Regeneration Seminar, Institute for Regenerative Medicine, University of Pennsylvania, Philadelphia PA, Nov 2016
44. *Adipose Tissue Engineering: The Big Picture*, Tseng Lab Seminar, Joslin Diabetes Center, Harvard Medical School, Boston MA, Apr 2016
45. *Adipose Tissue Engineering: The Big Picture*, Joint Department of Biomedical Engineering, University of North Carolina, North Carolina State University, Chapel Hill/Raleigh NC, Mar 2016
46. *Adipose Tissue Engineering: The Big Picture*, Department of Bioengineering, Lehigh University, Bethlehem PA, Mar 2016
47. *Adipose Tissue Engineering: The Big Picture*, Department of Bioengineering, Temple University, Philadelphia PA, Mar 2016
48. *Adipose Tissue Engineering: The Big Picture*, Department of Biomedical Engineering, Northwestern University, Evanston IL, Feb 2016
49. *Adipose Tissue Engineering: The Big Picture*, Department of Bioengineering, Imperial College London, London UK, Feb 2016
50. *Adipose Tissue Engineering: The Big Picture*, Department of Bioengineering, Northeastern University, Boston MA, Feb 2016
51. *Adipose Tissue Engineering: The Big Picture*, Department of Biomedical and Chemical Engineering, Syracuse University, Syracuse NY, Jan 2016

INVITED PANEL PRESENTATIONS

1. Invited Panelist, *LGBTQIA Social*, BMES Annual Meeting, Baltimore, Oct 2024

2. Invited Panelist, *Diversity Committee Special Session: Making Labs More Inclusive and Accessible*, BMES Annual Meeting, Seattle, Oct 2023
3. Invited Panelist, *Diversity Committee Special Session: Biomedical Engineering for All - Engaging Communities with BME Beyond Traditional Settings*, BMES Annual Meeting, San Antonio, Oct 2022
4. Invited Panelist, *Diversity Committee Special Session: Implementing Inclusive Research Practices*, BMES Annual Meeting, San Antonio, Oct 2022
5. Invited Panelist, *Diversity in Engineering Bridge Week*, Widener University, Jan 2021

CONFERENCE PRESENTATIONS (Refereed, presenting author denoted with ^)

1. Hammel J[^], Macias-Orihuela Y, Struss M, Stine C, **Bellas E**, Munson J. Measuring and mapping flow in lipedema: impact of adipose tissue dysfunction on interstitial fatty acid and fluid transport. BMES Annual Meeting, Seattle WA. **Oral Presentation**. Sept 2023.
2. Hammel J[^], Macias-Orihuela Y, Struss M, Stine C, **Bellas E**, Munson J. Measuring and mapping flow in lipedema: impact of adipose tissue dysfunction on interstitial fatty acid and fluid transport. BMES Annual Meeting Special Session Engineering Endocrine Tissue Function, Seattle WA. **Oral Presentation**. Sept 2023. **Selected as 1st place Rockstar Award in Session**
3. **Bellas E[^]**. Microphysiological Modeling of Adipose Tissue for Multi-Throughput Applications. Mid-Atlantic Diabetes and Obesity Research Symposium, National Institutes of Health (NIH). **Oral/Poster Presentation**. Sept 2023.
4. **Bellas E[^]**. Engineering (Dys)Functional Adipose Tissue. GRC Biomaterials and Tissue Engineering. Holderness, NH. **Poster Presentation**. Jul 2023. **Awarded Travel Award**
5. Benderly A[^], Alexander C, Hammel J, Munson J, **Bellas E**. The Effect of Estrogen on an Engineered Adipose Tissue Model of Lipedema. Vasculata (NAVBO). New Orleans, LA. **Poster Presentation**. Jul 2023.
6. Alexander C[^], Benderly A, Hammel J, Munson J, **Bellas E**. Defining Lymphatic Vascular Transport Parameters and Macrophage Polarization in Engineered Adipose Tissue Models of Lipedema. Vasculata (NAVBO). New Orleans, LA. **Poster Presentation**. Jul 2023. *(Selected for travel award)*
7. **Bellas E[^]**. Fibrosis Development in Engineered Adipose Tissue Models of Obesity. Society For Biomaterials 2023 Annual Meeting, San Diego, CA. **Oral Presentation**. Apr 2023.
8. **Bellas E[^]**. Engineering (Dys)Functional Models of Adipose Tissue. Fat Disorders Research Society 2023 Meeting, Atlanta, GA. **Oral Presentation**. Apr 2023.
9. Turner Z[^], **Bellas E**. Effect of Obesity on Lymphatic Function in a Microphysiological System. Northeast Bioengineering Conference (NEBEC). **Poster Presentation**. Drexel University, Philadelphia, PA. April 2023.
10. Struss M[^], Anvari G, **Bellas E**. Simulated Microgravity Enhances Adipocyte Maturation and Glucose Uptake via Increased Cortical Actin Remodeling. Biomedical Engineering Society (BMES) Annual Meeting, Philadelphia, PA. **Oral Presentation**. Oct 2022.
11. Turner Z[^], Anvari G, **Bellas E**. Effect of Obesity on Lymphatic Function in a Microphysiological Model. Biomedical Engineering Society (BMES) Annual Meeting, Philadelphia, PA. **Poster Presentation**. Oct 2022.
12. **Bellas E[^]**. Simulated Microgravity Enhances Adipocyte Maturation and Glucose Uptake via Increased Cortical Actin Remodeling. Mid-Atlantic Diabetes and Obesity Research Symposium, National Institutes of Health (NIH). **Oral Presentation**. Sept 2022.

13. Anvari G, Struss M, **Bellas E**[^]. Simulated Microgravity Enhances Adipocyte Maturation and Glucose Uptake via Increased Cortical Actin Remodeling. Copenhagen Brown Adipose Tissue (CPHBAT) Biannual Meeting. **Poster Presentation**. Copenhagen, Denmark. May 2022.
14. Nesbitt C[^], **Bellas E**. Effects of Microenvironment Stiffness on Adipocyte-Macrophage Crosstalk in Engineered Adipose Tissue. Immune Modulation and Engineering Symposium (IMES). **Poster Presentation**. Drexel University, Philadelphia, PA. Dec 2021.
15. Coleman S[^], **Bellas E**. The Effect of Macrophage Crosstalk on Vascularized Adipose Tissue. Immune Modulation and Engineering Symposium. **Poster Presentation**. Drexel University, Philadelphia, PA. Dec 2021.
16. Nesbitt C[^], **Bellas E**. Effects of Microenvironment Stiffness on Adipocyte-Macrophage Crosstalk in Engineered Adipose Tissue. Biomedical Engineering Society (BMES) Annual Meeting. **Poster Presentation**. Orlando, FL. Oct 2021.
17. Coleman S[^], **Bellas E**. The Effect of Macrophage Crosstalk on Vascularized Adipose Tissue. Biomedical Engineering Society Annual Meeting. **Oral Presentation**. Orlando, FL. Oct 2021.
18. Anvari G[^], **Bellas E**. Hypoxia Inhibits Adipocyte Maturation, and Induces Actin Stress Fiber Formation in Obesity. Biomedical Engineering Society (BMES) Annual Meeting. **Poster Presentation**. Orlando, FL. Oct 2021.
19. Berger AJ, Di Caprio N, **Bellas E**[^]. Fibrosis development in engineered adipose tissue models of obesity. American Society for Matrix Biology (ASMB) Annual Meeting. **Oral and Poster Presentation**. Sept 2021.
20. Berger AJ[^], **Bellas E**. Collagen Fiber Density Reduces Adipocyte Maturation. American Society for Matrix Biology (ASMB) e-Symposium Matrix Remodeling in Metabolic Health and Disease. **Oral Presentation**. December 2020.
21. Hammel J, **Bellas E**[^]. Functional Cross Talk of Adipocytes and Vascular Network in Engineered Adipose Tissue. World Biomaterials Congress, Glasgow, UK. **Oral Presentation**. December 2020.
22. Taylor GA[^], Acevedo Jr. E, Dugue D, Deemer A, Gassman AA, **Bellas E**. Collagen VI Alpha-3 Gene Expression Is Higher in the Superficial Adipose Tissue of Former Smokers Than Non-Smokers, and May be Associated with Major Wound Complications. Plastic Surgery The Meeting, San Francisco, CA. **Oral Presentation**. October 2020.
23. Anvari G[^], **Bellas E**. Hypoxia inhibits adipocyte differentiation and induces actin stress fiber formation in in vitro model of early stages of obesity. Biomedical Engineering Society (BMES) Annual Meeting. **Oral Presentation**. October 2020.
24. Di Caprio N[^], **Bellas E**. Collagen Architecture Regulates Metabolic and Fibrotic Gene Expression in Engineered Adipose Tissue. Biomedical Engineering Society (BMES) Annual Meeting. **Poster Presentation**. October 2020.
25. Hammel J[^], **Bellas E**. Adipocyte-Vascular Crosstalk in 3D Engineered Adipose Tissue. Biomedical Engineering Society (BMES) Annual Meeting. **Poster Presentation**. October 2020.
26. Berger AJ[^], **Bellas E**. Increasing Collagen Fiber Density Reduces Adipocyte Maturation. Biomedical Engineering Society (BMES) Annual Meeting. **Poster Presentation**. October 2020.
27. Struss M[^], Anvari G, **Bellas E**. Short Term Exposure to Simulated Microgravity Impacts Actin Fiber Organization in Adipocytes. Biomedical Engineering Society (BMES) Annual Meeting. **Poster Presentation**. October 2020.
28. Caston E[^], **Bellas E**. The Effect of Macrophage Crosstalk on Adipose Tissue Inflammation Biomedical Engineering Society (BMES) Annual Meeting. **Poster Presentation**. October 2020.

29. Anvari A[^], **Bellas E.** Hypoxia inhibits adipocyte differentiation and induces actin stress fiber formation in in vitro model of early stages of obesity. Center for Engineering Mechanobiology (NSF), Trainee Symposium. **Oral Presentation**. June 2020.
30. Taylor GA[^], Acevedo Jr. E, Dugue D, Deemer A, Gassman AA, **Bellas E.** Collagen VI Alpha-3 Expression Is Higher In The Superficial Epigastric Adipose Tissue Of Former Smokers Than In Non-smokers. Plastic Surgery Research Council Annual Meeting, Toronto, Canada. **Oral Presentation**. May 2020.
31. Taylor GA[^], Acevedo Jr. E, Dugue D, Deemer A, Gassman AA, **Bellas E.** Collagen VI Alpha-3 Expression Is Higher In The Superficial Epigastric Adipose Tissue Of Former Smokers Than In Non-smokers. Robert H. Ivy Pennsylvania Plastic Surgery Society 66th Annual Scientific Meeting, Hershey, PA. **Oral Presentation**. March 2020.
32. Berger AJ[^], **Bellas E.** Assessing the Impact of Collagen Density on Lipid Accumulation in Adipocytes Utilizing a Gelatin-methacrylate and Collagen Interpenetrating Network. Biomedical Engineering Society (BMES) Annual Meeting, Philadelphia, PA. **Oral Presentation**. October 2019.
33. Hammel J[^], **Bellas E.** Endothelial cell cross talk improves browning but delays white adipocyte maturation in engineered adipose tissue. Biomedical Engineering Society (BMES) Annual Meeting, Philadelphia, PA. **Oral Presentation**. October 2019.
34. Struss M[^], **Bellas E.** Microphysiological Modeling of Adipose Tissue for High-Throughput Applications. Biomedical Engineering Society (BMES) Annual Meeting, Philadelphia, PA. **Oral Presentation**. October 2019.
35. Di Caprio N[^], **Bellas E.** Modulation of Covalently Crosslinked 3D Collagen Hydrogels Regulates Metabolic and Fibrotic Gene Expression in Engineered Adipose Tissue. Biomedical Engineering Society (BMES) Annual Meeting, Philadelphia, PA. **Poster Presentation**. October 2019.
36. Anvari G[^], **Bellas E.** The Effect of Fibroblasts on Extracellular Matrix Remodeling in Healthy and Obese Adipose tissue. Biomedical Engineering Society (BMES) Annual Meeting, Philadelphia, PA. **Poster Presentation**. October 2019.
37. Urban J[^], Struss M, **Bellas E.** Coronary Artery-on-a-Chip System for Studying Vessel Interactions with Epicardial Adipose Tissue. Biomedical Engineering Society Annual Meeting, Philadelphia, PA. **Poster Presentation**. October 2019.
38. Abruzzo A[^], **Bellas E.** Glucose Sensitivity in Engineered Adipose Tissue Model of Type 2 Diabetes. Biomedical Engineering Society Annual Meeting, Philadelphia, PA. **Poster Presentation**. October 2019.
39. Caston E[^], **Bellas E.** The Effect of Macrophage Cross Talk on Adipose Tissue Inflammation. Biomedical Engineering Society Annual Meeting, Philadelphia, PA. **Poster Presentation**. October 2019.
40. Anvari G, Di Caprio N, Hammel J, Struss M, **Bellas E**[^]. Engineering Functional Adipose Tissue. Gordon Research Conference on Biomaterials and Tissue Engineering. Barcelona, Spain. **Poster Presentation**. July 2019.
41. Anvari G[^], **Bellas E.** The Effect of Fibroblasts on Extracellular Matrix Remodeling in Healthy and Obese Adipose tissue. American Society for Matrix Biology (ASMB). University of Virginia, Charlottesville, VA. **Poster Presentation**. June 2019. (*Selected for Travel Award*)
42. Caston E[^], **Bellas E.** The Effect of Macrophage Infiltration on Adipose Tissue Inflammation. Northeast Bioengineering Conference, New Brunswick, NJ. **Poster Presentation**. March 2019.
43. Hammel J[^], **Bellas E.** The Effect of Vascularization on Adipose Tissue Glucose Metabolism. Northeast Bioengineering Conference, New Brunswick, NJ. **Poster Presentation**. March 2019.

44. Abruzzo A[^], Struss M, **Bellas E**. Glucose Sensitivity in Engineered Adipose Tissue Model of Type 2 Diabetes. Northeast Bioengineering Conference, New Brunswick, NJ. **Poster Presentation**. March 2019.
45. Struss M[^], **Bellas E**. Microphysiological Modeling of Adipose Tissue for High-Throughput Applications. Northeast Bioengineering Conference, New Brunswick, NJ. **Poster Presentation**. March 2019.
46. Di Caprio N[^], **Bellas E**. Modulation of Covalently Crosslinked 3D Collagen Hydrogels Regulates Metabolic and Fibrotic Gene Expression. Northeast Bioengineering Conference, New Brunswick, NJ. **Poster Presentation**. March 2019.
47. Anvari G[^], **Bellas E**. The Effect of Fibroblasts on Extracellular Matrix Remodeling in Healthy and Obese Adipose tissue. Penn Center for Musculoskeletal Disorders (PCMD) Symposium. Philadelphia, PA. **Poster Presentation**. November 2018.
48. Hammel J[^], **Bellas E**. The Effect of Vascularization on Adipose Tissue Glucose Metabolism. BMES Annual Meeting, Atlanta, GA. **Poster Presentation**. Oct 2018.
49. Di Caprio N[^], **Bellas E**. Modulation of Covalently Crosslinked 3D Collagen Hydrogels Regulates Metabolic and Fibrotic Gene Expression. BMES Annual Meeting, Atlanta, GA. **Poster Presentation**. Oct 2018.
50. Struss M[^], **Bellas E**. Microphysiological Modeling of Adipose Tissue for High-Throughput Applications. Mid-Atlantic Diabetes and Obesity Research Symposium, NIH, Bethesda, MD. **Poster Presentation**. Oct 2018.
51. Anvari G[^], **Bellas E**. The effect of Fibroblasts on Extracellular Matrix Remodeling in Healthy and Obese Adipose Tissue. Mid-Atlantic Diabetes and Obesity Research Symposium, NIH, Bethesda, MD. **Poster Presentation**. Oct 2018.
52. DiCaprio N[^], **Bellas E**. The Effect of Stiffness Modulation of 3D Collagen Matrices on Adipocyte Metabolic Regulation. Northeast Bioengineering Conference. **Poster Presentation**. March 2018.
53. Hammel [^]J, **Bellas E**. The Effect of Vascularization on Adipose Tissue Glucose Metabolism. Northeast Bioengineering Conference. **Poster Presentation**. March 2018.
54. Hammel J[^], **Bellas E**. The Effect of Vascularization on Adipose Tissue Glucose Metabolism. University of Pennsylvania Institute for Diabetes, Obesity, and Metabolism (IDOM) Symposium. **Poster Presentation**. March 2018.
55. Anvari G[^], **Bellas E**. The Effect of Fibroblasts on Extracellular Matrix Remodeling in Healthy and Obese Adipose tissue. Institute for Diabetes, Obesity and Metabolism (IDOM) Spring Symposium. **Poster Presentation**. March 2018.
56. Hammel J[^], **Bellas E**. The Effect of Vascularization on Glucose Uptake and Overall Adipose Tissue Health in 3D Culture. Annual Biomedical Research Conference for Minority Students. **Poster Presentation**. November 2017.
57. Tehrani R[^], Helferty JJ, Kiani MK, Suh WH, **Bellas E**. A Project Based Approach to Introduction to Engineering. First-Year Engineering Experience Conference (ASEE). **Oral Presentation**. Aug 2017.
58. **Bellas E**[^], Chen CS. A 3D In Vitro Model Of Microvascular Remodeling In Adipose Tissue. Biomedical Engineering Society Annual Fall Meeting. **Oral Presentation**. Oct 2015.
59. **Bellas E**[^], Alimperti S, Chen CS. Cytoskeletal Tension Mediates Adipocyte Dysfunction In A 3D In Vitro Model of Obesity. TERMIS World Congress. **Poster Presentation**. Sept 2015.
60. **Bellas E**[^], Chen CS. Hypoxia Mediated Mechanotransduction in 3D In Vitro Model of Obesity. NJ Symposium on Biomaterials Science. **Poster Presentation**. Oct 2014.

61. Eyckmans J[^], **Bellas E**, Shenoy VB, Chen CS. Contractility mediated stem cell differentiation in mechanically constrained 3D microtissues. 7th World Congress of Biomechanics. **Oral Presentation**. July 2014
62. **Bellas E[^]**, Panilaitis B, Yoo JJ, Marra KG, Rubin JP, Kaplan DL. Adipocyte/Endothelial Cell Co-Cultures in Silk Scaffolds for Sustained Soft Tissue Regeneration: 1.5 year update. Armed Forces Institute for Regenerative Medicine Annual Meeting. **Oral Presentation/Poster Presentation**. Feb 2012.
63. **Bellas E[^]**, Lo T, Yoo JJ, Marra KG, Rubin JP, Leisk GG, Kaplan DL. Injectable Silk Foams for Soft Tissue Regeneration. Armed Forces Institute for Regenerative Medicine Annual Meeting. **Poster Presentation**. Feb 2012.
64. Valentin JE[^], Haworth-Ward D, Aini N, **Bellas E**, Kaplan DL, Marra KG, Rubin JP. Soft Tissue Reconstruction using Injectable Scaffolds Composed of Adipose Tissue and Silk Gel. Armed Forces Institute for Regenerative Medicine Annual Meeting. **Poster Presentation**. Feb 2012.
65. Quinn KP[^], **Bellas E**, Fourligas NP, Kaplan DL, Georgakoudi I. Non-invasive monitoring of redox state to assess cell differentiation in engineered adipose tissues. Photonics West- BIOS, San Francisco, CA. **Poster Presentation**. Jan 2012.
66. **Bellas E[^]**, Panilaitis B, Yoo JJ, Marra KG, Rubin JP, Kaplan DL. Adipocyte/Endothelial Cell Co-Cultures in Silk Scaffolds for Sustained Soft Tissue Regeneration: 1 year update. Tissue Engineering and Regenerative Medicine International Society- NA Annual Meeting. **Oral Presentation**. Dec 2011.
67. Quinn KP[^], **Bellas E**, Fourligas NP, Kaplan DL, Georgakoudi I. Quantification of Engineered Adipose Tissue Development Using Multi-Photon Microscopy. Biomedical Engineering Society Annual Fall Meeting. **Oral Presentation**. Oct 2011.
68. Haworth-Ward D[^], **Bellas E**, McLaughlin M, Ieraci M, Kaplan DL, Marra KG, Rubin JP. Adipose-Derived Stem Cell Dose and Silk on Soft Tissue Regeneration. Advanced Technology Applications for Combat Casualty Care. **Poster Presentation**. Aug 2011.
69. **Bellas E[^]**, Panilaitis B, Haworth-Ward D, Yoo JJ, Marra KG, Rubin JP, Kaplan DL. Adipocyte and Lipoaspirate Seeded Silk Scaffolds for Sustained *In Vivo* Soft Tissue Regeneration. Biomedical Engineering Society Annual Meeting. **Poster Presentation**. Jul 2011.
70. Quinn KP[^], Fourligas NP, **Bellas E**, Kaplan DL, Georgakoudi I. Quantitative multi-photon excited fluorescence imaging to evaluate engineered adipose tissue development. Advances in Optics for Biotechnology, Medicine and Surgery XII. **Poster Presentation**. Jun 2011.
71. Quinn KP[^], Fourligas NP, **Bellas E**, Kaplan DL, Georgakoudi I. Non-invasive quantitative assessments of engineered adipose tissue development using multi-photon excited fluorescence microscopy. European Conferences on Biomedical Optics. **Oral Presentation**. May 2011.
72. **Bellas E[^]**, Panilaitis B, Haworth-Ward D, Yoo JJ, Marra KG, Rubin JP, Kaplan DL. Adipocyte and Lipoaspirate Seeded Silk Scaffolds for Sustained *In Vivo* Soft Tissue Regeneration. Armed Forces Institute for Regenerative Medicine Annual Meeting. **Oral Presentation/Poster Presentation**. Jan 2011.
73. Haworth-Ward D[^], Miljkovic N, Ramadan M, Philips BJ, **Bellas E**, Kaplan DL, Marra KG, Rubin JP. Soft Tissue Regeneration Using Silk Biomaterials, Armed Forces Institute for Regenerative Medicine Annual Meeting. **Poster Presentation**. Jan 2011.
74. **Bellas E**, Burke KA[^], Kaplan DL. Development of a Long-Term *In Vitro* 3D Human Tissue Obesity Model. Keystone Symposium- Obesity. **Poster Presentation**. Jan 2011.
75. Burke KA[^], **Bellas E**, Kaplan DL. Development of an *In Vitro* 3D Human Type 2 Diabetes Disease Model. Keystone Symposium- Obesity. **Poster Presentation**. Jan 2011.

76. **Bellas E[^]**, Panilaitis B, Haworth-Ward D, Yoo JJ, Marra KG, Rubin JP, Kaplan DL. Adipocyte/Endothelial Cell Co-Cultures in Silk Scaffolds for Sustained Soft Tissue Regeneration. Tissue Engineering and Regenerative Medicine International Society- NA Annual Meeting. **Poster Presentation**. Dec 2010. **Selected as Top 25 Poster Presentation*
77. Haworth-Ward D[^], Miljkovic N, Ramadan M, Philips BJ, **Bellas E**, Kaplan DL, Marra KG, Rubin JP. Soft Tissue Regeneration Using Silk Biomaterials. Tissue Engineering and Regenerative Medicine International Society- NA Annual Meeting. **Oral Presentation**. Dec 2010.
78. **Bellas E[^]**, Panilaitis B, Marra KG, Rubin JP, Yoo JJ, Kaplan DL. Effect of Dynamic Culture on 3D Co-Culture of Adipose Derived Stem Cells and Endothelial Cells on Silk Scaffolds for Sustained Soft Tissue Regeneration. Biomedical Engineering Society Annual Fall Meeting. **Poster Presentation**. Oct 2010.
79. **Bellas E[^]**, Panilaitis B, Ward D, Marra KG, Rubin JP, Yoo JJ, Kaplan DL. Silk Protein Scaffolds for Sustained Soft Tissue Regeneration. Advanced Technology Applications for Combat Casualty Care. **Poster Presentation**. Aug 2010.
80. **Bellas E[^]**, Gimble J, Panilaitis B, Marra KG, Rubin JP, Yoo JJ, Kaplan DL. 3D Co-Cultures of Adipose Derived Stem Cells and Endothelial Cells on Silk Scaffolds for Sustained Soft Tissue Regeneration. Translational Regenerative Medicine Forum. **Poster Presentation**. Apr 2010.
81. **Bellas E[^]**, Glettig D, Choi J, Panilaitis B, Kaplan DL. 3D Co-Cultures of Adipose Derived Stem Cells and Endothelial Cells on Silk Scaffolds for Sustained Soft Tissue Regeneration: Improving Vascular Portion. Armed Forces Institute for Regenerative Medicine Annual Meeting. **Poster Presentation**. Jan 2010.
82. **Bellas E[^]**, Choi J, Gimble J, Kaplan DL. 3D Co-Culture of Adipose Derived Stem Cells and Endothelial Cells Silk Scaffolds for Sustained Soft Tissue Regeneration. Biomedical Engineering Society Annual Fall Meeting. **Oral Presentation**. Oct 2009.
83. Glettig D[^], **Bellas E**, Choi J, Gimble J, Kaplan DL. Temporal Changes and Differentiation Potential Characterization of Adipose- and Bone-marrow Derived Mesenchymal Stem Cells Using Flow Cytometry. Biomedical Engineering Society Annual Fall Meeting. **Poster Presentation**. Oct 2009.
84. **Bellas E[^]**, Kang J, Marra KG, Rubin JP, Yoo JJ, Gimble J, Kaplan DL. 3D Co-culture of Adipose Derived Stem Cells and Endothelial Cells on VEGF- and Laminin- coated Silk Scaffolds for Sustained Soft Tissue Regeneration. Gordon Research Conference on Biomaterials and Tissue Engineering. **Poster Presentation**. Jul 2009.
85. Kang J[^], **Bellas E**, Murphy A, Gimble J, Kaplan DL. 3D co-culture of adipose derived stem cells and endothelial cells on IKVAV-coupled, VEGF- and laminin- coated silk scaffolds for sustained soft tissue regeneration. Armed Forces for Regenerative Medicine Annual Meeting. **Poster Presentation**. Jan 2009.

CONFERENCE PRESENTATIONS (Non-refereed, Internal to Temple)

86. Alexander C[^], Benderly A, Hammel J, Munson J, **Bellas E**. Defining Lymphatic Vascular Transport Parameters and Macrophage Polarization in Engineered Adipose Tissue Models of Lipedema. Symposium for Undergraduate Research and Creativity Application. **Poster Presentation**. Temple University, Philadelphia, PA. Apr 2024.
87. Puig Cruz, A[^], Bellas E. Effect of Estrogen on Lipedema in Engineered Adipose Tissue Model. Temple College of Science and Technology Research Scholars Program Poster Day. Temple University, Philadelphia PA, Mar 2024
88. Alexander C[^], Benderly A, Hammel J, Munson J, **Bellas E**. Defining Lymphatic Vascular Transport Parameters and Macrophage Polarization in Engineered Adipose Tissue Models of Lipedema. Diamond Research Scholar Summer Symposium. **Poster Presentation**. Temple University, Philadelphia, PA. Jul 2023.

89. Turner Z[^], **Bellas E.** Effect of Obesity on Lymphatic Function in a Microphysiological System. Symposium for Undergraduate Research and Creativity Application. **Poster Presentation.** Temple University, Philadelphia, PA. March 2023.
90. Turner Z[^], **Bellas E.** Effect of Obesity on Lymphatic Function in a Microphysiological System. Symposium for Undergraduate Research and Creativity Application. **Poster Presentation.** Temple University, Philadelphia, PA. April 2022.
91. Ayub R[^], **Bellas E.** Neuro-Adipocyte Crosstalk in Engineered Adipose Tissue. Diamond Research Scholar Summer Symposium. **Poster Presentation.** Temple University, Philadelphia, PA. Jul 2022.
92. Coleman S[^], **Bellas E.** The Effect of Macrophage Crosstalk on Vascularized Adipose Tissue. Symposium for Undergraduate Research and Creativity Application. **Poster Presentation.** Temple University, Philadelphia, PA. April 2022.
93. Nesbitt C[^], **Bellas E.** Effects of Microenvironment Stiffness on Adipocyte-Macrophage Crosstalk in Engineered Adipose Tissue. Symposium for Undergraduate Research and Creativity Application. **Poster Presentation.** Temple University, Philadelphia, PA. April 2022.
94. Anvari G[^], Struss M[^], **Bellas E.** Simulated Microgravity Enhances Adipocyte Maturation and Glucose Uptake via Increased Cortical Actin Remodeling. College of Engineering Graduate Student Symposium. **Poster Presentation.** Temple University, Philadelphia, PA. Feb 2022. *(2nd place winner)*
95. Anvari G[^], **Bellas E.** Hypoxia Inhibits Adipocyte Maturation and Induces Actin Stress Fiber Formation in Obesity. College of Engineering Graduate Student Symposium. **Poster Presentation.** Temple University, Philadelphia, PA. Feb 2022. *(3rd place winner)*
96. Struss M[^], **Bellas E.** Microphysiological Modeling of Adipose Tissue for High-Throughput Applications. Temple University Summer Research Symposium, Philadelphia, PA. **Poster Presentation.** July 2019.
97. Anvari G[^], **Bellas E.** The Effect of Fibroblasts on Extracellular Matrix Remodeling in Healthy and Obese Adipose tissue. Temple Bioengineering Summer Research Symposium, Temple University, Philadelphia, PA. **Poster Presentation.** July 2019. *(1st place in Graduate Student Research Category)*
98. Hammel J[^], **Bellas E.** Endothelial cell cross talk improves browning but delays white adipocyte maturation in engineered adipose tissue. Temple Bioengineering Summer Research Symposium, Temple University, Philadelphia, PA. **Poster Presentation.** July 2019.
99. Urban J[^], Struss M, **Bellas E.** Coronary Artery-on-a-Chip System for Studying Vessel Interactions with Epicardial Adipose Tissue. Temple Bioengineering Summer Research Symposium, Philadelphia, PA. **Poster Presentation.** July 2019. *(1st place in Undergraduate Student Research Category)*
100. Abruzzo A[^], **Bellas E.** Glucose Sensitivity in Engineered Adipose Tissue Model of Type 2 Diabetes. Temple University Summer Research Symposium, Philadelphia, PA. **Poster Presentation.** July 2019.
101. Caston E[^], **Bellas E.** The Effect of Macrophage Cross Talk on Adipose Tissue Inflammation. Temple Bioengineering Symposium, Philadelphia, PA. **Poster Presentation.** July 2019. *(3rd place in Undergraduate Student Research Category)*
102. Di Caprio N[^], **Bellas E.** Modulation of Covalently Crosslinked 3D Collagen Hydrogels Regulates Metabolic and Fibrotic Gene Expression in Engineered Adipose Tissue. Temple University Summer Research Symposium, Temple University, Philadelphia, PA. **Poster Presentation.** July 2019. *(2nd place in Undergraduate Student Research Category)*

103. Di Caprio N[^], **Bellas E.** Modulation of Covalently Crosslinked 3D Collagen Hydrogels Regulates Metabolic and Fibrotic Gene Expression in Engineered Adipose Tissue. Diamond Scholar Undergraduate Research Symposium, Temple University, Philadelphia, PA. **Poster Presentation.** July 2019.
104. Acevedo E[^], Anvari G, Struss M, Gassman A, **Bellas E.** Regional Differences in Adipose Tissue Morphology. Harwick Annual Resident Research Symposium, Temple University Hospital, Philadelphia, PA. **Oral Presentation.** April 2019.
105. Anvari G[^], **Bellas E.** The Effect of Fibroblasts on Extracellular Matrix Remodeling in Healthy and Obese Adipose tissue. Temple University College of Engineering Graduate Student Symposium. Philadelphia, PA. **Poster Presentation.** February 2019.
106. Struss M[^], **Bellas E.** Microphysiological Modeling of Adipose Tissue for High-Throughput Applications. Temple University College of Engineering Graduate Student Symposium. Philadelphia, PA. **Poster Presentation.** February 2019.
107. Hammel J[^], **Bellas E.** The Effect of Vascularization on Adipose Tissue Glucose Metabolism. Temple University Bioengineering Summer Symposium. **Poster Presentation.** July 2018. (2nd place for Undergraduate Research Award)
108. Bobovich A[^], Hammel J, **Bellas E.** The Difference Between 2D and 3D Cultures on Insulin Resistance in Adipocytes. Temple University Bioengineering Summer Symposium. **Poster Presentation.** July 2018.
109. Struss M[^], **Bellas E.** Microphysiological Modeling of Adipose Tissue for High-Throughput Applications. Temple University Bioengineering Summer Symposium. **Poster Presentation.** July 2018.
110. Anvari G[^], **Bellas E.** The effect of Fibroblasts on Extracellular Matrix Remodeling in Healthy and Obese Adipose Tissue. Temple University Bioengineering Summer Symposium. **Poster Presentation.** July 2018.
111. Urban J[^], Struss M, **Bellas E.** Designing a Microfluidic Device for Studying Browning of Epicardial Adipose Tissue. Temple University Bioengineering Summer Symposium. **Poster Presentation.** July 2018.
112. Di Caprio N[^], **Bellas E.** Modulation of Covalently Crosslinked 3D Collagen Hydrogels Regulates Metabolic and Fibrotic Gene Expression. Temple University Bioengineering Summer Symposium. **Poster Presentation.** July 2018.
113. Hammel J[^], **Bellas E.** The Effect of Vascularization on Adipose Tissue Glucose Metabolism. Temple University Undergraduate Biology Poster Symposium. **Poster Presentation.** April 2018.
114. Hammel J[^], **Bellas E.** The Effect of Adipocyte-Macrophage Cross-Talk on Insulin Resistance. Temple University Undergraduate Engineering Poster Symposium. **Poster Presentation.** July 2017.

E. FUNDING

AWARDED GRANTS

ISS: Adipose tissue mechanosensing in true microgravity (2425583) NSF/CASIS PI: Bellas , Implementation Partner: RedWire Space	\$400,000 total costs 12/24-12/27
<i>Population Diversity in Responses from Vaccination</i> NIH Complement-ARIE Challenge prize PI: Pompano (UVA), Co-Is: Bellas , Munson (VTech), Luckey (UVA), Narayana (George Mason)	\$50,000 direct costs 5/24-
<i>Characterization of biotransport through engineered lipedemic tissues</i> (LF33_21_Bellas_COL) Lipedema Foundation PI: Bellas , Co-I: Munson (Virginia Tech)	\$250,000 total costs 9/21-8/23

<i>CAREER: Modeling the role of blood and lymphatic vessels in adipose tissue</i> (2045517) National Science Foundation PI: Bellas	\$500,000 total costs 6/21-5/26
<i>Lymphatic Remodeling in Obese Adipose Tissue</i> (Pilot Grant) Lemole Center for Integrated Lymphatics Research, Temple School of Medicine PI: Bellas	\$12,000 direct costs 10/20-10/21
<i>Effect of microgravity on adipose tissue remodeling and function</i> (New Investigator, 80NSSC19K0427) National Aeronautics & Space Administration PI: Bellas	\$150,000 total costs 2/19- 1/21
<i>Sustainability in Bioengineering and Entrepreneurship</i> (17387-18) VentureWell/Lemelson Faculty Grant PI: Bellas	\$30,000 total costs 7/18- 12/21
<i>Engineered Human Fat Depots on a Chip</i> NIH/NIDDK sponsored Diabetic Complications Consortium (DiaComp, DK076169) Co-I's: Bellas (Temple University), CS. Chen (Boston University), YH. Tseng (Joslin, Harvard Medical School)	\$750,000 total costs 1/16-12/17

F. TEACHING EXPERIENCE

Instructor, *Bionic Human* (BIOE 0844/0944), Spring 2023, Fall 2023, Spring 2024
Instructor, *Biomaterials Capstone/Biomaterials for Engineers* (BIOE 4411/5741), Spring 2018, 2019, 2020, 2021, 2022
Instructor, *Intro to Engineering* (ENGR 1101/1901), Spring 2017, Fall 2017
Instructor, *Principles of Tissue Engineering* (BIOE 4461/5461), Fall 2017, 2018, 2019, 2020, 2021, 2022, 2024
Instructor, *Bioengineering Graduate Seminar* (BIOE 5600), Fall 2017, Spring 2018, Fall 2018, Spring 2019, Fall 2019, Spring 2020, Fall 2020, Spring 2021, Fall 2021, Spring 2022, Fall 2022, Spring 2023, Fall 2023, Spring 2024

Guest Lecturer, *Regenerative Engineering Capstone* (BIOE 4501/5501), Spring 2017
Guest Lecturer, *Drug Delivery* (BIOE 3302), Spring 2017
Guest Lecturer, *Frontiers in Bioengineering* (BIOE 2001), Fall 2016, Spring 2017, Fall 2018, Spring 2018, Fall 2018, Spring 2019, Fall 2019, Spring 2020, Fall 2020, Fall 2021, Spring 2022, Fall 2022, Spring 2023, Fall 2023
Guest Lecturer, *Intro to Bioengineering* (BIOE 3719/5719), Fall 2016, Spring 2017, Fall 2018, Spring 2018, Fall 2019, Spring 2020, Fall 2020, Fall 2021, Fall 2022, Spring 2023, Fall 2023

Project Advisor, *Senior Design I and II*, AY's 2016- Present

Senior Design Teams (College of Engineering)
Biosafety Cabinet for Custom 3D Bioprinter (2023)
Anna Maus, Karissa Wai Jung ***2nd Place Team Overall***
Bioelectrical Stimulation Device for Metabolic Tissues (2022-2023)
Amr Kelawy, Christalle J.H. Wilson, Eyobel Ghide, Athar Nafis Md Wasi
Automated full-thickness skin bioprinter (2021-2022)
Kaitlyn Bui, Sarah Coleman, Julia Kurylec, Sabrina Lai, Christian Perlaza
Rapid and reproducible fat spheroids (2021-2022)
Amanda Benson, London Hopkins, Marilyn Ann Korah, Paul Perumaly
Tracking Fat in Space (2020-2021)
Allison Hornickle, Brendan Kane, Dilan Shista, John Timmons
Automated Epidermis Electrosprayer Module for Skin Bioprinter (2020-2021)

Mikaela Vlastic, Liam Chase, Gabrielle Gordon, Ethan Earnest
JCN Bioink (2018- 2019)
 Nikolas DiCaprio, Jennifer Hammel, Chris Hunnewell ***Finalist, 3rd Place Team Overall***
Development of a Microfluidic Neurovascular Unit (2017-2018)
 Rogena Azer, Vanja Nikolic, Timothy Sullivan
The Little Chubby Chip (2016-2017)
 Michael Struss, Casey Hobel, Nasir Holliday, Charles Silva ***1st Place Team Overall***

G. RESEARCH MENTORING

Postdoctoral Trainees

Anthony Berger, Ph.D., Jan 2019 to Jan 2021
 Current Employment: Senior Technical Specialist at CN Bio

Doctoral Students

Golnaz Anvari (BioE), Fall 2016 to Spring 2022, PhD awarded May 2022
 Current Employment: Post Doctoral Scientist at Janssen R&D (Philadelphia)
 Awards: FSRI Fellowship (2 summers support)
 ASMB Travel Award for Top Abstract (Jun 2019)

Michael Struss (BioE Ph.D. Candidate), Spring 2018 to Spring 2024 (on leave of absence)
 Awards: FSRI Fellowship (1 summer supported), Graduate School Fellowship (1 AY supported)

Master's Students

Julieta Rios Vergara (BioE), Fall 2024-
 Zoe Turner (BioE), Fall 2023- Spring 2024
 Currently: Lab Technician, UMD BIOE Moore Lab

Rotation Students

Sarah Moore, B.S., (BioE M.S. Candidate), Rotation Fall 2019 to April 2020
FSRI Fellowship (Awarded, not accepted)
 Andrew Rouff, M.S., (BioE Ph.D. Student), Rotation Fall 2017
 Raja Khalid Zahir, M.S., (BioE Ph.D. Student), Rotation Fall 2016

Clinical Fellows/Medical Students

Dylan Kahler, M.D., Temple University Hospital, Summer 2021
Clinical Fellowship for Research
 George Taylor, M.D., Temple University Hospital, Spring 2019 to Summer 2021
Clinical Fellowship for Research
 Andrew Daigneau, B.S., Temple University Medical School, Summer 2018
 Maria Sharaf, B.S., Temple University Medical School, Summer 2018
 Edwin Acevedo, M.D., Temple University Hospital, Spring 2017 to Summer 2019
Clinical Fellowship for Research
 Alexis Lo, B.S., Temple University Medical School, Spring 2017

Undergraduate Researchers

1. Jasmine Wilk, Public Health, Summer 2024 to Present
CARAS Research Fellowship
2. Trisha Verma, Biochemistry, Summer 2024 to Present
CARAS Research Fellowship
3. Michelle Fils, BioE, Summer 2024 to Present

4. Amruta Holavanhalli, Bio, Spring 2024 to Summer 2024
CST RSP Fellow
5. Alex (Alexandra) Puig Cruz, Bio, Spring 2024 to Present
CST RSP Fellow
6. Terry Thanh Trang Le, Bio, Spring 2024 to Fall 2024
7. Raegan Crowe, BioE, Fall 2023 to Summer 2024
*NIH U*STAR MARC Scholar*
8. Nicole Estephan, BioE, Fall 2023 to Present
Diamond Research Fellowship (\$4k)
9. Anna Maus, Fall 2023
10. Lauren Wilson, BioE, Summer 2023
College of Engineering Summer Fellowship (\$2k)
11. Aryanna Copling, Visiting Scholar, Rowan University, Summer 2023
12. David Kim, BioE, Spring 2023
13. Carmel Alexander, BioE, Fall 2022 to Fall 2023
Diamond Scholar Fellowship
14. Arielle Benderly, BioE, Spring 2022 to Summer 2023 (study abroad in Summer/Fall 22)
College of Engineering Summer Fellowship
15. Anjali Shankar, BioE, Spring 2022
Currently: Medical Scribe at Proscribe
16. Zoe Turner, BioE, Summer 2021 to Spring 2023
Currently: Lab Technician, UMD BIOE Moore Lab
CARAS Research Fellowship
17. Paul Perumaly, BioE, Summer 2021 to Spring 2022 (co-advised with Nancy Pleshko)
Currently: Associate Scientist at Adaptimmune (Philadelphia, PA)
18. Rida Ayub, Neuroscience, Summer 2021 to Summer 2022
Currently: Biology Student at Temple University
Diamond Scholar Fellowship
19. Zachary Hegenberg, BioE, Summer 2021
Currently: Compliance and Audit Specialist at Integra Life Science (Charlotte, NC)
20. Sofia Mehmood, BioE, Fall 2020 to Summer 2021
Currently: Bioengineering Student
21. Sarah Coleman, BioE, Summer 2020 to Spring 2022
Currently: Associate Scientist I at Synapticure (Philadelphia, PA)
Diamond Scholar Fellowship
dkNET NIDDK Summer Fellow
22. Julia Brenemen, BioE, Spring 2020
Currently: Supplier Quality Engineer at DSM Biomedical
Awarded CARAS Fellowship (did not accept to take coop role at DSM Biomedical)
23. Alina Vabishchevich, BioE, Spring 2020 to Fall 2020
24. Charlotte Nesbitt, Diamond Scholar, BioE, Spring 2020 to Spring 2022
Currently: Research Associate at Cellarity (Somerville, MA)
Diamond Scholar Fellowship
25. Joseph Urban, (Visiting Scholar, Brown University), Summer 2018 to Summer 2019
Currently: Microfluidics Engineer/Member of Technical Staff I at Draper Labs (Cambridge, MA)
Brown University Summer Fellowship Award
26. Alice Bobovich, (Visiting Scholar, University of Southern California), Summer 2018
Currently: Biomedical Engineering Master's Student at University of Southern California
27. Joseph Woolerton, BioE, Summer 2018
Currently: Research Assistant at the Wistar Institute (Philadelphia, PA)
28. Kyle Schwab, BioE, Spring 2018- Spring 2019
Currently: Predoctoral Fellow at NIH/Temple
29. Alexandra Abruzzo, BioE, Spring 2018- Fall 2019

Currently: M.D. Candidate at St. George's University

30. Eleanor Caston, BioE, Spring 2018- Summer 2020

Currently: NSF GRFP Fellow in Segura Lab at Duke University

31. Anthony Nassier Boyce-Davis, Bio, Spring 2017- Summer 2017

Currently: Research Assistant at NYU (New York, NY)

32. Jennifer Hammel, BioE, Spring 2017 - Summer 2020*

Currently: Postdoc Fellow in Gerecht Lab at Duke University

PhD, Virginia Tech (2024); VT ICTAS Doctoral Scholar at Virginia Tech

*NIH U*STAR MARC Scholar*

33. Nikolas DiCaprio, BioE, Fall 2016- Summer 2020*

Currently: PhD Student in Burdick Lab at University of Pennsylvania (UC-Boulder)

Diamond Scholar Fellowship, NSF REU at CEMB (UPenn)

34. Jimmy Dawood, BioE, Fall 2016- Summer 2017

Currently: United States Navy Ensign M.D. Candidate at the F. Edward Hebert School of Medicine

35. Michael Struss, BioE, Fall 2016- Fall 2017

Currently: PhD Student in BellasFATLab at Temple University

36. Casey Rodenberger (formerly Hobel), Fall 2016- Fall 2017

Currently: Manufacturing Engineer II at DSM Biomedical

High School Students

1. Victoria Kurneh (Summer 2024)
2. Jacqueline Joseph (Summer 2024)
3. Somaly Khumpan (Summer 2024)
4. Yesseli Amaro (Summer 2024)
5. Srujana Ayyagari (Summer 2023)
6. Paul Hutapea (Summer 2023)
7. Luke Stokes (Summer 2023)
8. Enrique Espada (Summer 2023)
9. Grace Alfred (Summer 2023)

DISSERTATION COMMITTEES

Preliminary Exam Committees

Jennifer Patten, BioE Ph.D. Candidate (Aug 2021)

Michael Struss, BioE Ph.D. Candidate (May 2020)

Joseph Licata, BioE Ph.D. Candidate (Dec 2019)

Golnaz Anvari, BioE Ph.D. Candidate (Dec 2018)

Louisiane Perrin, BioE Ph.D. Candidate (Nov 2017)

Dissertation Committees

Doctoral

Jennifer Patten, BioE Ph.D. (Proposed Dec 2023, Oct 2024)

Michael Struss, BioE Ph.D. (Proposed Jul 2022)

Tani Leigh, Temple School of Medicine, Physiology Ph.D. (Defended Jun 2022)

Golnaz Anvari, BioE Ph.D. (Proposed Dec 2020, Defended Apr 2022)

Christine Vrakas, Temple School of Medicine, Physiology Ph.D. (Defended Apr 2019)

Kamyar Esmaeili Pourfarhangi, BioE Ph.D. (Proposed Dec 2018, Defended Jun 2019)

Farzaneh Ghasemi Tahrir, BioE Ph.D. (Proposed Jan 2018, Defended Jun 2018)

Farzad Yousefi Gharebaghi, BioE Ph.D. (Defended Aug 2017)

Masters

Shahriar Cyrus Rashvand, BioE M.S. Candidate (Proposed Dec 2017, Defended Jul 2018)

Brittney Wass, BioE M.S. (Defended Dec 2016)

H. SERVICE

PROFESSIONAL SOCIETY ACTIVITIES

Membership

Member, Society for Biomaterials (SfB)
Member, American Society for Matrix Biology (ASMB)
Member, Cell & Molecular Bioengineering (CMBE) SIG, Biomedical Engineering Society (BMES)
Member, Biomedical Engineering Society (BMES)
Member, Tissue Engineering and Regenerative Medicine International Society (TERMIS)
Member, American Institute of Chemical Engineers (AIChE)
Member, American Society for Engineering Education (ASEE)
Member, Armed Forces Institute of Regenerative Medicine (AFIRM)

Leadership

Chair, BME Council of Diversity (2024-2025)
Chair (elected), BME Organizations Leading Diversity (BOLD) (2024-2025)
Council Member (elected), ASMB (2024-2028)
Council Member (elected), BMES Cell & Molecular Bioengineering (CMBE) SIG (2023-2025)
Vice-Chair (elected), Council of Diversity (2023-2024)
Committee Member, ASMB Membership Committee (2023-)
Outgoing Chair, BMES Diversity Committee (2023)
Department Representative, Council of Diversity Chairs (2022-)
Committee Member, BMES Special Committee on Elections (2021-2022)
Founding Member, Alliance of Diversity Committees in BME Professional Societies (AIMBE, BMES, AAAS) (2020-)
Founding Member, BME Organizations Leading Diversity (BOLD) (BMES, AIMBE, BME Council of Chairs) (2020-)
COVID19 Task Force, BMES (2020)
Chair, BMES Diversity Committee (2020-2022)
Co-Chair, BMES Diversity Committee: Outreach Subcommittee (2017-2018)
Committee Member (elected), TERMIS- AM Membership Committee (2017-2019)
Committee Member, BMES Diversity Committee (2016-2019)
Chair, AFIRM Fellows Leadership Council (2010-2012)

Session/Meeting Organizing/Chairing

Special Session Co-Organizer, Engineering Endocrine Tissue Function, BMES Annual Meeting (2024)
Conference Co-Chair, CMBE 2026 Annual Meeting (2024-2026)
Planning Committee Member, ASMB Annual Meeting 2025 (2024-2025)
Special Session Co-Organizer, Engineering Endocrine Tissue Function, BMES Annual Meeting (2023)
Co-Organizer, LGBTQIA & Friends Dessert Social, BMES Annual Meeting (2022)
Co-Organizer, Gender Equity in BME Luncheon, BMES Annual Meeting (2022)
Co-Organizer and Moderator, Diversity Committee Special Session: Inclusion in STEM: People with Disabilities (2022)
Co-Organizer, Diversity Committee Special Session: Biomedical Engineering for All - Engaging Communities with BME Beyond Traditional Settings (2022)
Organizer and Host, Celebration of Minorities Luncheon, BMES Annual Meeting (2021)
Organizer and Moderator, LGBTQIA & Friends Dessert Social, BMES Annual Meeting (2021)
Organizer and Host, Gender Equity in BME, BMES Annual Meeting (2021)
Organizer and Moderator, BMES Awards & Faculty Nominations (Inclusive Practices), BMES Webinar (2021)
Organizer and Moderator, Inclusive Practices for Faculty Recruiting, BMES Webinar (2021)
Committee Organizer and Breakout Leader, Equity and Anti-Racism: A Roadmap to Policy Transformation In BME AIMBE Summit (2021)

Organizer and Host, Townhall with BMES Leadership on Supporting our Black, Latinx, and Indigenous Members, BMES Annual Meeting (2020)

Organizer and Host, LGBTQIA in BME Panel, BMES Annual Meeting (2020)

Organizer and Host, Gender Equity in BME Panel, BMES Annual Meeting (2020)

Organizer and Host, LGBT Dessert Social, BMES Annual Meeting (2018, 2019)

Organizer and Speaker, Navigating Towards a Junior Faculty Position in STEM: A Woman's Perspective, BMES Webinar (2018)

Organizer and Host, High School Visitation Day, BMES Annual Meeting (2017, 2018, 2019)

Organizer, Women in BME Luncheon, BMES Annual Meeting (2017)

Organizer, Celebration of Minorities Luncheon, BMES Annual Meeting (2017)

Discussion Leader, Silk Proteins and the Transition to Biotechnologies, Gordon Research Conference (2023)

Symposium Chair/Organizer, Matrix Remodeling in Metabolic Health and Disease, ASMB e-Symposium (2020)

Track Chair, Micro and Nano Technologies Track, BMES Annual Meeting (2019)

Session Chair, Matrix Biology in Tissue Engineering, BMES (2020)

Session Chair, Matrix Remodeling in Metabolic Health and Disease, ASMB e-Symposium (2020)

Session Chair, Tissue Engineering, BMES (2018)

Session Chair, Immunoengineering and Immunomodulation in Tissue Engineering, BMES (2017)

Session Fellow Co-Chair, Craniofacial Reconstruction, AFIRM (2012)

Session Student Co-Chair, Stem Cell Sources, TERMIS-AM (2011)

Session Student Co-Chair, Soft Tissue Repair, TERMIS-AM (2010)

Committee Reviewing

Diversity Award Reviewer, Awards Committee, BMES (2021)

Diversity Award Reviewer, Diversity Committee, BMES (2019-20)

Abstract Reviewing

Abstract Reviewer, Rising Star Jr Faculty Awards, Postdoc/Graduate Student Travel Awards, BMES-CMBE (2023)

Abstract Reviewer, Micro and Nano Technologies Track, BMES (2018)

Abstract Reviewer, Tissue Engineering Track, BMES (2018)

Abstract Reviewer, Micro and Nano Technologies Track, BMES (2017)

Abstract Reviewer, Tissue Engineering Track, BMES (2017)

OTHER MEMBERSHIPS AND POSITIONS

Member, **Council on Undergraduate Research**, Washington, DC (2018-)

Member, **Science Studies Interdisciplinary Research Group**, Temple University (2018-)

Affiliate Member, **Center for Obesity Research and Education (CORE)**, Temple University (2017-)

Member, **Diabetes Research Center**, University of Pennsylvania (2016-)

Member, **Penn Center for Musculoskeletal Disorders**, University of Pennsylvania (2016-)

Trainee Member, **Institute for Diabetes, Obesity, Metabolism**, University of Pennsylvania (2012-2013)

Trainee Member, **Boston Nutrition Obesity Resource Center**, Boston University (2011-2012, 2014-2016)

Secretary, **Science and Technology Society**, Tufts University (2008-2010)

GRANT REVIEWING ACTIVITIES

National Institutes of Health (NIH), BTSS Study Section (2024)

National Science Foundation (NSF), CBET, Panel Reviewer (2024)

National Science Foundation (NSF), CBET, Panel Reviewer (2023)

Joslin Diabetes Research Center Boston, P&F Grant Reviewer (2023)

Lipedema Foundation, Collaborative Grant Reviewer (2022)
National Aeronautics and Space Administration (NASA), Space Biology Special Emphasis, Panel Reviewer (2021)
National Science Foundation (NSF), CBET, Panel Reviewer (2021)
National Science Foundation (NSF), CBET, Panel Reviewer (2021)
National Science Foundation (NSF), Cross-directorate “Future Manufacturing (FM) Program”, Reviewer (2020)
National Aeronautics and Space Administration (NASA), Space Biology Division, Panel Reviewer (2020)
National Institutes of Health (NIH), BMBI Study Section (2019)
National Institutes of Health (NIH), CMT Study Section (2019)
Camden Health Research Initiative, Rowan University, Grant Reviewer (2018)
National Science Foundation (NSF), CBET, Panel Reviewer (2018)
National Science Foundation (NSF), CBET, Panel Reviewer (2017)
National Science Foundation (NSF), CBET, Panel Reviewer (2017)

JOURNAL REVIEWING ACTIVITIES

ACS Applied Materials & Interfaces	eCM (eCells and Materials)
ACS Biomaterials Science and Engineering	Integrative Biology
ACS Nano	Journal of Tissue Engineering
Acta Biomaterialia	Journal of Cellular Physiology
Advanced Biology	Journal of Tissue Engineering and Regenerative Medicine
Advanced Healthcare Materials	Journal of Medical Devices
APL Bioengineering	Lab on a Chip
Biofabrication	Molecular Biology of the Cell
Bone	Nature Scientific Reports
Biomacromolecules	PLOS One
BioMed Research International	Science Advances
Cell and Molecular Bioengineering	Stem Cell Research and Therapy
Connective Tissue Research	Trends in Biotechnology (Cell Press)
Differentiation	Radiation Research

DEPARTMENTAL, COLLEGE, UNIVERSITY SERVICE ACTIVITIES

University

Member, Faculty Senate Faculty Disabilities Concerns Committee (2024-)
Elected Member, Faculty Senate Research Programs and Policies Committee (2024-)
Search Committee Reviewer, Vice Provost for Research External Search (2023)
Reviewer, Goldwater Scholar Fellowship Program (2022) (2/4 students awarded)

College of Engineering

Member, COE IT Committee (2023-)
Elected Member, Merit Review Committee (2021)
Founding Member, Diversity Committee (2021-)
Faculty Representative, Alumni Association (2021-)
Judge, 3 Minute Thesis Competition (2019, 2021)
Member, Entrepreneurship Council (2019)
Judge, Senior Design Prototype Competition (2018-2020)
Judge, Undergraduate Engineering Poster Symposium (2017)

Bioengineering Department

Member, Graduate curriculum review Adhoc Committee (2023-)
Member, Faculty Mentoring Committee (2019-)

Faculty Advisor, Trainee Writing Accountability Group (2018-2021)
Faculty Advisor, Temple BMES Student Chapter (2017-2020)
Co-Organizer, Bioengineering Seminar Series (2017-)
Member, Strategic Planning Committee (2017-)
Director, Temple Bioengineering Social Media (2016-2020)
Organizer, Bioengineering Professional Development Seminar Series (2016-2017)

CONSULTING AND ADVISORY ACTIVITIES

Foundry Therapeutics 1 (2019)
 WHY-PR Health and Science Advisory Board Member (2018-)
 New Enterprise Associates (NEA) (2018)

STEM OUTREACH COMMUNITY ACTIVITIES

Episcopal Academy, Invited STEM Speaker Series supported by Clare Foundation (2023)
Hunting Park Community Science Network Outreach, *Partner*, Halloween Bloody Organs-on-Chips (2018)
Franklin Institute, Philadelphia Science Festival, *Partner*, "Can you build an organ?" (2017, 2018, 2019)
Women's Engineering Exploration (WE2) Summer Camp, *Partner* (2017, 2018, 2019)
Ursuline Academy Biotechnology Group, *Mentor*, Mentored HS student on semester research project, Dedham, MA (2015)
HuffingtonPost "Girls in STEM" Program, *Mentor*, Boston, MA, New York City, NY (2013-2014)
Tahanto Middle School Career Day, *Presenter*, Tissue Engineering and ran biomaterials workshop, Boylston, MA (2012)
Tufts Community Day, Ran silk biomaterials experiment demos for local children, Medford, MA (2011)
Wounded Warrior Project Fun Run, *Organizer*, AFIRM Annual Meeting, Clearwater, FL (2011-2012)
826 Boston, Developed and taught Summer Science Camp Program on Bio-Inspired Engineering, Boston, MA (2009)
Tufts Tissue Engineering Resource Center, Demo silk biomaterials to students and visitors, Medford, MA (2007-2012)

NEWS & MEDIA FEATURES

The Pulse, WHY-PR, [How Science is Transforming Weight Loss](#), October 6, 2023
Temple College of Engineering, [How a Bioengineering Professor is leading DEIA efforts in STEM spaces](#), Jul 2023
Episcopal Academy, [STEM Speaker Series Features Dr. Evangelia Bellas](#), Jan 2023
Lipedema Foundation, [Bringing new Insight into Lipedema Research](#), June 2022
Virginia Tech VTx, Virginia Tech, Temple University [scientists awarded grant to research lipedema, an under-studied disease of fat tissues](#), January 12, 2022
Temple College of Engineering, [The future of fat: Discussion with Dr. Evangelia Bellas on her NSF CAREER Award](#), July 30, 2021
The Scientist, [Supply Shortages Hit Life Science Labs Hard](#), April 21, 2021
The Temple News, [Temple College of Engineering implements 'relief week'](#), March 2, 2021
BMES Diversity (Youtube)
The Pulse, WHY-PR, [Cleaning Up](#), October 6, 2017
The Pulse, WHY-PR, [Badass Ladies in Lab](#), March 24, 2017