Christine E. Schmidt, Ph.D. Distinguished Professor and J. Crayton Pruitt Family Endowed Chair

J. Crayton Pruitt Family Department of Biomedical EngineeringTel. 352-294-8832The University of Florida, 1064 Center Drive, NEB 363, P.O. Box 116131FAX 352-273-9221Gainesville FL 32611-6131E-mail: schmidt@bme.ufl.edu

EXECUTIVE SUMMARY:

Dr. Schmidt is a Distinguished Professor, the J. Crayton Pruitt Family Endowed Chair, and former Department Chair for the University of Florida J. Crayton Pruitt Family Department of Biomedical Engineering. Prior to joining UF, Dr. Schmidt was the B.F. Goodrich Endowed Professor at the University of Texas at Austin in both Biomedical Engineering (founding member) and Chemical Engineering.

When Dr. Schmidt stepped down as Department Chair in May 2023 after a decade in this role, the J. Crayton Pruitt Family Department of Biomedical Engineering encompassed 30 faculty, 500 undergraduates, 150 graduate students, and 21 department staff. UF BME graduate and undergraduate programs were ranked 12th and 10th, respectively, among national public programs (U.S. News & World Report, USNWR). The undergraduate BME program first became ABET accredited in Fall 2019 and the graduate program ranking climbed over 21 spots (public) and almost 30 spots (overall) since 2013. Dr. Schmidt launched initiatives to increase the impact and visibility of the department, enhance engagement and enrich the culture of the department by strengthening partnerships, expanding interdisciplinary research and education, and increasing opportunities to translate engineering discoveries to biomedical applications. Dr. Schmidt has been devoted to diversity and inclusion. Since 2013, Dr. Schmidt recruited 22 faculty to the department, with women faculty increasing from 2 to 16 (55% women) and Black and Hispanic faculty increasing from 1 to 7 (24% URM). Moreover, research expenditures per faculty more than tripled and UF BME received >\$3M in new gifts and foundation and industrial support for innovative research and educational programs. Prior to joining UF, Dr. Schmidt was extensively involved in curricula development and administration at UT Austin; she was one of four founding members of UT Austin's BME Department. She served as inaugural Graduate Program Chair and Graduate Recruiter and served as chair of the faculty search committee for many years, where she grew the new department to its current faculty size. She was instrumental in securing Whitaker Education funding and NSF IGERT training grants as well as implementing college programs to recruit and retain women faculty.

Dr. Schmidt has held numerous leadership positions in professional organizations, including the American Institute of Medical and Biological Engineering (AIMBE), an honorific society of over 2,000 elected fellows representing the top 2% in the field, and the Biomedical Engineering Society (BMES), which has over 6,000 members. For AIMBE, Dr. Schmidt served as President (2018-2020) and as AIMBE's Chair of the College of Fellows and as the Conference Organizer for AIMBE's 25th Anniversary Meeting. As President, she introduced a new nomination process to focus on impact, which has increased diversity in fellows, and launched the AIMBE Impact Awards. For BMES, Dr. Schmidt served on the Board of Directors from 2011-2015 and served as Conference Chair of the 2010 Annual BMES Meeting (with over 3,000 attendees). She has also served as Chair of the BMES National Meetings Committee, Chair of the BMES Diversity Committee, and is a recurring member of the BMES Fellows Selection Committee and the Awards and Nominations Committees.

Dr. Schmidt has over 25 years of experience in neural tissue engineering and wound healing, with over \$25M in funding and over 185 peer-reviewed papers and chapters (H-index=66), 34 issued U.S. patents, and has trained over 18 post-doctoral engineers and scientists (67% women and URM), 50 graduate students (50% women and URM), and hundreds of undergraduates in her laboratory. Dr. Schmidt is also active in innovation, commercialization, and clinical translation efforts. Her work is the foundation for the Avance Nerve Repair graft from Axogen (over 75,000 grafts implanted in patients) and VersaWrap from her affiliated start-up company, Alafair Biosciences (over 12,000 grafts implanted). Alafair Biosciences was recently listed on the 2023 Inc.5000 list of *Fastest-Growing Private Companies in America*. Dr. Schmidt is a Section Editor for *Current Opinion in Biomedical Engineering* and served as the inaugural Deputy Editor-in-Chief for *Journal of Materials Chemistry B*, a publication of the Royal Society of Chemistry, from 2012-2016. She currently serves on editorial boards for *Acta Biomaterialia, Journal of Neural Engineering, Tissue Engineering Part A, Journal of Biomedical Materials Research A, Journal of Biomaterials Science-Polymer Edition, International Journal of Nanomedicine, and Nanomedicine.*

Dr. Schmidt has received numerous major awards and recognitions. She is a Fellow of AIMBE, the National Academy of Inventors (NAI), the Biomedical Engineering Society (BMES), the American Society for the Advancement of Science (AAAS), the International Academy of Medical and Biological Engineering (IAMBE), and the International Union of Societies for Biomaterials Science and Engineering (FBSE/IUSBSE). She is an inductee into the Florida Inventors Hall of Fame and an elected member of the Florida Academy of Science, Engineering and Medicine of Florida (Florida's equivalent to the National Academies). Dr. Schmidt has received other prominent recognitions, including AIMBE's prestigious Pierre Galletti Award, the BMES Diversity Award (UF BME Representative), the TERMIS-AM Commercialization/Innovation Award, the Clemson Award for Applied Research from Society For Biomaterials, the American Competitiveness and Innovation Fellowship from the National Science Foundation, and the Chairmen's Distinguished Life Sciences Award from Christopher Columbus Fellowship Foundation and U.S. Chamber of Commerce.

| EDUCATION: | |
|-------------|---|
| 1988 | B.S. (with High Honors) in Chemical Engineering, The University of Texas at Austin |
| 1994 | Ph.D. in Chemical Engineering, The University of Illinois at Urbana–Champaign Advisor: Dr. Douglas Lauffenburger |
| 1994 – 1996 | NIH Postdoctoral Fellow in Chemical Engineering , MIT Advisor: Dr. Robert Langer |

PROFESSIONAL EXPERIENCE:

| 6/1/96-8/31/01 | Assistant Professor, Chemical Engineering, University of Texas at Austin |
|-----------------|---|
| 9/1/99-8/31/09 | Laurence E. McMakin, Jr. Centennial Fellow in Chemical Engineering |
| 9/1/01-8/31/02 | Assistant Professor, Biomedical Engineering, University of Texas at Austin |
| 9/1/01-8/14/04 | Graduate Adviser, Biomedical Engineering, Univ. of Texas at Austin |
| 9/1/02-8/31/07 | Associate Professor, Biomedical Engineering, University of Texas at Austin |
| 9/1/07-12/31/12 | Professor, Biomedical Engineering, University of Texas at Austin |
| 9/1/09-12/31/12 | B.F. Goodrich Endowed Professorship in Materials Engineering |
| 1/1/13-5/15/23 | Department Chair, Biomedical Engineering, University of Florida |
| 1/1/13-8/15/23 | Professor, Biomedical Engineering, University of Florida |
| 1/1/13-present | J. Crayton Pruitt Family Endowed Chair, Biomedical Engineering, University of Florida |
| 8/16/23-present | Distinguished Professor, Biomedical Engineering, University of Florida |

KEY PROFESSIONAL ACTIVITIES:

Professional Society Leadership Positions/Activities

Chaired and organized over 50 sessions/symposia at national conferences.

Federal Demonstration Partnership, Faculty Representative for The University of Texas at Austin, 2007-December 2009. Programming Chair, Area 8b (Biomaterials), American Institute of Chemical Engineers (AIChE), Fall 01-Fall 03. Conference Chair, Biomedical Engineering Society Annual Fall Meeting, October 2010, Austin, Texas. Board of Directors, Biomedical Engineering Society, Fall 2011, Fall 2014

Board of Directors, Biomedical Engineering Society, Fall 2011 – Fall 2014.

Chair, National Meetings Committee, Biomedical Engineering Society (BMES), Fall 2012 – Fall 2015. Chair-Elect, Chair, College of Fellows, American Inst. for Medical & Biological Eng. (AIMBE), 2014-15, 2015-16, resp. Conference Chair, AIMBE 25th Anniversary Meeting, Washington DC, April 3-4, 2016.

President-Elect, President, Past-President, AIMBE, 2017-18, 2018-20, 2020-21, respectively.

Editorships and Editorial Boards

Editorial Advisory Board, Encyclopedia of Biomaterials and Biomedical Engineering, Marcel Dekker. 2002-2008.
Inaugural Deputy Editor-in-Chief, *Journal of Materials Chemistry B*, Royal Society of Chemistry, Fall 2012 - Fall 2016.
Editorial Boards & Advisory Boards: *Biomedical Engineering Advances*, Fall 2020-present; *Tissue Engineering*, Spring 2020-present; *J. Biomaterials Science, Polymer Edition*, Spring 2006-present; *J. Biomedical Materials Research A*,

Spring 2007-present; Acta Biomaterialia, Spring 2010-present; J. Neural Engineering, Fall 2014-present; International Journal of Nanomedicine, Spring 2006-present; Nanomedicine, Spring 2011-present; Materials Horizons, Royal

Society of Chemistry (RSC), Fall 2013-present; J. Materials Chemistry B, RSC, Fall 2016-present.

Advisor, Cambridge Texts in Biomedical Engineering, Fall 2011 - present.

Section Editor for Neural Engineering, Current Opinion in Biomedical Engineering, Fall 2016 - present.

University Advisory Panels and External Review Boards

Chair, External Advisory Panel, Neuroengineering IGERT Program, Univ. Illinois Urbana-Champaign, Fall 2010-2013.
Chair, External Advisory Panel, Department of Chemical Engineering, University of Michigan, Fall 2010.
Member, External Advisory Committee, Emergent Behaviors of Integrated Cellular Systems (EBICS) Science and Technology Center (STC); MIT, University of Illinois, and Georgia Institute of Technology, 2010-2019.
Member, External Review Committee, Department of Biomedical Engineering, University of Florida, 2011.
Member, External Review Committee, Department of Bioengineering, University of Illinois, 2014.
Chair, Academic Review Committee, Department of Bioengineering, Texas A&M University, 2015.
Member, External Advisory Board, Biomedical Engineering, WPI, Worcester, MA, 2016-present.
Member, Scientific Advisory Board for Columbia P41: Tissue Engineering Resource Center (TERC), 2020-present.
Advisory Session for Bioengineering Chair Search, Dr. Robert Guldberg, University of Oregon, Oct. 14, 2021.
Advisory Session for New BME Department, Administrative Leadership Team, University of Mississippi, Oct. 27, 2021.
Chair, Academic Review Committee, Department of Biomedical Engineering, University of Oregon, Oct. 14, 2021.

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Scientific Panels and Advisory Groups

Panels and Site Review Teams: NSF: MRI, ERC, CAREER; NASA, NIH (SSS-M01, -M02 -M03, MDCN, MOSS G 01). Advisory Workshop for National Research Council (NRC) on "Challenges for the Chemical Sciences in the 21st Century: Health & Medicine", Beckman Center of the National Academies, Irvine, CA, Fall 2002.

- Invited Speaker and Event Moderator, "Visions of Biological Engineering, UT Metroplex Days, UT-DFW Initiative for Biological Sciences/Engineering, Dallas, TX, Nov. 29, 2006.
- Invited Speaker, Stem Cells in Regen. Medicine/Tissue Eng. Workshop, Multi-Agency Tissue Eng. Science (MATES) Interagency Working Group on Biotechnology, National Science & Technology Council, Arlington, VA, Feb. 1, 2007.
- Invited Participant, American Chemical Society (ACS) Biochemical Technology Division (BIOT) Strategic Planning Meeting, Washington DC, June 6-8, 2008.

Invited Participant, IEEE EMBS Forum on Grand Challenges in Neuroengineering, Bethesda MD, May 7-8, 2010. Invited Participant, NSF Biomaterials Workshop: Important Areas for Future Investment, Arlington, VA, June 19, 2012. Invited Participant, NIBIB (NIH) Strategic Planning Meetings, Potomac MD, Jan. 2020.

HONORS, AWARDS, AND RECOGNITIONS:

- 1991-1992 NIH Cell and Molecular Biology Predoctoral Training Fellowship
- 1995-1996 NIH F32 Postdoctoral Fellowship
- 1996 NSF Engineering Education Scholar, Carnegie Mellon University
- 1997 NSF CAREER Award
- 1998 Whitaker Young Investigator Award
- 1998 Most Outstanding Faculty Member in Chemical Engineering, Student Engineering Council, UT Austin
- 1998 Lockheed Martin Department of Chemical Engineering Teaching Award, UT Austin
- 1998 Halliburton/Brown and Root Young Faculty Excellence Award, UT Austin
- 1999 James W. Vick Texas Excellence Award for Academic Advising, UT Austin
- 1999 Laurence E. McMakin, Jr. Centennial Fellowship, UT Austin
- 1999 National Academy of Engineering (NAE) "Frontiers of Engineering" Symposium, Selected Participant
- 2000 NAE Gallery of Women Engineers ("Engineer Girl")
- 2000 Faculty Appreciation Award for Commitment to Teaching Excellence, Student Eng. Council, UT Austin
- 2000 Lockheed Martin College of Engineering Award for Outstanding Teaching, UT Austin
- 2002 El Paso Energy Foundation Faculty Achievement Award in Recognition of Teaching Excellence
- 2003 Whitaker Academic Leadership Program, Selected Participant, Leesburg, VA, February 27-March 2, 2003
- 2008 Protégé, 5th Annual Conference of The Academy of Medicine, Engineering & Science of Texas (TAMEST), required nomination by National Academy (NAE) member, Houston, TX, Jan. 10-11, 2008
- 2008 Chairmen's Distinguished Life Sciences Award, Christopher Columbus Foundation/US Chamber of Commerce 2009 *Fellow*, American Institute for Medical and Biological Engineering (AIMBE)
- 2010 Page Morton Hunter Bioengineering Distinguished Seminar, Clemson University, April 1, 2010
- 2010 Protégé, 7th Annual Conference of TAMEST, nomination by NAE Member, San Antonio, TX, Jan. 2010
- 2010 NSF American Competitiveness and Innovation (ACI) Award, Division of Materials Research, NSF
- 2010 *Fellow*, Biomedical Engineering Society (BMES)
- 2011 ING Professor of Excellence Award, UT Austin
- 2011 Gail F. Beach Lecture, Miami Project to Cure Paralysis, Miami, FL, December 7, 2011
- 2012 Cockrell School of Engineering Distinguished Alumnus Award, The University of Texas at Austin
- 2012 *Fellow*, International Union of Societies for Biomaterials Science and Engineering (FBSE/IUSBSE)
- 2013 *Fellow*, American Society for the Advancement of Science (AAAS)
- 2014 Women's Initiatives Committee's (WIC) Mentorship Excellence Award, AIChE
- 2016 Weinbaum Distinguished Lecture, Department of Biomedical Engineering, RPI, April 14, 2016
- 2017 Academy of Distinguished Chemical Engineers, Inaugural Class, Dept. Chemical Engineering, UT Austin
- 2018 *Fellow*, National Academy of Inventors (NAI)
- 2019 Clemson Award for Applied Research, Society For Biomaterials (SFB)
- 2019 *Fellow*, International Academy of Medical and Biological Engineering (IAMBE)
- 2020 Inductee, Florida Inventors Hall of Fame (FIHF)
- 2020 Elected Full Member, Sigma Xi, The Scientific Research Honor Society
- 2021 Elected Member, Academy of Science, Engineering and Medicine of Florida (ASEMFL)
- 2021 TERMIS-AM (Tissue Eng./Regen. Med, Int. Soc., Americas Chapter) Commercialization/Innovation Award
- Alan J. Hunt Memorial Lecture, Department of Biomedical Engineering, Univ. of Michigan, Nov. 18, 2022 Pierre Galletti Award, AIMBE's highest distinguished career award
- 2023 Pierre Galletti Award, AIMBE's highest distinguished career award
- Academy of Distinguished Biomedical Engineers, Inaugural Class, Dept. Biomedical Engineering, UT Austin
 BMES Diversity Award for UF BME Department, Department Representative

RESEARCH

PUBLICATIONS: [H-INDEX=66, I₁₀-INDEX=147, I₁₀₀-INDEX=52; TOTAL CITATIONS > 23,000; GOOGLE SCHOLAR]

Refereed Archival Journal Publications (*denotes UG student co-author)

- 1. Barney, F., C. Schmidt*, G. Georgiou (1990). Affinity immobilization of a genetically engineered bifunctional hybrid protein. <u>Enzyme and Microbial Technology</u> 12: 337-342.
- 2. Schmidt, C.E., A.F. Horwitz, D.A. Lauffenburger, M.P. Sheetz (1993). Integrin-cytoskeletal interactions in migrating fibroblasts are dynamic, asymmetric, and regulated. Journal of Cell Biology 123: 977-91.
- 3. Schmidt, C.E., T. Chen*, D.A. Lauffenburger (1994). Simulation of integrin-cytoskeletal interactions in migrating fibroblasts. <u>Biophysical Journal</u> 67: 1-14.
- 4. Schmidt, C.E., D.A. Lauffenburger, M.P. Sheetz, A.F. Horwitz (1995). Integrin-cytoskeletal interactions in neuronal growth cones. Journal of Neuroscience 15: 3400-3407.
- 5. Schmidt, C.E., T. Chen*, D.A. Lauffenburger (1995). Modulation of cell migration speed via site-directed manipulation of the integrin/cytoskeleton linkage. Journal of Cellular Engineering 1: 3-12.
- 6. Palecek, S.P., C.E. Schmidt, D.A. Lauffenburger, A.F. Horwitz (1996). Integrin dynamics on the tail region of migrating fibroblasts. Journal of Cell Science 109: 941-952.
- 7. Schmidt, C.E., V.R. Shastri, J.P. Vacanti, R. Langer (1997). Stimulation of neurite outgrowth using an electrically conducting polymer. <u>Proceedings of the National Academy of Science USA</u> 94: 8948-8953.
- 8. Hudson, T.W., G.R.D. Evans, C.E. Schmidt (1999). Engineering strategies for peripheral nerve repair. <u>Clinics in Plastic</u> <u>Surgery</u> 26: 617-628.
- 9. Collier, J.H., J.P. Camp*, T.W. Hudson, C.E. Schmidt (2000). Synthesis and characterization of polypyrrole/hyaluronic acid composite biomaterials for tissue engineering. Journal of Biomedical Materials Research 50: 574-584.
- 10. Schmidt, C.E., J.M. Baier (2000). Acellular vascular tissues: natural biomaterials for tissue repair and tissue engineering. <u>Biomaterials</u> 21: 2215-2231.
- 11. Hudson, T.W., G.R.D. Evans, C.E. Schmidt (2000). Engineering strategies for peripheral nerve repair. <u>Orthopedic</u> <u>Clinics of North America</u> 31: 485-497. *Reprinted from <u>Clinics in Plastic Surgery</u>*
- 12. Kotwal, A., C.E. Schmidt (2001). Electrical stimulation alters protein adsorption and nerve cell interactions with electrically conducting biomaterials. <u>Biomaterials</u> 22:1055-1064.
- 13. Dixit, P., D. Hern-Anderson, J. Ranieri, C.E. Schmidt (2001). Vascular graft endothelialization: comparative analysis of canine and human endothelial cell migration on natural biomaterials. Journal of Biomedical Materials Research 56:545-555.
- 14. Winter, J.O., T.Y. Liu*, B.A. Korgel, C.E. Schmidt (2001). Recognition molecule directed interfacing between semiconductor quantum dots and nerve cells. <u>Advanced Materials</u> 13: 1673-1677.
- 15. Fischbeck, J.A., J.M. Baier, R. Akella, D. Hern-Anderson, C.E. Schmidt (2001). Genetic modification of alphaGal expression in xenogeneic endothelial cells yields a complex immunological response. <u>Tissue Engineering</u> 7: 743-756.
- Furnish, E.J., W. Zhou, C.C. Cunningham, J.A. Kas, C.E. Schmidt (2001). Gelsolin overexpression enhances neurite outgrowth in PC12 cells. <u>FEBS Letters</u> 508: 282-286.
- 17. Rivers, T.J., T.W. Hudson, C.E. Schmidt (2002). Synthesis of a novel, biodegradable electrically conducting polymer for biomedical applications. <u>Advanced Functional Materials</u> 12: 33-37.
- 18. Carnagey, J., D. Hern-Anderson, J. Ranieri, C.E. Schmidt (2003). Rapid endothelialization of PhotoFix natural biomaterial vascular grafts. Journal of Biomedical Materials Research B: Applied Biomaterials. 65B: 171-9.
- 19. Leach J.B., K.A. Bivens, C.W. Patrick Jr., C.E. Schmidt (2003). Photocrosslinked hyaluronic acid hydrogels: natural biodegradable tissue engineering scaffolds. <u>Biotechnology and Bioengineering</u>. 82 (5):578-589.
- 20. Schmidt, C.E., J.B. Leach (2003). Neural tissue engineering: strategies for repair and regeneration. <u>Annual Reviews</u> of Biomedical Engineering. 5:293–347.
- 21. Leach, J.B., K.A. Bivens, C.N. Collins*, C.E. Schmidt (2004). Development of photocrosslinkable hyaluronic acidpolyethylene glycol-peptide composite hydrogels for soft tissue engineering. <u>Journal of Biomedical Materials</u> <u>Research.</u> 70A:74-82.
- 22. Hudson, T.W., S.Y. Liu*, C.E. Schmidt (2004). Engineering an improved acellular nerve graft via optimized chemical processing. <u>Tissue Engineering</u>. 10: 1346-1358.
- 23. Hudson, T.W., S. Zawko, C. Deister, S. Lundy*, C.Y. Hu*, K. Lee*, C.E. Schmidt (2004). Optimized acellular nerve graft is immunologically tolerated and supports regeneration. <u>Tissue Engineering</u>. 10: 1641-51.
- 24. Winter, J.O., N. Gomez, S. Gatzert*, C.E. Schmidt, B.A. Korgel (2005). Variation of cadmium sulfide nanoparticle size and photoluminescence intensity with altered aqueous synthesis conditions. <u>Colloids and Surfaces A:</u> <u>Physicochemical and Engineering Aspects</u>. 254: 147–157.
- 25. Leach, J.B., C.E. Schmidt (2005). Characterization of protein release from photocrosslinkable hyaluronic acid-polyethylene glycol hydrogels. <u>Biomaterials</u> 26: 125-135.

- 26. Sanghvi, A.B., K.P-H. Miller, A.M. Belcher, C.E. Schmidt (2005). Biomaterials functionalization using a novel peptide that selectively binds to an electrically conducting polymer. <u>Nature Materials</u>. 4: 496-502.
- 27. Gomez, N., J.O. Winter, F. Shieh, A.E. Saunders, B.A. Korgel, C.E. Schmidt (2005). Challenges in quantum dotneuron active interfacing. <u>Talanta</u> 67: 462-471.
- 28. Deister, C., C.E. Schmidt (2006). Optimizing neurotrophic factors combinations for neurite outgrowth. Journal of <u>Neural Engineering</u> 3: 172-179.
- 29. Lee, J.W., F. Serna, J. Nickels, C.E. Schmidt (2006). Carboxylic Acid-Functionalized Conductive Polypyrrole as a Bioactive Platform for Cell Adhesion. <u>Biomacromolecules</u>. 7: 1692-1695.
- 30. Lee, J.W., F. Serna, C.E. Schmidt (2006) Carboxy-endcapped conductive polypyrrole: biomimetic conducting polymer for cell scaffolds and electrodes. <u>Langmuir</u>. 22: 9816-9819.
- 31. Gomez, N., Y. Lu, S. Chen, C.E. Schmidt (2007). Immobilized nerve growth factor and microtopography have distinct effects on polarization versus axon elongation in hippocampal cells in culture. <u>Biomaterials</u>. 28: 271-284.
- 32. Gomez, N., C.E. Schmidt (2007). Nerve growth factor-immobilized polypyrrole: bioactive electrically conducting polymer for enhanced neurite extension. Journal of Biomedical Materials Research. 81A: 135-149.
- 33. Gomez, N., S. Chen, C.E. Schmidt (2007). Polarization of hippocampal neurons with competitive surface stimuli: contact guidance cues are preferred over chemical ligands. J. Royal Society Interface. 4: 223-233.
- 34. Gomez, N., J.Y. Lee, J.D. Nickels, C.E. Schmidt (2007). Micropatterned polypyrrole: combination of electrical and topographical characteristics for stimulation of cells. <u>Advanced Functional Materials</u>. 17: 1645-1653.
- 35. Deister, C., S. Aljabari*, C.E. Schmidt (2007). Effects of collagen 1, fibronectin, laminin 1, and hyaluronic acid concentration on neurite extension. Journal of Biomaterials Science, Polymer Edition. 18: 983-997.
- 36. Guimard, N., N. Gomez, C.E. Schmidt (2007). Conducting polymers in biomedical applications. <u>Progress in Polymer</u> <u>Science</u>. 32: 876–92. (invited review)
- 37. Seidlits, S., J.Y. Lee, C.E. Schmidt (2008). Nanostructured scaffolds for neural applications. Nanomedicine 3:183-199.
- 38. Zawko, S.A., Q. Truong*, C.E. Schmidt (2008). Drug binding hydrogels of hyaluronic acid functionalized with betacyclodextrin. Journal of Biomedical Materials Research. 87A: 1044-1052.
- 39. Gopal, A., Z. Luo, J.Y. Lee, K. Kumar, B. Li, K. Hoshino, C. Schmidt, P.S. Ho, X. Zhang (2008). Nano-optomechanical characterization of neuron membrane mechanics under cellular growth and differentiation. <u>Biomedical</u> <u>Microdevices</u>. 10(5): 611-622.
- 40. Fonner, J.M., L. Forciniti, H. Nguyen, J. Byrne*, Y.-F. Kou*, J. Syeda-Nawaz*, C.E. Schmidt (2008). Biocompatibility Implications of Polypyrrole Synthesis Techniques. <u>Biomedical Materials</u>. 3: 034124.
- 41. Forciniti, L., C.E. Schmidt, M.H. Zaman (2009). Computational model provides insight into the distinct responses of neurons to chemical and topographical cues. <u>Annals of Biomedical Engineering</u>. 37: 363-374.
- 42. Zawko, S.A., S. Suri, Q. Truong*, C.E. Schmidt (2009). Photopatterned anisotropic swelling of dual-crosslinked hyaluronic acid hydrogels. <u>Acta Biomaterialia.</u> 5: 14-22.
- 43. Guimard, N.K., J.L. Sessler, C.E. Schmidt (2009). Towards a biocompatible, biodegradable copolymer incorporating electroactive oligothiophene units. <u>Macromolecules</u>. 42: 502-511.
- 44. Lee, J.Y., J.-W. Lee, C.E. Schmidt (2009). Neuroactive conducting scaffolds: nerve growth factor conjugation on active ester functionalized polypyrrole. J. Royal Society Interface. 6: 801-10.
- 45. Suri, S., C.E. Schmidt (2009). Photopatterned collagen-hyaluronic acid Interpenetrating polymer network hydrogels. <u>Acta Biomaterialia</u>. 5: 2385-2397.
- 46. Lee, J.Y., C. Bashur, A. Goldstein, C.E. Schmidt (2009). Polypyrrole-coated electrospun PLGA nanofibers for neural tissue applications. <u>Biomaterials</u>. 30: 4325-4335.
- 47. Seidlits, S.K., C.E. Schmidt, J.B. Shear (2009). High-resolution patterning of hydrogels in three dimensions using direct-write photofabrication for cell guidance. <u>Advanced Functional Materials</u>. 19: 3543-3551.
- 48. Zawko, S., C. E. Schmidt (2010). Simple benchtop patterning of hydrogel grids for living cell microarrays. <u>Lab on a</u> <u>Chip</u>. 10: 379-383.
- 49. Lee, J.Y., C. Bashur, A. Goldstein, C.E. Schmidt (2010). Enhanced polarization of embryonic hippocampal neurons on micron scale electrospun fibers. Journal of Biomedical Materials Research Part A. 92A: 1398-1406.
- 50. Wang*, Y., Z. Khaing, B. Hall, C.E. Schmidt, A. Ellington (2010). Aptamer antagonists of myelin-derived inhibitors promote axon growth. <u>PLoS ONE</u>. 5: e9726 (8 pp).
- 51. Suri, S., C.E. Schmidt (2010). Cell-laden hydrogel constructs of hyaluronic acid, collagen, and laminin for neural tissue engineering. <u>Tissue Engineering</u>. 16: 1703-1716.
- 52. Zawko, S., C. E. Schmidt (2010). Crystal Templating Dendritic Pore Networks and Fibrillar Micro-structure into Hydrogels. <u>Acta Biomaterialia</u>.6: 2415-2421.
- 53. Seidlits, S.K., Z.Z. Khaing, R.R. Petersen*, J.D. Nickels, J.D. Vanscoy*, J.B. Shear, C.E. Schmidt (2010). The effect of hyaluronic acid hydrogels with tunable mechanical properties on the differentiation of neural progenitor cells. <u>Biomaterials.</u> 31: 3930-3940.

- 54. Durgam, H., S. Sapp, C. Deister, Z. Khaing, E. Chang, S. Luebben, C.E. Schmidt (2010). Novel degradable copolymers of polypyrrole support cell proliferation and enhance neurite outgrowth with electrical stimulation. Journal of Biomaterials Science, Polymer Edition. 21: 1265-1282.
- 55. Zawko, S., C. E. Schmidt (2010). Assembly of sodium soap fibers and fibrillar particles triggered by dissolution of sodium chloride crystals. <u>Soft Matter</u>. 6: 3289-3297.
- 56. Han, L.S., S. Suri, C.E. Schmidt, S. Chen (2010). Fabrication of three-dimensional scaffolds for heterogeneous tissue engineering. <u>Biomedical Microdevices</u>. 12: 721-725.
- 57. Lee, J., C.E. Schmidt (2010). Pyrrole-hyaluronic acid conjugates for decreasing cell binding to metals and conducting polymers. <u>Acta Biomaterialia.</u> 6: 4396-4404.
- 58. Yang, Y., S.K. Seidlits, M.M. Adams, V.M. Lynch, C.E. Schmidt, E.V. Ansyln, J.B. Shear (2010). A highly selective, low-background fluorescent imaging agent for nitric oxide. Journal of the American Chemical Society. 132: 13114-13116.
- 59. Fonner, J.M., C.E. Schmidt, P. Ren (2010). A Combined Molecular Dynamics and Experimental Study of Doped Polypyrrole. <u>Polymer</u>. 51: 4985-4993.
- 60. Forciniti, L., N.K., Guimard, S. Lee*, C.E. Schmidt (2010). Unique electrochemically synthesized polypyrrole:poly(lactic-co-glycolic acid) blends for biomedical applications. Journal of Materials Chemistry. 20: 8865–8874. (highlighted on inside front cover)
- 61. Fozdar, D.Y., J.Y. Lee, C.E. Schmidt, S. Chen (2010). Hippocampal neurons respond uniquely to topographies of various sizes and shapes. <u>Biofabrication</u>. 2(3):035005 (10 pp).
- 62. Khurshid, S.S., C.E. Schmidt, N.A. Peppas (2011). Optimization of molecularly imprinted polymers of serotonin for biomaterial applications. Journal of Biomaterials Science, Polymer Edition. 22: 343-362.
- 63. Fozdar, D.Y., J.Y. Lee, C.E. Schmidt, S. Chen (2011). Selective axonal growth of embryonic hippocampal neurons to competing topographical features of various size and shape. <u>International Journal of Nanomedicine</u>. 6:45-57.
- 64. Seidlits, S.K., C.T. Drinnan, R.R. Petersen*, J.B. Shear, L.J. Suggs, C.E. Schmidt (2011). Fibronectin-Hyaluronic Acid Composite Hydrogels for Three-Dimensional Endothelial Cell Culture. <u>Acta Biomaterialia</u>. 7:2401–2409.
- 65. Zawko, S., C.E. Schmidt (2011). Fibrillar Films Obtained from Sodium Soap Fibers and Polyelectrolyte Multilayers. Journal of Biomedical Materials Research Part A. 98:287-95.
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- 1. Furnish, E.J., C.E. Schmidt (1998). Tissue Engineering of the Peripheral Nervous System. In: Patrick, C.W., Mikos, A.G., McIntire, L.V., eds. Frontiers in Tissue Engineering, Elsevier Science, pp. 512-535.
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- 4. Leach, J.B., C.E. Schmidt (2004) Hyaluronan. <u>Encyclopedia of Biomaterials and Biomedical Engineering</u>, G.E. Wnek and G.L. Bowlin, eds, Marcel Dekker: New York, NY. pp. 779-789.
- 5. Sanghvi, A, J. Murray, C.E. Schmidt (2004). Tissue Engineering of Peripheral Nerve. <u>Encyclopedia of Biomaterials</u> <u>and Biomedical Engineering</u>, G.E. Wnek, G.L. Bowlin, eds, Marcel Dekker: New York, NY. pp. 1613-1621.
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8. Hardy, J.G., C.E. Schmidt (2015). Towards Organic Electronic Materials for Electrically Stimulated Gene Delivery. In: J. Ramsey and M.L. Forrest, eds. <u>Nanoparticles for Delivery of Biotherapeutics</u>. Future Science. Pages 58-70.

Other Publications

- 1. Schmidt, C.E. (1998). Tissue Engineering. In: Hatfield, C., ed. <u>Discovery: Research and Scholarship at the University</u> of Texas at Austin, 15 (1): 6-10.
- 2. Guimard, N., A. Sanghvi, C.E. Schmidt (2004). Conducting polymers in biomedical research. <u>Materials Chemistry</u> <u>Forum Newsletter</u>, Royal Society of Chemistry in London, Issue No. 7: 10-11.
- 3. Zawko, S., C.E. Schmidt (2012). Giving hydrogels backbone: Incorporating physical architecture into soft biomaterials. SurFACTS in Biomaterials, Vol. 17, Issue 3: 13-14.

Journal Editorials (Special Issues)

- 1. Shoichet, M., C.E. Schmidt (2001), Guest Editors, Special Issue: "Neurological Biomaterials" in Biomaterials, Vol. 22.
- 2. Eberhart, R., C.E. Schmidt (2007), Guest Editors, Special Issue: "Materials for Neural Engineering" in Journal of Biomaterials Science, Polymer Edition, Vol. 18.
- 3. Peppas, N.A., C.E. Schmidt (2015), Guest Editors, Special Issue: "Young Innovators" in <u>Cellular and Molecular</u> <u>Bioengineering Journal</u>, (Editor-in-Chief: Michael R. King).
- 4. Schmidt, C.E. (2017), Section Editor, Inaugural Issue: "Neural Engineering" in <u>Current Opinion in Biomedical</u> <u>Engineering</u> (Nov. 2017 Issue).

ISSUED U.S. PATENTS AND PATENT APPLICATIONS:

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- 2. Rivers, T.J., C.E. Schmidt. "Biodegradable, Electrically Conducting Polymer for Tissue Engineering Applications". <u>US</u> <u>Patent # 6,696,575</u>, WO Patent# 2,002,076,288 (UT Austin; issue date: Feb. 24, 2004). *Licensed by Axogen, Inc.*
- Hudson, T.W., C.E. Schmidt. "Cell-free tissue replacement for tissue engineering". <u>US Patent #s 7,402,319; 8,758,794;</u> <u>9,597,429</u> (UT-Austin; issue dates: July 22, 2008; June 24, 2014; March 21, 2017, respectively). *Licensed by Axogen, Inc. for AVANCETM Nerve Graft.*
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- Zawko, S., C.E. Schmidt. "Dendritic Macroporous Hydrogels Prepared by Crystal Templating". <u>US Patent #s</u> <u>8,668,863; 8,728,499; 9,320,827; 9,896,561; 10,442,911; 10,982,068; 11,760,858</u> (UT Austin; issue dates: March 11, 2014; May 20, 2014; April 26, 2016; Feb. 20, 2018; Oct. 15, 2019; April 20, 2021; Sept. 19, 2023, respectively). *Licensed by Alafair Biosciences for VersaWrap*[®].
- Mayes, S., C.E. Schmidt. "One-Step Processing of Hydrogels for Mechanically Robust and Chemically Desired Features". <u>US Patent #s 8,946,194; 9,656,001; 10,279,042; 11,246,937;</u> WO Patent# 2,012,048,283 (UT Austin; issue dates: Feb. 3, 2015; May 23, 2017; May 7, 2019; Feb. 15, 2022, respectively). *Licensed by Alafair Biosciences for VersaWrap*®.
- Mayes, S., C.E. Schmidt. "Anti-adhesive Barrier Membrane Using Hyaluronic Acid for Biomedical Applications". <u>US</u> <u>Patent #s 9,095,558; 10,314,950; 11,058,802; 11,744,926</u> (UT Austin; issue dates: Jan. 21, 2016; June 11, 2019; July 13, 2021; Sept. 5, 2023, respectively). *Licensed by Alafair Biosciences for VersaWrap*[®].
- Mayes, S., S. Zawko, C.E. Schmidt. "Hydrogel membrane for adhesion prevention". <u>US Patent #s 9,662,424:</u> <u>10,272,184; 10,850,011; 11,565,027</u> (UT Austin; issue dates: May 30, 2017; April 30, 2019; December 1, 2020; January 31, 2023, respectively). *Licensed by Alafair Biosciences for VersaWrap*[®].
- 9. Hardy, J., C.E. Schmidt. "Drug delivery using electrochemically-triggered biodegradable electroactive materials". <u>US</u> <u>Patent # 9,783,637</u> (University of Florida; issue date: Oct. 10, 2017).
- Hardy, J.H., C.E. Schmidt. "Electroactive supramolecular polymeric assemblies, methods of making electroactive supramolecular polymeric assemblies, and methods of using electroactive supramolecular polymeric assemblies". <u>US</u> <u>Patent #s 10,653,798; 11,007,278</u> (University of Florida; issue date: May 19, 2020; May 18, 2021, respectively).
- Hardy, J., C.E. Schmidt. "Electroactive polymeric scaffolds and method for delivering nerve growth factor to nerve tissue". <u>US Patent # 10,597,636; 11,390,847</u> (University of Florida; issue date: March 24, 2020; July 19, 2022, resp.).
- 12. Schmidt, C.E., R.A. Wachs, R.C. Cornelison. "Tissue decellularization methods". <u>US Patent #10,898,609</u> (University of Florida; issue date: January 26, 2021).
- Rinaldi, C., C.E. Schmidt, C. Lacko, Z. Khaing, A. Garcia. "Magnetically templated tissue engineering scaffolds and methods of making and using the magnetically templated tissue engineering scaffolds". <u>US Patent #10,918,767</u> (University of Florida; issue date: February 16, 2021). Option to License Agreement with SANA Technologies.

- 14. Hur, B., J. Hardy, W.R. Eisenstadt, C.E. Schmidt. "Drug delivery integrated circuit (ic) and system". <u>US Patent</u> <u>#11,285,307</u> (University of Florida; issue date: March 29, 2022).
- 15. Judy, J., C.E. Schmidt, K. Otto, C. Rinaldi, C.A. Kuliasha. "Tissue-engineered electronic peripheral nerve interface". US Patent # 11,376,005 (University of Florida; issue date: July 5, 2022).
- 16. Mobini, S., C.E. Schmidt, A.B. Brennan, C.A. Kuliasha, J. Judy. "Sharklet topographies to control neutral cell interactions with implanted electrodes". US Patent App. 16/485,685, 2020.
- 17. Agrawal, N., J. Griffin, C.E Schmidt, M.W. McCrary, D. Bousalis, Y.H. Song "Decellularized tissues, hydrogels thereof, and uses thereof". US Patent App. 16/968,941, 2021.
- 18. Schmidt, C.E., B.S. Spearman, T. Ngo "Bioprinted, 3D Scaffolds for Cellular Test Beds and Methods of Use Thereof". US Patent App. 17/236,352, 2021.
- 19. Schmidt, C.E., S. Mobini "Electrical Stimulation of Cells to Induce Enhanced Secretome for Therapeutic Applications". US Patent App. 17/263,263, 2021.
- 20. Hudalla, G.A., B.G. Keselowsky, D.T. Seroski, S.A. Farhadi, C.E. Schmidt, N.K. Agrawal "Targeted Chondritinase ABC Fusion Proteins and Complexes Thereof". US Patent App. 17/288,435, 2022.

CLINICAL TRANSLATION & COMMERCIALIZED PRODUCTS:

1. Avance Nerve Graft; Axogen Inc. [Licensed IP] Licensed patents: US Patent #s 7,402,319; 8,758,794; 9,597,429

The Avance Nerve Graft is a decellularized allograft commercialized by Axogen Inc. in Alachua, Florida. <u>Over 75,000</u> <u>Avance grafts have been implanted</u> in patients and is used to repair peripheral nerves (such as those in the hands, arms, legs, face, breast, prostate, etc.) that have been damaged by accidental trauma or surgery.

2. VersaWrap; Alafair Biosciences [Start-up Company]

Licensed patents: US Patent #s 8,668,863; 8,728,499; 8,946,194; 9,095,558; 9,320,827; 9,656,001; 9,662,424; 9,896,561; 10,272,184; 10,279,042; 10,314,950; 10,442,911; 10,850,011; 10,982,068; 11,058,802; 11,246,937; 11,565,027; 11,744,926; 11,760,858

VersaWrap is a natural, bioresorbable biomaterial film made of polysaccharides alginate and hyaluronic acid and commercialized by Alafair Biosciences, a start-up based in Austin, TX in which Dr. Schmidt owns equity. <u>Alafair Biosciences was listed on the 2023 Inc.5000 list of "Fastest-Growing Private Companies in America"</u>. VersaWrap is used to address postoperative scarring and to protect tendons, nerves, skeletal muscle, and ligaments after surgery. VersaWrap was approved for tendon in December 2017, nerve in September 2020, and for ligament and skeletal muscle in March 2021. VersaWrap is a class II medical device FDA cleared via several 510k's. <u>VersaWrap has over 12,000 implants</u> and has been used by over 500 surgeons in over 400 different facilities, since its launch in December 2017.

UNIVERSITY SEMINARS AND INVITED PLENARY TALKS:

- 1. Schmidt, C.E. "Molecular Analysis of Integrin-Cytoskeleton Interactions in Migrating Tissue Cells". <u>Biomedical</u> <u>Engineering Society (BMES) Annual Meeting</u>. University Park, PA. October 1996.
- 2. Schmidt, C.E. "The Role of Integrin-Cytoskeleton Coupling in Neurite Extension". <u>Biomedical Engineering Society</u> (BMES) Annual Meeting. University Park, PA. October 1996.
- Schmidt, C.E. "Engineering Materials for Tissue Regeneration", <u>Lindsay Lecture in Chemical Engineering</u>, <u>Texas</u> <u>A&M University</u>, College Station, TX. March 1997.
- 4. Schmidt. C.E., "Tissue Engineering Strategies for Peripheral Nerve Regeneration", <u>Continuing Education Course</u> <u>"Advances in Tissue Engineering", Rice University</u>, Houston, TX. August 1997.
- 5. Fischbeck, J.A., D. Hern, R. Akella, J. Ranieri, C.E. Schmidt [speaker] "Genetically Modified Xenogeneic Endothelium for Tissue Engineered Vascular Grafts", <u>Surfaces in Biomaterials Annual Meeting</u>. Minneapolis, MN, August 1997.
- 6. Schmidt, C.E. "Engineering Therapies to Improve Nerve Regeneration". <u>Nonlinear Dynamics Center Seminar Series</u>, <u>University of Texas at Austin</u>, Austin, TX, October 1997.
- 7. Schmidt. C.E., "Tissue Engineering Strategies for Peripheral Nerve Regeneration", <u>Continuing Education Course</u> "Advances in Tissue Engineering", Rice University, Houston, TX, August 1998.
- 8. Schmidt, C.E. "Neural and Vascular Tissue Engineering". <u>Pittsburgh Tissue Engineering Initiative Seminar Series</u>, Pittsburgh, PA, August 1998.
- 9. Schmidt, C.E. "Tissue Engineering Strategies for Peripheral Nerve Regeneration". <u>Fourth Annual Neuroscience</u> <u>Symposium, University of Texas at Austin</u>, Austin, TX, April 1999.
- 10. Schmidt, C.E. "Polypyrrole/Hyaluronic Acid Composites for Peripheral Nerve Regeneration". <u>Biomedical</u> <u>Engineering Department Seminar Series, Rice University</u>, June 1999.

- 11. Schmidt. C.E., "Tissue Engineering Strategies for Peripheral Nerve Regeneration", <u>Continuing Education Course</u> <u>"Advances in Tissue Engineering", Rice University</u>, Houston, TX. August 1999.
- 12. Schmidt, C.E. "Polypyrrole/Hyaluronic Acid Composites for Peripheral Nerve Regeneration". <u>Chemical Engineering</u> <u>Department Seminar Series, University of Colorado</u>, Nov. 1999.
- Schmidt, C.E. "Polypyrrole/Hyaluronic Acid Composite Biomaterials for Tissue Engineering Applications". <u>Patten</u> <u>Biotechnology Seminar Series, Chemical Engineering Department, University of Connecticut</u>, Storrs, CT, Dec. 1999.
- 14. Schmidt, C.E. "Electroactive Polymers for Tissue Engineering". <u>American Chemical Society Annual Meeting –</u> <u>"Frontiers for Polymer Science in the 21st Century"</u>, San Francisco, CA, March 29, 2000.
- 15. Schmidt, C.E. "Biomaterials and Tissue Engineering: Novel Approaches for Biomedical Therapies". Joel G. Hardman Student-Invited Pharmacology Forum on Stem Cell Research and Tissue Engineering, Vanderbilt University, Nashville, TN, April 11, 2000.
- 16. Schmidt, C.E. "Electroactive Polymers for Tissue Engineering of Nerve". <u>The Fifth New Jersey Symposium on</u> <u>Biomaterials Science</u>, Somerset, NJ, Nov. 2000.
- 17. Schmidt, C.E. "Novel Approaches for Neural Tissue Engineering". <u>Biomedical Engineering Seminar Series, Texas</u> <u>A&M University</u>, College Station, TX, April 10, 2001.
- 18. Schmidt, C.E. "Novel Approaches for Neural Tissue Engineering". <u>Chemical Engineering Department Seminar</u> Series, University of California at Davis, Davis, CA, May 7, 2001.
- 19. Schmidt, C.E. "A Galaxy of Stars". <u>Future Directions in Chemical Engineering Education Panel, American Society</u> of Engineering Education (ASEE) Annual Meeting, Albuquerque, NM, June 26, 2001.
- 20. Schmidt, C.E. "Tissue Engineering Strategies for Nerve Regeneration". <u>"Science At The Edge" Seminar Series</u>, <u>Electrical and Computer Engineering, Michigan State University</u>, East Lansing, MI, Nov. 16, 2001.
- 21. Schmidt, C.E. "Cellular and Biomaterial Manipulations to Enhance Nerve Regeneration", Symposium on "Manipulations to Enhance Tissue Formation" organized by Dr. Frank Yin, <u>BMES/Experimental Biology Meeting</u>, New Orleans, LA, April 22, 2002.
- 22. Schmidt, C.E. "How to Grow Your Own Body Parts". <u>Opening Night Keynote Lecture, University of Texas Honors</u> <u>Colloquium</u>, Austin, TX, July 25, 2002.
- 23. Schmidt, C.E. "Biomaterials and Cell Engineering Approaches for Nerve Repair", <u>Chemical Engineering Department</u> Seminar Series, <u>University of Oklahoma</u>, Norman, OK, February 13, 2003.
- 24. Schmidt, C.E. "Biomaterials and Cell Engineering Approaches for Nerve Repair", <u>Biomedical Engineering</u> <u>Department Seminar Series, Tulane University</u>, New Orleans, LA, April 4, 2003.
- 25. Schmidt, C.E. "Biomaterials and Cell Engineering Approaches for Nerve Repair", <u>Biomedical Engineering</u> <u>Department Seminar Series, Case Western Reserve University</u>, Cleveland, OH, April 11, 2003.
- 26. Schmidt, C.E. "Biomaterials and Cell Engineering Approaches for Nerve Repair", <u>Separations Research Program</u> <u>Symposium, University of Texas at Austin</u>, Austin, TX, April 15, 2003.
- 27. Schmidt, C.E. "Interdisciplinary Graduate Student Education: IGERT Optical Molecular Bio-Engineering Program at the University of Texas", <u>Association of American Medical Colleges (AAMC) Graduate</u>, <u>Research</u>, and <u>Education (GREAT) Group Annual Meeting</u>, Austin, TX, April 24, 2004.
- 28. Schmidt, C.E. "Tissue Engineering Strategies for Nerve Regeneration", <u>Regenerate Conference: Tissue Engineering</u> <u>the Human Body Symposium</u> (hosted by the Pittsburgh Tissue Engineering Initiative (PTEI) and the Tissue Engineering Society International (TESI)), Seattle, WA, June 10, 2004.
- 29. Schmidt. C.E., "Materials for Neural Tissue Engineering", <u>Continuing Education Course "Advances in Tissue Engineering", Rice University</u>, Houston, TX. August 14, 2004.
- 30. Schmidt, C.E. "Engineering and Biotechnology Strategies for Nerve Repair", <u>NSF IGERT Program in Bio-nanotechnology Seminar Series, Arizona State University</u>, Tempe, AZ, Sept. 9, 2004.
- 31. Schmidt, C.E. "Engineering and Biotechnology Strategies for Nerve Repair", <u>28th Annual Symposium for</u> <u>Macromolecular Science and Engineering, University of Michigan</u>, Ann Arbor, MI, Oct. 28, 2004.
- 32. Schmidt, C.E. "Engineering and Biotechnology Strategies for Nerve Repair", <u>Nanobiotechnology Center Seminar</u> Series, Cornell University, Ithaca, NY, November 23, 2004.
- 33. Schmidt, C.E. "Engineering and Biotechnology Strategies for Nerve Repair", <u>Biology Department Seminar Series</u>, <u>Texas Women's University</u>, Denton, TX, January 28, 2005.
- 34. Schmidt, C.E. "Engineering and Biotechnology Strategies for Nerve Repair", <u>Frontiers in Interdisciplinary</u> <u>Biosciences Seminar Series, Bio-X Program, Stanford University</u>, Palo Alto, CA, February 10, 2005.
- 35. Schmidt, C.E. "Engineering and Biotechnology Strategies for Nerve Repair", <u>Biocomplexity Institute Seminar Series</u>, <u>Indiana University</u>, March 1, 2005.
- 36. Schmidt. C.E., "Nerves and Tissue Engineering", <u>Tissue Engineering Symposium: An ISAKOS Approved Course</u>, <u>Wake Forest University Medical School</u>, Winston-Salem, NC, March 31, 2005.
- 37. Schmidt, C.E. "Engineering and Biotechnology Strategies for Nerve Repair", <u>Chemical Engineering Department</u> <u>Seminar Series, Yale University</u>, New Haven, CT, April 14, 2005.

- 38. Schmidt, C.E. "Strategies for Functional Nerve Repair", <u>Biomedical Engineering Department Seminar Series</u>, <u>University of Michigan</u>, Ann Arbor, MI, October 19, 2005.
- 39. Schmidt, C.E. "Strategies for Functional Nerve Repair", <u>Molecular Pharmacology</u>, <u>Physiology</u>, and <u>Biotechnology</u> <u>Department Seminar Series</u>, <u>Brown University</u>, Providence, RI, March 3, 2006.
- 40. Schmidt, C.E. "Strategies for Functional Nerve Repair", <u>Biomedical Engineering, University of California San</u> <u>Diego</u>, La Jolla, CA, March 13, 2006.
- 41. Schmidt, C.E. "Strategies for Functional Nerve Repair", <u>Chemical Engineering Department Seminar Series</u>, <u>University of Delaware</u>, Newark, DE, March 23, 2006.
- 42. Schmidt, C.E. "Engineering Biomolecular Materials for Nerve Regeneration", <u>Chemistry Department Seminar Series</u>, <u>Texas Christian University</u>, Ft. Worth, TX, April 7, 2006.
- 43. Schmidt, C.E. "Engineering Biomolecular Materials for Nerve Regeneration", <u>Section of Neurobiology Seminar</u> Series, University of Texas at Austin, Austin, TX, May 8, 2006.
- 44. Schmidt, C.E. "Interdisciplinary Graduate Student Training", <u>University of Texas Houston Graduate School of Biomedical Sciences (GSBS)</u> Faculty Retreat (invitation from Dean of GSBS), Clear Lake, TX, May 13, 2006.
- 45. Schmidt, C.E. "Advanced Material Designs for Stimulating and Analyzing Nerve Regeneration", <u>Biomedical</u> <u>Engineering, Duke University</u>, Durham, NC, Sept. 14, 2006.
- 46. Schmidt, C.E. "Engineering Biomolecular Materials for Nerve Regeneration", <u>Department of Kinesiology, University</u> of Texas at Austin, Austin, TX, Oct. 27, 2006.
- 47. Schmidt, C.E. "Advanced Material Designs for Stimulating and Analyzing Nerve Regeneration", <u>Biomedical</u> <u>Engineering, University of Florida</u>, Gainesville, FL, Nov. 1, 2006.
- 48. Schmidt, C.E. "Visions of Biological Engineering", UT Metroplex Days, <u>UT-DFW Initiative for Biological</u> <u>Sciences/Engineering</u>, Dallas, TX, Nov. 29, 2006.
- 49. Schmidt, C.E. "Advanced Material Designs for Stimulating and Analyzing Nerve Regeneration", <u>Biomedical</u> <u>Engineering, University of Alabama, Birmingham</u>, Birmingham, AL, Jan. 19, 2007.
- 50. Schmidt, C.E. "Engineering Approaches to Regenerating Damaged Neural Tissue", <u>Workshop on Stem Cells in Regenerative Medicine and Tissue Engineering</u>, Sponsored by Multi-Agency Tissue Engineering Science (MATES) Interagency Working Group Subcommittee on Biotechnology, National Science and Technology Council, National Science Foundation (NSF), Arlington, VA, Feb. 1, 2007.
- 51. Schmidt, C.E. "Advanced Material Designs for Stimulating and Analyzing Nerve Regeneration", <u>Biomedical</u> <u>Engineering, University of Texas Health Science Center at San Antonio</u>, San Antonio, TX, Feb. 15, 2007.
- 52. Schmidt, C.E. "Advanced Material Designs for Stimulating and Analyzing Nerve Regeneration", <u>Chemical Engineering and Biomedical Engineering, Wayne State University</u>, Detroit, MI, March 22, 2007.
- 53. Schmidt, C.E. "Engineering Approaches to Regenerating Damaged Neural Tissue", *PMRM 2007*, <u>International Symposium on Polymeric Materials for Regenerative Medicine</u>, <u>Industrial Materials Institute of the National Research Council of Canada</u>, Boucherville, Canada, April 2, 2007.
- 54. Schmidt, C.E. "Engineering Approaches for Functional Nerve Regeneration", <u>Chemical and Biological Engineering</u>, <u>University of Maryland</u>, <u>Baltimore County</u>, Baltimore, MD, October 8, 2007.
- 55. Schmidt, C.E. "Conductive Polymers For Nerve Guidance", <u>American Institute of Chemical Engineers (AICHE) Fall</u> <u>Annual Meeting</u>, Salt Lake City, UT, Nov. 9, 2007.
- 56. Schmidt, C.E. "Biologically Active and 3D Electrically Conducting Polymer Scaffolds for Neural Engineering", <u>Materials Research Society (MRS) Fall Annual Meeting</u>, Symposium QQ, Boston, MA, Nov. 27, 2007.
- 57. Schmidt, C.E. "Engineering Approaches for Functional Nerve Regeneration", <u>Biomedical Engineering, Rensselaer</u> <u>Polytechnic Institute (RPI)</u>, Troy, NY, March 5, 2008.
- 58. Schmidt, C.E. "Electrically Responsive Biomaterials for Neural Engineering", <u>Materials Research Society (MRS)</u> <u>Spring Annual Meeting</u>, Symposium EE, San Francisco, CA, March 25, 2008.
- 59. Schmidt, C.E. "Optimized Acellular Nerve Grafts with Preserved Collagen and Laminin Architecture for Clinically Relevant Nerve Injuries", <u>American Chemical Society (ACS) Spring Annual Meeting</u>, Division of Polymer Chemistry, New Orleans, LA, April 9, 2008.
- 60. Schmidt, C.E. "Engineering Advanced Materials to Promote Axonal Regeneration", <u>Mission Connect Conference</u>, Houston, TX, May 9, 2008.
- 61. Schmidt, C.E. "Hyaluronan-Based Matrices for Neural Tissue Regeneration", <u>MacroMex: Mexican-American</u> <u>Conference on Advances in Polymer Science</u>, Los Cabos, Baja California Mexico, December 2008.
- 62. Schmidt, C.E. "Hyaluronan-Based Matrices for Neural Tissue Regeneration", <u>Chemical Engineering Department</u> <u>Seminar Series, University of Michigan</u>, Ann Arbor, MI, April 9, 2009.
- 63. Schmidt, C.E. "Engineering Constructs for Neural Regeneration", <u>Biomaterials and Tissue Engineering Gordon</u> <u>Research Conference</u>, Holderness, NH, July 22, 2009.

- 64. Schmidt, C.E. "Engineering Therapies for Functional Nerve Regeneration", <u>Department of Biomedical Engineering</u> <u>Distinguished Leaders in Tissue Engineering and Center for Translational Neuroscience Joint Seminar, Case Western</u> Reserve University, Cleveland, OH, September 17, 2009.
- 65. Schmidt, C.E. "Engineering Advanced Materials for Neural Regeneration and Neural Interfacing", <u>Institute for</u> <u>Regenerative Medicine Seminar, Wake Forest University</u>, Winston-Salem, NC, March 2, 2010.
- 66. Schmidt, C.E., "Engineering Therapies for Functional Nerve Regeneration", <u>Page Morton Hunter Bioengineering</u> <u>Distinguished Seminar, Clemson University</u>, Clemson, SC, April 1, 2010.
- 67. Schmidt, C.E., "Engineering Approaches for Neural Tissue Regeneration", <u>Joint Symposium on Neuroscience and</u> <u>Molecular Biology by the Federation of North Texas Area Universities</u>, University of North Texas, Denton, TX, April 9, 2010.
- 68. Schmidt, C.E., "Engineering Therapies for Functional Nerve Regeneration", <u>Chemical Engineering Department</u> <u>Seminar, Northeastern University</u>, Boston, MA, April 13, 2010.
- 69. Schmidt, C.E., "Engineering Therapies for Functional Nerve Regeneration", <u>Biomedical Engineering Department</u> Seminar, University of Florida, Gainesville, FL, April 19, 2010.
- 70. Schmidt, C.E., "Engineering Therapies for Functional Nerve Regeneration", <u>Chemical and Biomolecular Engineering</u> Department Seminar, Georgia Institute of Technology, Atlanta, GA, Sept. 1, 2010.
- 71. Schmidt, C.E., "Engineering Therapies for Functional Nerve Regeneration", <u>Chemical Engineering Department</u> Seminar, Virginia Institute of Technology, Blacksburg, VA, Sept. 15, 2010.
- 72. Schmidt, C.E., "Engineering Therapies for Functional Nerve Regeneration", <u>Chemistry and Biochemistry Department</u> Seminar, Southern Illinois University, Carbondale, IL, Dec. 15, 2010.
- 73. Schmidt, C.E., "Engineering Therapies for Functional Nerve Regeneration", <u>Chemical Engineering Department</u> Seminar, City College of New York, New York, NY, Feb. 28, 2011.
- 74. Schmidt, C.E., "Engineering Approaches for Functional Nerve Regeneration", <u>Keynote Speaker, 15th Annual Hilton</u> <u>Head Workshop</u>: "Regenerative Medicine: Innovations for Clinical Applications", Hilton Head, SC, March 17, 2011.
- 75. Schmidt, C.E., S. Mayes, D. Peterson, "Challenges of Adhesions in Neurosurgery", <u>Frontiers of Neuroscience</u> Seminar Series, The University of Texas at Austin, Austin, TX, March 29, 2011.
- 76. Schmidt, C.E., "Engineering Therapies for Nerve Regeneration", <u>First Annual Austin Translational Neuroscience</u> <u>Symposium, NeuroTexas Institute Research Foundation</u>, Austin, TX, April 2, 2011.
- 77. Schmidt, C.E., "Engineering Approaches for Functional Nerve Regeneration", <u>Biomedical Engineering Program</u>, <u>Colorado State University</u>, Fort Collins, CO, April 4, 2011.
- 78. Schmidt, C.E., "Engineering Approaches for Functional Nerve Regeneration", <u>Biomaterials Day, Texas A&M</u> <u>University</u>, College Station, TX, May 16, 2011.
- 79. Schmidt, C.E. "Engineering Materials for Neural Regeneration", Keynote Speaker for "Biocolloids and Biological Interfaces" Session, <u>85th ACS Colloid and Surface Science Symposium</u>, McGill University Montreal, Quebec, Canada, June 19 22, 2011.
- Schmidt, C.E., "Tutorial on Engineering Therapies for Neural Regeneration", <u>Global Enterprise for MicroMechanics</u> and <u>Molecular Medicine (GEM⁴) Summer School on Biomechanics and Bioengineering</u>, Georgia Institute of Technology, Atlanta, GA, June 25, 2011.
- 81. Schmidt, C.E., "Engineering Approaches for Functional Nerve Regeneration", <u>Chemical and Biological Engineering</u> <u>Department, Tufts University</u>, Medford, MA, July 7, 2011.
- 82. Schmidt, C.E., "Engineering Approaches for Functional Nerve Regeneration", <u>Department of Bioengineering</u>, <u>University of Maryland</u>, College Park, MD, Sept. 16, 2011.
- 83. Schmidt, C.E., "Engineering Approaches for Functional Nerve Regeneration", <u>Department of Biomedical</u> Engineering, Illinois Institute of Technology, Chicago, IL, Sept. 21, 2011.
- Schmidt, C.E. "Small, Simple Steps to Survival and Success". Invited Keynote Lecture, <u>Women's Initiatives</u> <u>Committee (WIC) Luncheon, American Institute of Chemical Engineers (AIChE) Annual Meeting</u>, Minneapolis, MN, October 17, 2011.
- 85. Schmidt, C.E., "Engineering Approaches for Functional Nerve Regeneration", <u>Department of Biomedical</u> <u>Engineering, Purdue University</u>, West Lafayette, IN, November 2, 2011.
- 86. Schmidt, C.E., "Engineering Novel Materials for Axonal Regeneration", <u>Gail F. Beach Lecture Series, Miami Project</u> to Cure Paralysis, Miami, FL, December 7, 2011.
- 87. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Department of Chemical and</u> <u>Biomolecular Engineering, The University of Illinois at Urbana-Champaign</u>, Urbana, IL, February 14, 2012.
- 88. Schmidt, C.E., "Engineering Advanced Materials for Neural Regeneration", <u>Department of Materials Science and Engineering</u>, <u>University of Tennessee</u>, Knoxville, TN, March 6, 2012.
- 89. Schmidt, C.E., "Electrically Conducting Polymers for Neural Tissue Engineering", <u>Keystone Symposium</u>, <u>Regenerative Tissue Engineering and Transplantation</u>, Breckenridge, CO, April 1 6, 2012.

- 90. Schmidt, C.E. (invited panelist), "Crosscutting Topics in Regenerative Medicine: Stone Soup for Organ Regeneration", <u>Keystone Symposium, Regenerative Tissue Engineering and Transplantation</u>, Breckenridge, CO, April 1 6, 2012.
- 91. Schmidt, C.E., " Electroactive Materials for Neural Regeneration", <u>Department of Biomedical Engineering</u>, <u>The</u> <u>University of Florida</u>, Gainesville, FL, May 14, 2012.
- 92. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Department of Biomedical Engineering</u>, <u>Boston University</u>, Boston, MA, June 4, 2012.
- 93. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Department of Biomedical Engineering</u>, <u>Yale University</u>, New Haven, CT, Oct. 11, 2012.
- 94. Schmidt, C.E., "Electrically Conducting Polymers for Neural Engineering", <u>Biomedical Engineering Society (BMES)</u> <u>Annual Meeting</u>, Atlanta, GA, Oct. 26, 2012.
- 95. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Department of Biomedical Engineering</u>, <u>Texas A&M University</u>, College Station, TX, Nov. 12, 2012.
- 96. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Department of Chemical Engineering</u>, <u>The University of Utah</u>, Salt Lake City, UT, April 1, 2013.
- 97. Schmidt, C.E., "Neural Tissue Engineering", <u>Tissue Engineering Mini-Symposium, Institute for Cellular Engineering</u> and Regenerative Medicine (ICERM), The University of Florida, Gainesville, FL, April 11, 2013.
- 98. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Department of Chemical Engineering</u>, <u>The University of Utah</u>, Salt Lake City, UT, April 1, 2013.
- 99. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Department of Chemical Engineering</u>, <u>The University of Florida</u>, Gainesville, FL, September 30, 2013.
- 100. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Department of Neuroscience, College of</u> <u>Medicine, The University of Florida</u>, Gainesville, FL, October 17, 2013.
- 101. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Department of Chemical and Biomedical</u> <u>Engineering, The University of South Florida</u>, Tampa, FL, January 17, 2014.
- 102. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Department of Biomedical Engineering</u>, <u>The University of California</u>, Irvine, Irvine, CA, February 7, 2014.
- 103. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Department of Biomedical Engineering</u>, <u>Carnegie Mellon University</u>, Pittsburgh, PA, March 3, 2014.
- 104. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Whitney Marine Lab</u>, St. Augustine, FL, April 11, 2014.
- 105. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Department of Bioengineering</u>, <u>University of California</u>, Riverside, Riverside, CA, May 22, 2014.
- 106. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Department of Biomedical Engineering</u>, <u>University of North Carolina/NC State</u>, Chapel Hill, NC, September 5, 2014.
- 107. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>School of Biological and Health Systems</u> Engineering, Arizona State University, Tempe, AZ, September 19, 2014.
- 108. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Department of Chemical & Biochemical Engineering</u>, The University of Iowa, Iowa City, IA, October 8, 2014.
- 109. Schmidt, C.E., "Regenerating Nerve Tissue and Managing Scar Tissue in Wound Healing", Invited Speaker at Special Plenary Session: "Overcoming Challenges and Obstacles for Clinical Translation: From Bench to Bedside", <u>Biomedical Engineering Society Annual Meeting</u>, San Antonio, TX, October 23, 2014.
- 110. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Department of Biomedical Engineering</u>, <u>University of California</u>, Davis, CA, January 8, 2015.
- 111. Schmidt, C.E., "Industrial Innovations in Biomaterials", Invited Speaker and Panelist, Chairs: A. Salamone and B. Ratner, <u>Society for Biomaterials (SFB) Annual Meeting</u>, Charlotte, NC, April 15, 2015.
- 112. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Department of Biomedical Engineering</u>, <u>Case Western Reserve University</u>, Cleveland, OH, April 27, 2015.
- 113. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Meinig School of Biomedical</u> <u>Engineering, Cornell University</u>, Ithaca, NY, September 10, 2015.
- 114. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Department of Biomedical Engineering</u>, <u>University of Minnesota</u>, St. Paul, MN, September 28, 2015.
- 115. Schmidt, C.E., "Small, Simple Steps to Survival and Success", <u>Graduate Women in Biomedical Engineering Group</u>, <u>University of Minnesota</u>, St. Paul, MN, September 28, 2015.
- 116. Schmidt, C.E., "Engineering Advanced Materials for Nerve Regeneration", Plenary Speaker, <u>Third US-KOREA Joint</u> Workshop in BME, Biomedical Engineering Society (BMES) Annual Meeting, Tampa, FL, October 8-10, 2015.
- 117. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Department of Chemical Engineering</u> <u>Centennial Lecture Series, University of Texas at Austin</u>, Austin, TX, October 13, 2015.

- 118. Schmidt, C.E., "Bridging the Gap: Engineering New Pathways for Regenerating Nerves", UF ChE Alumni Professional Speakers Series, <u>Department of Chemical Engineering</u>, The University of Florida, October 28, 2015.
- 119. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Department of Biomedical Engineering</u>, <u>University of Wisconsin-Madison</u>, Madison, WI, November 9, 2015.
- 120. Schmidt, C.E., "Engineering Materials to Heal the Body: A Focus on Nerve Tissue", <u>School of Biological & Physical</u> <u>Sciences "STEMinar Series, Daytona State College</u>, Daytona, FL, January 25, 2016.
- 121. Schmidt, C.E., "Engineering Materials to Heal the Body: A Focus on Nerve", Keynote for <u>Junior Science, Engineering</u> <u>and Humanities Symposium</u>, University of Florida, Gainesville, FL, January 31, 2016.
- 122. Schmidt, C.E., "Making a Difference: The Innovation Life Cycle", Invited Speaker and Panelist, <u>A Celebration of Innovation, The University of Florida</u>, March 8, 2016.
- 123. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Weinbaum Lecture</u>, <u>Department of</u> <u>Biomedical Engineering</u>, <u>Rensselaer Polytechnic Institute (RPI)</u>, Troy, NY, April 14, 2016.
- 124. Schmidt, C.E., "Small, Simple Steps to Survival and Success", <u>Women in Biomedical Engineering Group, RPI</u>, Troy, NY, April 14, 2016.
- 125. Schmidt, C.E. "Balancing Academic Pressures & Research Creativity: It's All About T&P (and, that's not Tenure and Promotion!)", Invited Speaker and Panelist for "Round Table Panel Discussion: Life-long learning", <u>World Biomaterials Congress</u>, Montreal, Canada, May 20, 2016.
- 126. Schmidt, C.E. "Engineering electroactive scaffolds for neural regeneration applications", Invited Keynote for New Frontiers Symposium "Bioelectrical field: from petri dish to tissue regeneration", <u>World Biomaterials Congress</u>, Montreal, Canada, May 22, 2016.
- 127. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Department of Materials Science and</u> <u>Engineering, University of Michigan</u>, Ann Arbor, MI, September 8, 2016.
- 128. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Department of Bioengineering, Rice</u> <u>University</u>, Houston, TX, September 19, 2016.
- 129. Schmidt, C.E., "ECM-Based Scaffolds for Neural Regeneration", <u>TERMIS Guest Symposium at the 2016 biennial</u> <u>American Society for Matrix Biology (ASMB) Meeting</u>, St. Petersburg, FL, November 13, 2016.
- 130. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Department of Biomedical Engineering</u>, <u>University of Washington</u>, Seattle, WA, January 19, 2017.
- 131. Schmidt, C.E., "Engineering Materials for Functional Nerve Regeneration", <u>Department of Chemical and Biological</u> <u>Engineering, Colorado School of Mines</u>, Golden, CO, April 14, 2017.
- 132. Schmidt, C.E., "Biomaterials for Nerve Repair Therapies", <u>Department of Biomedical Engineering Distinguished</u> <u>Lecture Series, Worcester Polytechnic Institute</u>, Worcester, MA, October 26, 2017.
- 133. Schmidt, C.E., "Biomaterials for Nerve Repair Therapies", <u>Nano@Wayne Seminar, Wayne State University</u>, Worcester, MA, December 5, 2017.
- 134. Schmidt, C.E., "Biomaterials for Nerve Repair Therapies", <u>Department of Biomedical Engineering</u>, <u>University of Georgia</u>, Athens, GA, January 25, 2018.
- 135. Schmidt, C.E., "Biomaterials for Nerve Repair Therapies", <u>Department of Biomedical Engineering</u>, <u>University of Utah</u>, Salt Lake City, UT, February 8, 2018
- 136. Schmidt, C.E., "Engineered Therapies for Nerve Repair", Invited Keynote Lecture, <u>Symposium on Regenerative</u> <u>Engineering</u>, Northwestern University, Evanston, IL, May 31, 2018.
- 137. Schmidt, C.E., "Biomedical Clinical Translation", Invited Talk, <u>BioMed: Research to Reality -- Discovery</u>, <u>Innovation, Commercialization</u>, UF-University of South Florida Symposium, Lakewood Ranch, FL, August 8, 2018.
- 138. Schmidt, C.E., "Challenges in Translating BME Technologies", Plenary Panelist, <u>Carnegie Mellon Forum on</u> <u>Frontiers in Biomedical Engineering</u>, Carnegie Mellon University, Pittsburgh, PA, September 2, 2018.
- 139. Schmidt, C.E., "Engineering Natural-Based Biomaterials for Functional Nerve Regeneration", <u>Department of</u> <u>Biomedical Engineering, University of Arkansas</u>, Fayetteville, AR, September 28, 2018.
- 140. Schmidt, C.E., "Engineering Natural-Based Biomaterials for Functional Nerve Regeneration", <u>Department of</u> <u>Chemical Engineering</u>, The Ohio State University, Columbus, OH, November 29, 2018.
- 141. Schmidt, C.E., "Engineering Materials for Clinical Nerve Repair, and Other Applications Along the Way", <u>Clemson</u> <u>Award for Applied Research Presentation</u>, Society for Biomaterials Annual Meeting, Seattle, WA, April 4, 2019.
- 142. Schmidt, C.E., "Conversations with Women Leaders in the Life Sciences", Plenary Panelist, <u>BioFlorida Northeast</u> <u>Chapter</u>, University of Florida, Gainesville, FL, June 27, 2019.
- 143. Schmidt, C.E., "Engineering Natural-Based Biomaterials for Functional Nerve Regeneration", <u>Department of Biomedical Engineering, Washington University in St. Louis</u>, St. Louis, MO, August 28, 2019.
- 144. Schmidt, C.E., "Engineering Advanced Materials for Neural Regeneration", <u>Leaders in Biomaterials (invited session)</u>, <u>American Institute of Chemical Engineers Annual Meeting</u>, Orlando, FL, November 11, 2019.

- 145. Schmidt, C.E., "Engineering Materials for Clinical Application", <u>Meet the Innovators: Transforming the Future through Chemical Engineering (invited speaker and panelist)</u>, <u>American Institute of Chemical Engineers Annual Meeting</u>, Orlando, FL, November 12, 2019.
- 146. Schmidt, C.E., "Engineering Advanced Materials for Neural Regeneration", <u>Soft Matter Applied Research and</u> <u>Technology Symposium</u>, Gainesville, FL, January 31, 2020.
- 147. Schmidt, C.E., "Engineering Advanced Materials for Neural Regeneration", <u>Department of Biomedical Engineering</u>, <u>University of Pittsburgh</u>, Virtual Platform, September 24, 2020.
- 148. Schmidt, C.E., "Engineering Advanced Materials for Neural Regeneration and Wound Repair", <u>Tissue Talks Seminar</u> Series, Columbia University, Virtual Platform, February 3, 2021.
- 149. Schmidt, C.E., "Picture a Scientist: Building Diversity in Academia", Invited Speaker and Panelist, is <u>Anti-Racism</u> <u>and Equity Spring Plenary Symposium, Pitt Senate Research Committee, University of Pittsburgh,</u> Virtual Platform, April 8, 2021.
- 150. Schmidt, C.E., "Engineering Advanced Materials for Neural Regeneration", <u>Department of Biomedical Engineering</u>, <u>University of Delaware</u>, Virtual Platform, April 16, 2021.
- 151. Schmidt, C.E., "Engineering Advanced Materials for Neural Regeneration and Wound Repair", Business and Entrepreneurship in Medicine (BEIM) interest group, <u>College of Medicine, University of Florida</u>, Virtual Platform, May 17, 2021.
- 152. Schmidt, C.E., "Engineering Advanced Materials for Neural Regeneration", <u>Department of Biomedical Engineering</u>, <u>Columbia University</u>, Virtual Platform, May 21, 2021.
- 153. Schmidt, C.E., "Engineering Advanced Materials for Neural Regeneration", <u>Axogen 20th Anniversary Celebration</u> <u>Symposium</u>, Tampa, FL, May 16, 2022.
- 154. Schmidt, C.E., "Engineering Advanced Materials for Neural Regeneration", <u>Alan J. Hunt Memorial Lecture</u>, <u>Department of Biomedical Engineering, University of Michigan</u>, Ann Arbor, MI, Nov. 18, 2022.
- 155. Schmidt, C.E., "Amplifying Voices", Plenary Speaker, <u>Pierre Galletti Award Presentation, AIMBE Annual Meeting</u>, Arlington, VA, March 26, 2023.
- 156. Schmidt, C.E., "Amplifying Voices", Plenary Speaker, <u>Diversity Award Presentation</u>, <u>BMES Annual Meeting</u>, Seattle, WA, October 12, 2023.
- 157. Schmidt, C.E. (panelist), "Artificial Intelligence (AI) in Biomedical Engineering (BME) Education", <u>BMES Annual</u> <u>Meeting</u>, Seattle, WA, October 12, 2023.
- 158. Schmidt, C.E., "Engineering Materials for Clinical Nerve Repair, and Other Applications Along the Way", Plenary Speaker, <u>Academy of Science Engineering and Medicine of Florida (ASEMFL) Annual Meeting</u>, Tampa, FL, November 4, 2023.
- 159. Schmidt, C.E., "Engineering Advanced Materials for Neural Regeneration", <u>BME Distinguished Seminar Speaker</u> Series, University of California Irvine, Irvine, CA, October 27, 2023.
- 160. Schmidt, C.E., "Engineering Advanced Materials for Neural Regeneration", <u>Department of Biomedical Engineering</u> <u>Distinguished Seminar Series, University of Texas, Dallas</u>, Dallas, TX, December 1, 2023.

TECHNICAL CONFERENCE PRESENTATIONS: (*denotes UG student)

- 1. Schmidt, C.E. [speaker], A.F. Horwitz, D.A. Lauffenburger, M.P. Sheetz. Integrin-Cytoskeleton Interactions in Migrating Fibroblasts are Asymmetric, Dynamic and Regulated (Talk & Poster). <u>Gordon Research Conferences: "Cell Contact and Adhesion"</u>. Andover, NH. June 1993.
- 2. Schmidt, C.E. [speaker], A.F. Horwitz, D.A. Lauffenburger. Integrin-Cytoskeleton Interactions in Migrating Fibroblasts are Asymmetric and Dynamic. <u>6th Annual NIH Cell and Molecular Biology / Molecular Biophysics</u> <u>Research Symposium</u>. Beckman Institute, Urbana, IL. May 1993.
- 3. Schmidt, C.E. [speaker], A.F. Horwitz, D.A. Lauffenburger. Integrin-Cytoskeleton Interactions in Migrating Fibroblasts. <u>Biomedical Engineering Society (BMES) Annual Meeting</u>. Memphis, TN. October 1993.
- 4. Schmidt, C.E. [speaker], A.F. Horwitz, D.A. Lauffenburger. Adhesion Receptor Dynamics in Migrating Fibroblasts. <u>American Institute of Chemical Engineers (AIChE) Annual Meeting</u>. San Francisco, CA. November 1994.
- 5. Schmidt, C.E. [presenter], V.R. Shastri, T.-H. Kim, J.P. Vacanti, R. Langer. Biomaterials for Neural Regeneration. Keystone Conference on Tissue Engineering. Taos, NM. January 1996.
- 6. Schmidt, C.E. [speaker], V.R. Shastri, J.P. Vacanti, R. Langer. Biomaterials for Stimulating Nerve Regeneration. <u>5th</u> <u>World Congress of Chemical Engineering</u>. San Diego, CA. June 1996.
- 7. Schmidt, C.E. [speaker], V.R. Shastri, J.P. Vacanti, R. Langer. Electrically Conducting Polymers for Neural Tissue Engineering. <u>Workshop on Biomaterials and Tissue Engineering</u>, Hilton Head, SC. February 1997.
- 8. Schmidt, C.E. [speaker], E.J. Furnish, J.A. Fischbeck. Cell and Tissue Engineering. <u>10th Annual Cellular and</u> <u>Molecular Biology Retreat</u>, University of Texas at Austin, Bandera, TX. October 1997.

- 9. Fischbeck, J.A. [presenter], D. Hern, J. Ranieri, C.E. Schmidt. Genetically Modified Xenogeneic Endothelium for Tissue Engineered Vascular Grafts (poster), <u>American Institute of Chemical Engineers (AIChE) Annual Meeting</u>. Los Angeles, CA. November 1997.
- 10. Schmidt, C.E. [speaker], V.R. Shastri, E.J. Furnish, R. Langer. Electrical Stimulation of Neurite Outgrowth and Nerve Regeneration. <u>17th Annual Southern Biomedical Engineering Conference</u>, San Antonio, TX. February 1998.
- 11. Schmidt, C.E. [speaker], Electrical Stimulation of Neurite Outgrowth and Nerve Regeneration. <u>16th Annual Meeting</u> of the Houston Society for Engineering in Medicine and Biology, Houston, TX. April 1998.
- 12. Furnish, E.J., J. Collier, C.E. Schmidt [speaker]. Electrical Stimulation of Neurite Outgrowth. <u>24th Annual Meeting of the Society for Biomaterials</u>, San Diego, CA. April 1998.
- 13. Schmidt, C.E. [speaker], Neural Tissue Engineering ⇔ Actin-Based Growth Cone Motility. <u>Conference on</u> <u>Breakthroughs in Ultraspectroscopy and Ultramicroscopy</u>, University of Texas at Austin, April 1999.
- 14. Collier, J.H., J.P. Camp, T.W. Hudson, C.E. Schmidt [presenter]. Polypyrrole/Hyaluronic Acid Composite Materials for Nerve Repair (poster). <u>Gordon Conference: Tissue Engineering, Biomaterials, Biocompatibility</u>. July 18-23, 1999.
- 15. Furnish, E.J. [presenter], C.C. Cunningham, J. Käs, C.E. Schmidt. Overexpression of Gelsolin in PC12 Cells to Enhance Neurite Outgrowth (poster). <u>AIChE Annual Meeting</u>, Dallas, TX, Nov.1999.
- Rivers, T.J. [presenter], C.E. Schmidt. Synthesis of a Novel Biodegradable, Electrically Conducting Polymer for Nerve Regeneration Applications (poster). <u>18th Annual Meeting of the Houston Society for Engineering in Medicine and</u> <u>Biology</u>. February 10-11, 2000.
- Furnish, E.J. [speaker], C.C. Cunningham, J. Käs, C.E. Schmidt. Overexpression of Gelsolin in PC12 Cells to Enhance Neurite Outgrowth. <u>18th Annual Meeting of the Houston Society for Engineering in Medicine and Biology</u>. February 10-11, 2000.
- 18. Furnish, E.J. [speaker], C.C. Cunningham, J. Käs, C.E. Schmidt. Enhanced Neurite Outgrowth by Overexpression of Gelsolin in Nerve Cells. <u>Center for Nonlinear Dynamics Seminar</u>, Austin, TX. Sept. 2000.
- 19. Rivers, T.J. [speaker], C.E. Schmidt. Synthesis of a Novel Biodegradable, Electrically Conducting Polymer for Biomedical Applications. <u>Biomedical Engineering Society (BMES) Annual Fall Meeting</u>. Seattle, WA. Oct. 2000.
- 20. Furnish, E.J. [speaker], C.C. Cunningham, J. Käs, C.E. Schmidt. Enhancing Neurite Outgrowth by Genetically Manipulating the Actin Cytoskeletal Migratory Machinery. <u>BMES Annual Fall Meeting</u>. Seattle, WA. Oct. 2000.
- 21. Korgel, B.A. [speaker], J. Winter, C.E. Schmidt. Directed Interfacing of Neurons and Semiconductors Using Quantum Dots Functionalized with Biological Recognition Molecules. <u>AIChE Annual Meeting</u>. Los Angeles, CA. Nov. 2000.
- 22. Schmidt, C.E. [speaker], J. Baier, E. Askenasy, J. Collier. Electrically Conducting Biomaterials Functionalized with Angiogenic Factors. <u>AIChE Annual Meeting</u>. Los Angeles, CA. Nov. 2000.
- 23. Furnish, E.J. [speaker], C.C. Cunningham, J.A. Käs, C.E. Schmidt. Remodeling the Actin Cytoskeleton to Enhance Neurite Outgrowth. <u>AIChE Annual Meeting</u>. Los Angeles, CA. Nov. 2000.
- 24. Rivers, T.J. [speaker], C.E. Schmidt. Synthesis of a Novel Biodegradable, Electrically Conducting Polymer for Biomedical Applications. <u>AIChE Annual Meeting</u>. Los Angeles, CA. Nov. 2000.
- 25. Rivers, T.J. [speaker], C.E. Schmidt. Synthesis of a Novel Biodegradable, Electrically Conducting Polymer for Biomedical Applications. <u>Materials Research Society (MRS) Annual Meeting</u>. Boston, MA. Dec. 2000.
- 26. Baier, J.M. [presenter], C.E. Schmidt. Hyaluronan Hydrogels as Angiogenic Tissue Engineering Scaffolds (poster). <u>19th Annual Meeting of the Houston Society for Engineering in Medicine and Biology</u>. Houston, TX. February 2001.
- Winter, J. [speaker], T. Liu, C.E. Schmidt, B.A. Korgel. Biomolecule-Directed Interfacing between Semiconductor Quantum Dots and Nerve Cells. <u>19th Annual Meeting of the Houston Society for Engineering in Medicine and Biology</u>. Houston, TX. February 2001.
- 28. Furnish, E.J., C.E. Schmidt [presenter]. Mechanisms of Neurite Outgrowth: Role of Gelsolin (poster). <u>Whitaker</u> <u>Investigator's Conference</u>, La Jolla, CA August 9, 2001.
- 29. Hudson, T.W. [speaker], S. Liu, C.E. Schmidt. Engineering an Acellular Nerve Graft Via Detergent Processing. <u>BMES</u> <u>Annual Fall Meeting</u>. Durham, NC. Oct. 2001.
- 30. Baier, J.M. [speaker], G-Y Hwang, C.E. Schmidt. Angiogenic Hyaluronan Hydrogel Scaffolds for Tissue Regeneration. <u>BMES Annual Fall Meeting</u>. Durham, NC. Oct. 2001.
- 31. Hudson, T.W. [speaker], S. Liu, C.E. Schmidt. Processing of Nerve Tissue to Create Natural Biomaterial Grafts. <u>AIChE</u> <u>Annual Meeting</u>. Reno, NV. Nov. 2001.
- 32. Baier, J.M. [speaker], G-Y Hwang, C.E. Schmidt. Hyaluronan Hydrogel Scaffolds Designed for Tissue Regeneration. <u>AIChE Annual Meeting</u>. Reno, NV. Nov. 2001.
- 33. Winter, J.O. [speaker], C.E. Flynn, T.S. Liu, A.M. Belcher, B.A. Korgel, C.E. Schmidt. Semiconductor-Neural Interfaces. <u>Second Joint EMBS/BMES Meeting</u>, Houston, TX, Oct. 2002.
- 34. Sanghvi, A.B. [speaker], K.P.H Miller, A. Belcher, C.E. Schmidt. Fabrication of Novel Interactive Biomaterials Via Peptide Integration for Tissue Engineering Applications. <u>Second Joint EMBS/BMES Meeting</u>, Houston, TX, Oct. 2002.

- 35. Baier (Leach), J.M. [speaker], C.W. Patrick, Jr., C.E. Schmidt. Directing Tissue Regeneration via Hyaluronic Acid Hydrogel Scaffolds. <u>Second Joint EMBS/BMES Meeting</u>, Houston, TX, Oct. 2002.
- 36. Sanghvi, A.B. [presenter], K.P.H Miller, A. Belcher, C.E. Schmidt. Selection of Novel Polymer-Specific Peptides Using Phage Display (poster) <u>6th New Jersey Symposium on Biomaterials Science</u>. Somerset, NJ. Oct. 2002.
- Winter, J.O. [speaker], C. Flynn, T.S. Liu, A. Belcher, B. Korgel, C.E. Schmidt. Cell-Nanoparticle Interfaces Mediated by Biomolecular Recognition Molecules. <u>AIChE Annual Meeting</u>. Indianapolis, IN. Nov. 2002.
- 38. Sanghvi, A.B. [speaker], K.P.H Miller, A. Belcher, C.E. Schmidt. Selection of Novel Polymer-Specific Peptides Using Phage Display. <u>AIChE Annual Meeting</u>. Indianapolis, IN. Nov. 2002.
- 39. Baier (Leach), J.M. [speaker], C.W. Patrick, C.E. Schmidt. Angiogenic Hyaluronic Acid Hydrogels for Neural Tissue Engineering. <u>AIChE Annual Meeting</u>. Indianapolis, IN. Nov. 2002.
- 40. Sanghvi, A. B. [speaker], K. P. H. Miller, A. M. Belcher, C. E. Schmidt. "Fabrication of Novel Biomimetic Polymers Using Combinatorial Peptide Screening Technologies", <u>BMES Annual Fall Meeting</u>, Nashville, TN, October 1-4, 2003. *[Winner graduate student travel award]*
- 41. Winter, J. O. [speaker], BA Korgel, CE Schmidt. "Surface-Functionalized Quantum Dots for Nerve Cell Binding and Stimulation", <u>BMES Annual Fall Meeting</u>, Nashville, TN, Oct. 1-4, 2003. [Winner graduate student research award]
- 42. Winter, J. O. [speaker], B. A. Korgel, C. E. Schmidt. "Surface-Functionalized Quantum Dots for Nerve Cell Binding and Stimulation", <u>AICHE Annual Fall Meeting</u>, San Francisco, CA, Nov.17 22, 2003.
- 43. Leach, J. B. [speaker], C. E. Schmidt, "Photocrosslinkable Hyaluronic Acid Hydrogels for Tissue Engineering", Symposium F: Biomaterials for Tissue Engineering, <u>MRS Annual Fall Meeting</u>, Boston MA, Dec. 1-5, 2003.
- 44. Sanghvi, A. B. [speaker], K. P. H. Miller, A. M. Belcher, C. E. Schmidt, "Fabrication of Novel Biomimetic Polymers Using Combinatorial Peptide Screening Technologies", Symposium H: Biological and Bio-Inspired Materials Assembly, <u>MRS Annual Fall Meeting</u>, Boston MA, Dec. 1-5, 2003.
- 45. Winter, J. O. [presenter], B. A. Korgel, C. E. Schmidt. "Optimization of Quantum Dot Nerve Cell Interfaces" (poster), Symposium N: Quantum Dots, Nanoparticles, and Nanowires, <u>MRS Annual Fall Meeting</u>, Boston MA, Dec. 1-5, 2003. [Winner GOLD graduate student research award]
- 46. Sanghvi, A. B. [speaker], K. P. H. Miller, A. M. Belcher, C. E. Schmidt, "Fabricating novel biomimetic polymers using combinatorial peptide screening technologies", <u>American Chemical Society National Meeting</u>, Anaheim, CA, March 28-April 1, 2004.
- 47. Gomez, N. [speaker], C.E. Schmidt, S. Chen "Studies on Competitive Responses in Neurons to Extracellular Cues Using Microfabricated Systems", <u>BMES Annual Fall Meeting</u>, Philadelphia, PA, October 13-16, 2004.
- 48. Sanghvi, A.B. [speaker], K. P-H Miller, A.M. Belcher, C.E. Schmidt. "Surface Functionalization of Polypyrrole Using Combinatorial Peptide Screening Technologies", <u>Society for Biomaterials</u>, Philadelphia, PA October, 2004.
- 49. Lundy, S. [speaker], S. Zawko, C. Deister, C.E. Schmidt. "Optimized Acellular Nerve Graft is Immunologically Tolerated and Supports Regeneration", <u>AICHE Annual Fall Meeting</u>, Austin, TX, Nov 7-12, 2004.
- 50. Bivens, K.A. [presenter], C.E Schmidt. "Hyaluronan Oligosaccharide Based Biomaterials for Peripheral Nerve Regeneration" (poster), <u>AICHE Annual Fall Meeting</u>, Austin, TX, Nov 7-12, 2004.
- Gomez, N. [speaker], C.E. Schmidt "Studies on Competitive Responses in Neurons to Extracellular Cues Using Microfabricated Systems", <u>AICHE Annual Fall Meeting</u>, Austin, TX, Nov 7-12, 2004.
- 52. Deister, C. [presenter], C.E. Schmidt. "Neurotrophic Factor Combinations for Peripheral Nerve Regeneration" (poster), <u>AICHE Annual Fall Meeting</u>, Austin, TX, Nov 7-12, 2004.
- 53. Sanghvi, A.B. [speaker], K. P-H Miller, A.M. Belcher, C.E. Schmidt. "Surface Functionalization of Polypyrrole Using Combinatorial Peptide Screening Technologies", <u>AICHE Annual Fall Meeting</u>, Austin, TX, Nov 7-12, 2004.
- 54. Schmidt, C.E. [speaker]. "Tutorial on Neural Engineering", Advances in Biomaterials, Bionanotechnology, Biomimetic Systems & Tissue Engineering: Tutorial Session II, <u>AICHE Ann. Fall Mtg</u>, Austin, TX, Nov 7-12, 2004.
- 55. Winter, J.O. [speaker], N. Gomez, B.A. Korgel, C.E. Schmidt. "Biocompatible Quantum Dots for Electrical Stimulation of Neural Cells", <u>SPIE Photonics West</u>, San Jose, CA, Jan. 2005.
- 56. Zawko, S. [presenter], C.E. Schmidt. "Synthesis of a Photocrosslinked Hyaluronic Acid-Cyclodextrin Hydrogel" (poster). <u>BMES Annual Fall Meeting</u>, Baltimore, MD, Sept. 29 Oct. 1, 2005.
- 57. Gomez, N. [speaker], S. Chen, C.E. Schmidt. "Neuron Responses to Simultaneous and Competing Extracellular Cues". <u>BMES Annual Fall Meeting</u>, Baltimore, MD, Sept. 29 - Oct. 1, 2005.
- 58. Deister, C. [speaker], C.E. Schmidt. "Neurotrophic Factor Combinations for Peripheral Nerve Regeneration". <u>BMES</u> <u>Annual Fall Meeting</u>, Baltimore, MD, Sept. 29 - Oct. 1, 2005.
- 59. Bivens, K. [speaker], C.E. Schmidt. "Hyaluronan Oligosaccharides -- Bioactivity and Biomaterials". <u>BMES Annual Fall Meeting</u>, Baltimore, MD, Sept. 29 Oct. 1, 2005.
- 60. Gomez, N. [speaker], S. Chen, C.E. Schmidt. "Neuron Responses to Simultaneous and Competing Extracellular Cues". <u>MRS Annual Fall Meeting</u>, Boston, MA, Nov. 27 - Dec. 1, 2005.
- 61. Bivens, K. [presenter], C.E. Schmidt. "Hyaluronan Oligosaccharides -- Bioactivity and Biomaterials" (poster). Regenerate World Congress on Tissue Engineering and Regenerative Medicine, Pittsburgh, PA, April 24-27, 2006.

- 62. Deister, C [presenter], CE Schmidt. "Neurotrophic Factor Combinations for Peripheral Nerve Regeneration" (poster). Regenerate World Congress on Tissue Engineering and Regenerative Medicine, Pittsburgh, PA, Apr 24-27, 2006.
- 63. Seidlits, S. [presenter], J.B. Shear, C.E. Schmidt. "'Direct-Write' of Biologically Relevant Molecules into Three Dimensional, Submicron Structures" (poster). <u>Regenerate World Congress on Tissue Engineering and Regenerative Medicine</u>, Pittsburgh, PA, April 24-27, 2006.
- 64. Nickels, J.D. [presenter], F. Serna, J.W. Lee, C.E. Schmidt. "Carboxyl Functionalized Polypyrrole for Surface Modification in Tissue" (poster). <u>Society for Biomaterials</u>, Pittsburgh, PA, April 28-29, 2006.
- 65. Seidlits, S. [speaker], J.B. Shear, C.E. Schmidt. "'Direct-Write' of Biologically Relevant Molecules into Three Dimensional, Submicron Structures" (poster). <u>2nd International Conference: Strategies in Tissue Engineering</u>, <u>sponsored by TERMIS</u>. Wurzburg, Germany, May 31-June 2, 2006.
- 66. Khaing, Z.Z. [speaker], C.E. Schmidt. "Neuroscience Meets Engineering" <u>Graduate Student Retreat hosted by the</u> <u>Department of Neurobiology at UT-Austin</u>, Kerrville,TX. September 8, 2006.
- 67. Zawko, S. [speaker], C.E. Schmidt. "Preparation of a methacryloyl-beta-cyclodextrin monomer for hydrogel functionalization". <u>ACS Annual Fall Meeting</u>, San Francisco, CA, Sep. 10-14, 2006.
- Seidlits, S.K. [speaker], J.B. Shear, C.E. Schmidt. "'Direct-Write' of 3D, Submicron Biomolecule Structures in Hydrogel Materials". <u>Biomedical Engineering Society Annual Meeting</u>, Chicago, IL, Oct. 11-14, 2006.
- 69. Khaing, Z.Z. [speaker], C.E. Schmidt. "Acellular Grafts for Spinal Cord Injuries" <u>Current Concepts in Spine</u> <u>Regeneration sponsored by Seton Family of Hospitals</u>, Austin TX. November 4, 2006.
- 70. Guimard, N. K. [presenter], J.L. Sessler, C.E. Schmidt "A Novel Electrically Conducting, Biocompatible, Biodegradable Polymer for Nerve Regeneration" (poster). <u>8th New Jersey Symposium Biomaterials Science:</u> <u>Therapeutic and Diagnostic Applications of Biomaterials</u>, New Brunswick, NJ, Nov. 8-10, 2006.
- 71. Zawko, S. [speaker], C.E. Schmidt. "Photocured Hyaluronic Acid Films Functionalized with Cyclodextrin". <u>AICHE</u> <u>Annual Meeting</u>, San Francisco, CA, Nov. 12-17, 2006.
- 72. Guimard, N.K. [speaker], J.L. Sessler, C.E. Schmidt "Synthesis of a Novel Electrically Conducting, Biocompatible, Biodegradable Polymer for Biomedical Applications". <u>MRS Annual Fall Meeting</u>, Boston, MA, Nov. 27, 2006.
- Suri, S. [presenter], C.E. Schmidt. "Photocrosslinkable Interpenetrating Networks of Collagen and Hyaluronic Acid for Neural Tissue Engineering" (poster). 24th Annual <u>Houston Society of Engineering in Medicine and Biology Conference</u> (<u>HSEMB</u>), Houston, TX. Feb. 8-9, 2007.
- 74. Smith*, J. [speaker], Z. Khaing, C.E. Schmidt. "Bioengineering grafts for spinal cord injury", 24th Annual <u>Houston</u> <u>Society of Engineering in Medicine and Biology Conference (HSEMB)</u>, Houston, TX. Feb. 8-9, 2007.
- 75. Fechtel*, B. [presenter]., Z. Bevis, Z. Khaing, C. Schmidt. "Behavioural Characterization of CNS Regeneration Using an Accellular Peripheral Nerve Graft" (poster). <u>Biomedical Engineering Department, UT-Austin</u>. May 4, 2007.
- 76. Bevis*, Z.J. [presenter], Z. Khaing, C. Schmidt. "CNS regeneration Using Acellular Nerve Grafts" (poster). <u>Biomedical Engineering Department, UT-Austin</u>. May 4, 2007.
- 77. Smith*, J. [presenter] Z.Z. Khaing, C.E. Schmidt. "Olfactory Ensheathing Glia and Spinal Cord Injuries" (poster). Biomedical Engineering Department, UT-Austin. May 4, 2007.
- 78. Kot*, K. [presenter], J. Vanscoy*, B. Fechtel*, Z. Bevis*, J. Smith*, Z. Khaing, C.E. Schmidt. "Histological Analysis of Rat Spinal Cord after Transection" (poster). <u>Biomedical Engineering Department, UT-Austin</u>. May 4, 2007.
- 79. Vanscoy*, J. [presenter], K. Kot*, Z. Khaing, C.E. Schmidt. "Spinal Cord Injury: Histological Analysis of Regeneration" (poster). <u>Biomedical Engineering Department, UT-Austin</u>. May 4, 2007.
- McCarty*, K.R. [presenter], S.K. Seidlits, R.R. Rosenberger*, J.M. Heisler*, C.T. Drinnan, L.J. Suggs, C.E. Schmidt. "Modification of hyaluronic acid biomaterials" (poster), 24th Annual <u>Houston Society of Engineering in Medicine and</u> <u>Biology Conference (HSEMB</u>), Houston, TX. Feb. 8-9, 2007.
- Rosenberger*, R.R. [speaker], S.K. Seidlits, C.T. Drinnan, J.M. Heisler*, L.J. Suggs, C.E. Schmidt. "Photocrosslinkable fibronectin-hyaluronic acid 3D scaffolds", 24th Annual <u>Houston Society of Engineering in Medicine and Biology</u> <u>Conference (HSEMB)</u>, Houston, TX. Feb. 8-9, 2007.
- 82. Suri, S. [speaker], C.E. Schmidt. "Synthesis and Characterization of a Photocrosslinkable Collagen-Hyaluronan Interpenetrating Network for Neural Tissue Engineering: An ECM mimic". <u>Society of Biomaterials Annual Meeting</u>, Chicago, IL, Apr. 18-21, 2007.
- 83. Lee, J. Y. [presenter], N. Gomez, J. Nickels, C.E. Schmidt "Polypyrrole Micropatterns for Electrical and Topological Stimulation of Hippocampal Neurons" (poster). <u>Society of Biomaterials Annual Meeting</u>, Chicago, IL, April 2007.
- 84. Nickels, J.D. [presenter], D. Hunter*, C.E. Schmidt. "Affinity Peptide for Surface Modification of Polypyrrole" (poster). Society of Biomaterials Annual Meeting, Chicago, IL, Apr. 18-21, 2007.
- Rosenberger*, R.R. [presenter], C.T. Drinnan, S.K. Seidlits, J.M. Heisler*, L.J. Suggs, C.E. Schmidt. "Photocrosslinkable Fibronectin-Hyaluronic Acid Hydrogels as 3D Scaffolds" (poster). <u>Society of Biomaterials Annual Meeting</u>, Chicago, IL, Apr. 18-21, 2007.

- 86. Suri, S. [speaker], J.S. Tang, C.E. Schmidt. "Synthesis and Characterization of a Photocrosslinkable Collagen-Hyaluronan Interpenetrating Network for Neural Tissue Engineering: An ECM mimic". <u>Biomedical Engineering</u> <u>Society Annual Meeting</u>, Los Angeles, CA, Sept. 24-29, 2007.
- 87. Guimard, N.K. [presenter], J.L. Sessler, C.E. Schmidt. "Design of a Novel Conducting, Cytocompatible Polymer with Degradable Linkages for Nerve Regeneration" (poster). <u>Biomedical Engineering Society Annual Meeting</u>, Los Angeles, CA, Sept. 24-29, 2007.
- Seidlits, S.K. [speaker], J.B. Shear, C.E. Schmidt. "Direct-Write' of 3D, Submicron Biomolecule Structures in Hydrogel Materials". <u>Biomedical Engineering Society Annual Meeting</u>, Los Angeles, CA, Sept. 24-29, 2007.
- 89. Guimard, N.K. [presenter], J.L. Sessler, C.E. Schmidt. "An Electroactive, Degradable Thiophene and Ester-Based Copolymer for Neural Applications" (poster). <u>MRS Annual Fall Meeting</u>, Boston, MA, Nov. 25 30, 2007.
- Forciniti, L. [presenter], C.E. Schmidt, M. Zaman. "A Computational approach describing the distinct effects topographical and chemical Cues have on axogenesis" (poster). <u>52nd Annual Meeting of the Biophysical Society and 16th IUPAB International Biophysics Congress</u>, Long Beach CA, February 2-6, 2008.
- Hyunth*, S. [presenter], S. Suri, C.E. Schmidt. "Collagen-Hyaluronic Acid Photocrosslinkable Interpenetrating Networks for Tissue Engineering" (poster). <u>The Houston Society for Engineering in Medicine and Biology 2008 Annual</u> <u>meeting</u>, Houston, TX, February 7-8, 2008.
- 92. Fechtel*, B [speaker], Z. Bevis*, J. Smith*, J. Vanscoy*, K. Kot*, Z. Khaing, C.E. Schmidt. "CNS Regeneration Using Acellular Nerve Grafts". <u>The Houston Society for Engineering in Medicine and Biology</u>, Houston, TX, Feb. 7-8, 2008.
- Heisler*, J.M. [presenter], S.K. Seidlits, M.A. Salmon*, R.R. Rosenberger*, C.E. Schmidt. "Photocrosslinkable, 3D Scaffolds Composed of Hyaluronic Acid and Fibronectin" (poster). <u>The Houston Society for Engineering in Medicine</u> <u>and Biology</u>, Houston, TX, February 7-8, 2008.
- 94. Rosenberger*, R.R. [presenter], Seidlits, S.K., C.M. Massingill*, Z.K. Khaing, C.E. Schmidt. "Effect of Substrate Stiffness on Neural Progenitor Differentiation" (poster) <u>The Houston Society for Engineering in Medicine and Biology</u>, Houston, TX, February 7-8, 2008.
- 95. Guimard, N.K. [speaker], J.L. Sessler, C.E. Schmidt. "Synthesis of an Electroactive Polymer with Degradable Linkages for Tissue Engineering Applications". <u>Am. Chemical Society National Meeting</u>, New Orleans, LA, April 6-10, 2008.
- 96. Guimard, N.K. [speaker], S.A. Zawko, C.E. Schmidt. "Covalent Surface Modification of Hyaluronic Acid Hydrogels for Biomedical Applications". <u>American Chemical Society National Meeting</u>, New Orleans, LA, April 6-10, 2008.
- 97. Byrne, J.D. [presenter], J. Fonner, L. Forciniti, H. Nguyen, Y.-F. Kou*, J. Syeda-Nawaz*, C.E. Schmidt. "Biocompatibility Implications of Polypyrrole Synthesis Techniques" (poster). <u>National Conference for Undergraduate</u> <u>Research</u>, Salisbury, MD, April 10-12, 2008.
- Seidlits, S.K. [speaker], J.B. Shear, C.E. Schmidt. "3D Direct-write Modification of Hydrogels with Photocrosslinked, Bioactive Structures as Neural Scaffolds". <u>World Biomaterials Congress</u>, Amsterdam, Netherlands, May 28-Jun 1, 2008.
- 99. Khaing, Z.Z. [speaker], S. Seidlits, R. Grill, C.E. Schmidt. "Biological Properties of Hyaluronic Acid in Glail Scar Formation after SCI". <u>National Neurotrauma Symposium</u>, Orlando, FL. July 27-30, 2008.
- 100. Suri, S. [speaker], S. Zawko, Q. Trong*, C.E. Schmidt. "Superswelling and Patterned Dual-Crosslinked Hyaluronic Acid Hydrogels: Zonal Distribution of Hydrogel Properties". <u>Society for Biomaterials Annual Meeting</u>, Atlanta, GA, Sep. 11-13, 2008.
- 101. Suri, S. [presenter], S. Zawko, Q. Trong*, C.E. Schmidt. "Superswelling and Dual Crosslinked Hyaluronic Acid Hydrogels with Micro- and Macro-patterned Zonal Distribution of Hydrogel Properties" (poster). <u>Biomedical Engineering Society Annual Meeting</u>, St. Louis, MO, Oct. 1-4, 2008.
- 102. Forciniti, L. [speaker], C.E. Schmidt, M.H. Zaman. "Computational model provides insight into distinct responses of neurons to chemical & topographical cues". <u>Biomed. Engineering Society Ann. Meeting</u>, St. Louis, MO, Oct. 1-4, 2008.
- 103. Fonner, J.M. [speaker], C.E. Schmidt, P. Ren. "Development of a Molecular Mechanics Model for Chloride-Doped Polypyrrole". <u>Biomedical Engineering Society Annual Meeting</u>, Saint Louis, MO, Oct. 1-4, 2008.
- 104. Long, Su, D.P. Desai* [presenter], K. Kumar, C.C. Chen, P. Ingram, C.E. Schmidt, X. Zhang. "Droplet-based microfluidic system for encapsulation and culture of neuron cells in micro-gel-particles" (poster). <u>MicroTas 2008: 12th</u> <u>International Conference on Miniaturized Systems for Chemistry and Life Sciences</u>, San Diego, CA, Oct.12 -16, 2008.
- 105. Khaing, Z.Z. [presenter], S. Seidlits, R. Grill, C.E. Schmidt. "Biological Properties of Hyaluronic Acid in Glail Scar Formation after SCI" (poster). <u>Society for Neuroscience Annual Meeting</u>, Wash. DC, November 15-19, 2008.
- 106. Khaing, Z.Z. [presenter], S.K. Seidlits, J. Vanscoy*, R.J. Grill, C.E. Schmidt. "Biological properties of hyaluronic acid in glial scar formation after SCI" (poster). <u>Houston Society for Engineering in Medicine and Biology Annual Meeting</u>, Houston, TX, March 19-20, 2009.
- 107. Lee, J.Y. [presenter], C.E. Schmidt. "Electrochemical Coating of Hyaluronic Acid on Conducting Substrates for a Potential Neural Electrode Application (poster)". <u>Soc. Biomaterials Annual Mtg</u>, San Antonio, TX, April 22-25, 2009.
- 108. S. Suri [presenter], C.E. Schmidt. "Engineered Extracellular Matrix-Mimicking Hydrogels with Embedded Schwann Cells for Neural Tissue Engineering (poster)". <u>Society for Biomaterials Ann. Meeting</u>, San Antonio, April 22-25, 2009.

- 109. Spivey, E.C. [presenter], S. Seidlits, C.E. Schmidt, J.B. Shear. "Multiphoton Fabricated Biopolymer Matrices as Scaffolds for Neuronal Networks" (poster). Soc. for Biomaterials Ann. Meeting, San Antonio, TX, April 22-25, 2009.
- 110. Fonner, J.M. [speaker], C.E. Schmidt, P. Ren. "Development of a Molecular Mechanics Model for Chloride-Doped Polypyrrole". Society for Biomaterials Annual Meeting, San Antonio, TX, April 22-25, 2009.
- 111. Seidlits S.K. [presenter], Z.Z. Khaing, R.R. Rosenberger*, J.E. Vanscoy*, C.E. Schmidt. "Hyaluronic acid hydrogels with tunable material properties for the culture of ventral midbrain progenitors." (poster) <u>Society for Biomaterials Annual Meeting</u>, San Antonio, TX, April 22-25, 2009.
- 112. Khaing, Z.Z. [presenter], S.K. Seidlits, R.R. Rosenberger*, J.D. Nickels, J.E. Vanscoy*, C.E. Schmidt. "Culture of Ventral Midbrain Progenitors in Biocompatible 3D Hydrogels with Tunable Mechanical Properties" (poster). <u>American</u> <u>Society for Neural Therapy & Repair</u>, Clearwater FL, April 30-May 2, 2009.
- 113. Khaing, Z.Z. [presenter], J.E. Vanscoy*, S.K. Seidlits, R.J. Grill, C.E. Schmidt. "Implantation of engineered hyaluronic acid scaffolds attenuate inflammatory cell response and glial scar after SCI" (poster). <u>American Society for Neural Therapy & Repair</u>, Clearwater FL, April 30-May 2, 2009.
- 114. Seidlits, S.K. [presenter], Z.Z. Khaing, R.R. Rosenberger*, J.D. Nickels, K.M. Silverberg*, J.E. Vanscoy*, C.E. Schmidt. "Hyaluronic Acid Hydrogels with Tunable Material Properties for Neural Progenitor Culture" (poster). "Biomaterials & Tissue Engineering" Gordon Research Conference, Holderness, NH, July 19-24, 2009.
- 115. Lee, J.Y. [presenter], J.D. Nickels, C.E. Schmidt. "Electroconductive Pyrrole-Hyaluronic Acid Coatings for Passivating Electrodes" (poster) <u>Biomedical Engineering Society Annual Meeting</u>, Pittsburgh, PA, Oct 7-10, 2009.
- 116. Spivey, E.C. [speaker], S.K. Seidlits, C.E. Schmidt, J.B. Shear. "Tuning Mechanical and Chemical Properties of Multiphoton-Fabricated Cell Scaffolds". <u>Biomedical Eng. Society Ann. Meeting</u>, Pittsburgh, PA, Oct 7-10, 2009.
- 117. Khaing, Z.Z. [presenter], S.A. Geissler*, T. Schallert, R.J. Grill, C.E. Schmidt. "Hyaluronan & Laminin Hydrogels for Repair Strategies after Cervical Spinal Cord Injury" (poster). <u>14th Ann. Neuroscience Symp.</u>, Austin TX, Jan. 16, 2010.
- 118. Khaing, Z. [speaker], S. Geissler, S. Aguilar, T. Schallert, C.E. Schmidt. "Hyaluronic Acid Scaffolds for Repair Strategies after Cervical Spinal Cord Injury". <u>Biomedical Eng. Society Ann. Meeting</u>, Austin, TX, Oct 6-9, 2010.
- 119. Seidlits, S. [speaker], E. Ritschdorff, D. Hernandez, E. Spivey, C.E. Schmidt, J. Shear. "Three-Dimensional Gradients of Immobilized Factors". <u>Biomedical Engineering Society Annual Meeting</u>, Austin, TX, Oct 6-9, 2010.
- 120. Milman*, B. [speaker], Z. Khaing, S. Geissler, C.E. Schmidt. "Laminin modified hyaluronic acid hydrogels promote axonal regeneration following spinal cord injury in rats". <u>Biomedical Engineering Society Annual Meeting</u>, Austin, TX, Oct 6-9, 2010.
- 121. Spivey, E.[speaker], C.E. Schmidt, J.B. Shear. "Tuning Mechanical Properties of Multiphoton-Fabricated, Biological Macromolecular Scaffolds". <u>Biomedical Engineering Society Annual Meeting</u>, Austin, TX, Oct 6-9, 2010.
- 122. Thomas, R. [presenter], C.E. Schmidt. "Characterization of Salt Templated Hyaluronic Acid Hydrogels for Neural Wound Healing" (poster). <u>Biomedical Engineering Society Annual Meeting</u>, Austin, TX, Oct 6-9, 2010.
- 123. Milroy, C. [presenter], J. Lee, C.E. Schmidt. "Neural tissue engineering scaffolds with simultaneous nanofibrous, electrical, & neurotrophic cues" (poster). <u>Biomedical Engineering Society Annual Meeting</u>, Austin, TX, Oct 6-9, 2010.
- 124. Forciniti, L. [presenter], N. Guimard, S. Lee*, C.E. Schmidt "Unique electrochemically synthesized polypyrrole:poly(lactic-co-glycolic acid) blends for biomedical applications" (poster). <u>Biomedical Engineering Society Annual Meeting</u>, Austin, TX, Oct 6-9, 2010.
- 125. Hernandez, D. [presenter], S. Seidlits, C.E. Schmidt, J. Shear. "Guiding Neuronal Cells in 3-Dimensions Using a Composite Scaffold System" (poster). <u>Biomedical Engineering Society Annual Meeting</u>, Austin, TX, Oct 6-9, 2010.
- 126. Nagao, R. [presenter], C.E. Schmidt. "Analysis of Cellularity and ECM Composition in a Decellularized Vascular Construct" (poster). <u>Biomedical Engineering Society Annual Meeting</u>, Austin, TX, Oct 6-9, 2010.
- 127. Fonner, J. [presenter], C.E. Schmidt, P. Ren "Selective Binding of Peptides on Conducting Polymers" (poster). <u>Biomedical Engineering Society Annual Meeting</u>, Austin, TX, Oct 6-9, 2010.
- 128. Mayes, S. [presenter], C.E. Schmidt "Nerve Injury Isolation: A novel anti-adhesion film from natural materials" (poster). <u>Biomedical Engineering Society Annual Meeting</u>, Austin, TX, Oct 6-9, 2010.
- 129. Forciniti, L. [presenter], J. Ybarra*, J. Maldonado*, C.E. Schmidt. "Investigating Schwann cell response on polypyrrole substrates upon electrical stimulation" (poster). <u>Biomedical Engineering Society Annual Meeting</u>, Austin, TX, Oct 6-9, 2010.
- 130. Khaing, Z. [presenter], S. Seidlits, K. Sliverberg*, S. Geissler, C.E. Schmidt. "Tunable 3D Hyaluronic Acid Hydrogels for Differentiation of Progenitors into Dopamine Neurons" (poster). <u>Biomedical Engineering Society Annual Meeting</u>, Austin, TX, Oct 6-9, 2010.
- 131. Forciniti, L. [speaker], J. Ybarra*, J. Maldonado*, C.E. Schmidt. "Investigating Schwann cell response on polypyrrole substrates upon electrical stimulation". <u>AICHE Annual Meeting</u>, Salt Lake City, UT, Nov. 7-12, 2010.
- 132. Thomas, R. [speaker], C.E. Schmidt. "Characterization of Salt Templated Hyaluronic Acid Hydrogels for Neural Wound Healing". <u>AICHE Annual Fall Meeting</u>, Salt Lake City, UT, Nov. 7-12, 2010.

- 133. Thomas, R.C. [presenter], C.E. Schmidt. "Characterization of Salt Templated Hyaluronic Acid Hydrogels for Neural Wound Healing" (Poster). National <u>Society of Black Engineers Region 5 Fall Regional Conference</u>, New Orleans, LA, Nov 19-21, 2010.
- 134. Thomas, R.C. [presenter], C.E. Schmidt. "Natural Polymer Scaffolds to Treat Nerve Injury" (Poster). <u>American</u> <u>Institute for Medical and Biological Engineering</u>, Washington, DC, Feb 20-22, 2011.
- 135. Nguyen, H.T. [presenter], S. Sapp, S. Luebben, C.E Schmidt. "Electric field enhances axon length and directionality of dorsal root ganglia embedded in hydrogel on a conductive polypyrrole substrate" (poster). <u>Society for Biomaterials Annual Meeting</u>, Orlando, FL, April 13-16, 2011.
- 136. Spivey [presenter], E.C., C.E. Schmidt, J.B. Shear. "Tuning the Young's Modulus of Multiphoton-Fabricated Hydrogels" (poster). <u>Society for Biomaterials 2011 Biomaterials Day</u>, Texas A&M University, College Station, TX, May 2011.
- 137. Mayes, S. [speaker], D. Peterson, S. Aguilar, J. Scott*, J. Davis*, C. Brown, B. Coopwood, D. Lopez, C. Schmidt. "Designing the next generation adhesion barrier: a natural polymer-based film with robust handling properties". <u>Biomedical Engineering Society Annual Meeting</u>, Hartford, Conn., Oct. 12–15, 2011.
- 138. Davis, J. [presenter]*, S. Mayes, C.E. Schmidt. "Methacrylation Methods of Hyaluronic Acid Based Biomaterials Alter Wound Healing Capabilities" (poster). <u>Biomedical Engineering Society Annual Meeting</u>, Hartford, Conn., Oct. 12– 15, 2011.
- Thomas, R.C. [presenter], J.G. Hardy, S.P. Modi*, L. Forciniti, C.E. Schmidt. "The Incorporation of Electrically Conducting Polymer within Natural-Polymer Hydrogels" (poster). <u>AICHE Annual Meeting</u>, Minneapolis, MN, Oct. 19, 2011.
- 140. Thomas, R.C. [speaker], C.E. Schmidt. "The In Vitro Cellular Response to Three-Dimensional Hyaluronic Acid Hydrogels Templated by Self-Assembled Poragen Architecture" (poster). <u>AICHE Annual Meeting</u>, Minneapolis, MN, Oct. 20, 2011.
- 141. Khaing, Z.Z. [presenter], W. Alilain, H. Sharma, J. Silver, C.E. Schmidt. "Optimized acellular grafts support functional recovery after cervical spinal cord injury" (poster). <u>Society for Neuroscience Annual Meeting</u>, Washington DC, November 2011.
- 142. Khaing, Z.Z. [presenter], W. Alilain, J. Silver, C.E. Schmidt. "Optimized acellular grafts support functional recovery after cervical spinal cord injury" (poster). <u>International Symposium on Neural Regeneration (ISNR) Meeting</u>, Pacific Grove, CA, December 2011.
- 143. Khaing, Z.Z. [presenter], W. Alilain, J. Silver, C.E. Schmidt. "Optimized acellular grafts support functional recovery after cervical spinal cord injury" (poster). <u>Mission Connect Annual Symposium</u>, Houston, TX, December 2011.
- 144. Thomas, R.C. [presenter], B. McGhee*, C.E. Schmidt. "Peptide Conjugation in Hyaluronic Acid Hydrogels" (poster). <u>TERMIS-North America</u> 2011 Conference and Exposition Houston, TX, December 12, 2011.
- 145. Thomas, R.C. [presenter], J.G. Hardy, S.P. Modi*, C.E.Schmidt. "The Incorporation of Electrically Conducting Polymers within Biopolymer Hydrogels" (poster). <u>TERMIS-North America</u> 2011 Conference and Exposition, Houston, TX, December 12, 2011.
- 146. Thomas, R.C. [speaker], C.E. Schmidt. "Three-Dimensional Hyaluronic Acid Hydrogels Templated by Self-Assembled Poragen Architecture". <u>TERMIS-North America</u> 2011 Conference and Exposition, Houston, TX, December 13, 2011.
- 147. Milroy, C.A. [speaker], C. Ellison, C.E Schmidt. "Elastic Conductive Polymer Nanofiber Scaffolds for Tissue Regeneration". <u>Materials Research Society Spring Meeting</u>, San Francisco, CA, April 10, 2012.
- 148. Mayes, S.M. [speaker], J. Scott*, S.V. Aguilar, D.L. Peterson, C.E. Schmidt. "Promoting nerve injury isolation and regeneration with a bilayer polysaccharide-based hydrogel film", <u>Seventh Annual Symposium on Biologic Scaffolds</u> for Regenerative Medicine, Napa Valley, CA, April 26 28, 2012.
- 149. Khaing, Z.Z. [presenter], T.A. Evans, D.S. Barkauskas*, A.Y. Huang, C.E. Schmidt, J. Silver. "High resolution, real time imaging of regenerating axons in acellular peripheral nerve grafts in vivo" (poster). <u>Society for Neuroscience Annual Meeting</u>, New Orleans LA, October 2012.
- 150. Mayes, S., J. Scott*, J. Davis*, D. Peterson, S. Zawko, C. Schmidt, "Wound Healing Bilayer Polysaccharide-based Hydrogel Film", <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, Atlanta, GA, Oct. 27, 2012.
- 151. Thomas, R.C. [presenter], P. Chung*, C.E. Schmidt. "The Manipulation of Hydrogel Lumen Architecture for Potential Biomedical Applications" (poster), <u>Biomedical Eng. Society (BMES) Ann. Meeting</u>, Seattle, WA, Sept. 25-28, 2013.
- 152. Geissler, S.A. [presenter], A.L. Sabin*, Z.Z. Khaing, C.E. Schmidt. "Directing Spinal Progenitor Cell Differentiation Toward Oligodendrocytes Using Multi-Component Hydrogels" (poster), <u>15th International Symposium on Neural</u> <u>Regeneration</u>, Pacific Grove, CA, Dec. 11-15, 2013.
- 153. Khaing, Z.Z. [presenter], J. Grau, C.E. Schmidt. "Hydrogels and Microparticles for BDNF Delivery after Spinal Cord Injury" (poster), <u>15th International Symposium on Neural Regeneration</u>, Pacific Grove, CA, Dec. 11-15, 2013.
- 154. Cornelison, R.C. [presenter], C.E. Schmidt. "Extracellular Matrix Hydrogels Derived from optimized Acellular Peripheral Nerve" (poster), Society for Biomaterials (SFB) Annual Meeting, Denver CO, April 16-19, 2014.

- 155. Geissler, S. [presenter], A. Sabin*, O. Gooden*, R. Besser*, C. Schmidt. "Directing NPC Differentiation with Natural Biomaterials: Implications for Spinal Cord Repair" (poster), <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, San Antonio, TX, October 22-25, 2014.
- 156. Geissler, S. [presenter], A. Sabin*, O. Gooden*, R. Besser*, C. Schmidt. "Directing NPC Differentiation with Natural Biomaterials: Implications for Spinal Cord Repair" (poster), <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, San Antonio, TX, October 22-25, 2014.
- 157. Khaing, Z. [speaker], J. Park*, J. Grau, K. Lee, A. Niemerski, C. Schmidt. "Local and Sustained Delivery of BDNF Mediates Spinal Learning after Injury", <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, San Antonio, TX, October 22-25, 2014.
- 158. Cornelison, C. [speaker], V. Nguyen*, C. Schmidt. "Peripheral Nerve Extracellular Matrix Hydrogels for Treating Spinal Cord Injury", American Institute of Chemical Engineers (AICHE) Annual Meeting, Atlanta, GA, Nov. 18, 2014.
- 159. Wachs, R.A. [presenter], A. Hyti, R.C. Cornelison, C.E. Schmidt, "Development of a Tissue Specific Acellular Extracellular Matrix for Intervertebral Disc Regeneration Using a Gentle Decellularization Process" (poster), <u>Society</u> for Biomaterials (SFB) Annual Meeting, Charlotte, NC, April 14-18, 2015.
- 160. Lacko, C. [presenter], A. Garcia, C. Rinaldi, C.E. Schmidt. "Magnetically-Templated Hydrogels for Peripheral Nerve Repair" (poster), <u>2015 Regenerative Medicine Workshop</u>, Hilton Head, SC, May 13-16, 2015.
- 161. Wachs, R.A. [presenter], R.C. Cornelison, S. Xin, H. Huda*, S.L. Porvasnik, C.E. Schmidt. "Development of Proteoglycan Rich Matrix for Nucleus Pulposus Regeneration" (poster), <u>2015 Regenerative Medicine Workshop</u>, Hilton Head, SC, May 13-16, 2015.
- 162. Cornelison, R.C. [presenter], J. Park*, C.E. Schmidt. "Injectable Acellular Nerve Hydrogels to Promote Spinal Cord Regeneration" (poster), <u>2015 Regenerative Medicine Workshop</u>, Hilton Head, SC, May 13-16, 2015.
- 163. Lacko, C. [presenter], A. Garcia, C. Rinaldi, C. Schmidt. "Magnetically-Templated Hydrogels for Peripheral Nerve Repair" (poster), <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, Tampa, FL, October 8-10, 2015.
- 164. Wachs, R.A. [presenter], S. Xin, H.I. Huda*, E.N. Hoogenboezem*, D.N. Stanton*, S.L. Porvasnik, C.E. Schmidt. "Targeted Engineering of the Nucleus Pulposus Using a Tissue Specific Acellular Matrix" (poster), <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, Tampa, FL, October 8-10, 2015.
- 165. Agrawal, N. [presenter], J. Park*, S. Xin, K. Lee*, J. Grau, C. Schmidt, Z. Khaing, A. Niemerski. "A Composite Hydrogel-Microparticle Platform for Controlled Delivery of BDNF after Spinal Cord Injury" (poster), <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, Tampa, FL, October 8-10, 2015.
- 166. Cornelison, C., J. Park*, R. Wachs [presenter], S. Wellman*, C. Schmidt. "Harnessing Apoptosis for Enhanced Tissue Preservation during Decellularization" (poster), <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, Tampa, FL, October 8-10, 2015.
- 167. Agrawal, N.K. [presenter], Y. Du, P. Allen, A. Ellington, Z.Z. Khaing, C.E. Schmidt. "Oligonucleotide Hybridized Hydrogels for Sustained Release of Aptamer Antagonists to Promote Axon Growth" (poster), <u>2016 Regenerative</u> <u>Medicine Workshop - Discovery Technologies and Translation</u>, Hilton Head, SC, March 16-19, 2016.
- 168. Spearman, B.S. [presenter], R.A. Wachs, C.E. Schmidt. "Mechanically-tuned Natural Hydrogel Scaffolds for Peripheral Nerve Regeneration" (poster), <u>2016 Regenerative Medicine Workshop - Discovery Technologies and Translation</u>, Hilton Head, SC, March 16-19, 2016.
- 169. Mertz, M.W. [presenter], R.C. Cornelison, R.A. Wachs, M.B. Bunge, C.E. Schmidt. "Novel Injectable Acellular Peripheral Nerve Scaffold for Cell Delivery to Enhance Spinal Cord Regeneration After Injury" (poster), <u>2016</u> <u>Regenerative Medicine Workshop - Discovery Technologies and Translation</u>, Hilton Head, SC, March 16-19, 2016.
- 170. Mertz, M.W. [speaker], R.C. Cornelison, R.A. Wachs, M.B. Bunge, C.E. Schmidt. "Novel Injectable Acellular Peripheral Nerve Scaffold for Cell Delivery to Enhance Spinal Cord Regeneration After Injury" (selected rapid fire oral presentation), <u>2016 Regenerative Medicine Workshop - Discovery Technologies and Translation</u>, Hilton Head, SC, March 16-19, 2016.
- 171. Hardy, J.G. [speaker], C. E. Schmidt, "Electroactive Polymers for Drug Delivery and Tissue Engineering." <u>Advanced Functional Polymer Meeting</u>, Galway, Ireland, March 23, 2015.
- 172. Hardy, J.G. [speaker], C. E. Schmidt, D. L. Kaplan "Electroactive biomaterials for drug delivery and tissue engineering." <u>12th International Conference on Materials Chemistry (MC12)</u>, York, UK, July 20, 2015.
- 173. Hardy, J.G. [speaker], C. E. Schmidt, D. L. Kaplan "Electroactive biomaterials for drug delivery and tissue engineering." <u>Recent Appointees in Polymer Science Conference</u>, Birmingham, UK, September 2, 2015.
- 174. Hardy, J.G. [speaker], C. E. Schmidt, D. L. Kaplan "Electroactive biomaterials for drug delivery and tissue engineering." <u>Recent Appointees in Materials Science Conference</u>, Warwick, UK, September 16, 2015.
- 175. Hardy, J.G. [speaker], C. E. Schmidt, "Electroactive biomaterials for drug delivery and tissue engineering." <u>RSC</u> <u>Biomaterials Chemistry Specialist Interest Group Annual Conference</u>, Birmingham, UK, January 7, 2016.
- 176. Desai, V. [presenter], C. Shafor, B. Spearman, R. Wachs, J. Graham, E. Atkinson, E. Nunamaker, K. Otto, C. Schmidt, J. Judy. "Design and Fabrication of a Scalable Tissue-Engineered Electronic Nerve Interface" (poster), <u>38th Annual</u>

International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS), Orlando, FL, August 17-20, 2016.

- 177. Spearman, B. [presenter], R. Wachs, V. Desai, C. Shafor, J. Graham, E. Atkinson, E. Nunamaker, K. Otto, C. Schmidt, J. Judy. "Development of Mechanically-Tunable Hydrogel Scaffold for a Regenerative Peripheral Nerve Interface" (poster), <u>38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS)</u>, Orlando, FL, August 17-20, 2016.
- 178. Graham, J. [presenter], E. Atkinson, E. Nunamaker, B. Spearman, R. Wachs, V. Desai, C. Shafor, K. Otto, C. Schmidt, J. Judy. "Histological Evaluation of Implanted Tissue-Engineered Electronic Neural Interface (TEENI) Devices" (poster), <u>38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS)</u>, Orlando, FL, August 17-20, 2016.
- 179. Lacko, C. [speaker], S. Porvasnik, M. Wall*, A. Garcia, C. Rinaldi, C.E. Schmidt. "Three-Dimensionally Templated Hydrogels for Peripheral Nerve Injury Repair", <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, Minneapolis, MN, October 5-8, 2016.
- 180. Cerqueira, S.R. [presenter], Y.S. Lee, R.C Cornelison, M.W Mertz, R.A Wachs, C.E Schmidt, M.B. Bunge. "Acellular Nerve as an Injectable Matrix to Support Schwann Cell Graft Survival Following Spinal Cord Injury" (poster), <u>University of Miami Neural Engineering Research Symposium</u>, Miami, FL, October 13, 2016.
- 181. Cornelison, R.C., M.W Mertz [presenter], R.A Wachs, S.R Cerqueira, Y.S. Lee, M.B. Bunge, C.E Schmidt. "Development of an Injectable Acellular Peripheral Nerve Scaffold for Schwann cell Therapies after Spinal Cord Injury" (poster), <u>University of Miami Neural Engineering Research Symposium</u>, Miami, FL, October 13, 2016.
- 182. Agrawal, N. [speaker], Y. Du, P. Allen, A. Ellington, S. Khaing, C. Schmidt. "Oligonucleotide Hybridized Hydrogels for Sustained Release of Small Molecular (Aptamer) Therapeutics", <u>2017 Society for Biomaterials Annual Meeting</u> <u>and Exposition</u>, Minneapolis, MN, April 5-8, 2017.
- 183. Spearman, B.S. [speaker], R.A. Wachs, V.H. Desai, C.S. Shafor, J.B. Graham, E.W. Atkinson, E.A. Nunamkaer, K.J. Otto, J.W. Judy, C. Schmidt. "Mechanically-tunable Extracellular Matrix Hydrogel Scaffold for Use in a Tissue-Engineered Electronic Nerve Interface (TEENI)", <u>2017 Society for Biomaterials Annual Meeting and Exposition</u>, Minneapolis, MN, April 5-8, 2017.
- 184. Mertz, M.W. [presenter], N.E. Vaughn*, R.A. Wachs, C.E. Schmidt. "Balancing Cell Removal and Preservation of Intricate ECM Microstructures during Chemical Decellularization of Peripheral Nerve" (poster), <u>2017 Society for</u> <u>Biomaterials Annual Meeting and Exposition</u>, Minneapolis, MN, April 5-8, 2017.
- 185. Nunamaker, E. [presenter], B. Spearman, J. Graham, E. Atkinson, V. Desai, C. Shafor, S. Natt, R. Wachs, C. Schmidt, J. Judy, K. Otto. "Implantation Methodology Development for Tissue-Engineered Electronic Neural Interface (TEENI) Devices" (poster), <u>8th Internat. IEEE EMBS Conference on Neural Engineering</u>, Shanghai, China, May 25-28, 2017.
- 186. Graham, J. [presenter], E. Atkinson, E. Nunamaker, B. Spearman, V. Desai, R. Wachs, C. Schmidt, J. Judy, K. Otto. "Histological Evaluation of Chronically Implanted Tissue-Engineered-Electronic-Neural-Interface (TEENI) Devices" (poster), <u>8th International IEEE EMBS Conference on Neural Engineering</u>, Shanghai, China, May 25-28, 2017.
- 187. Desai, V. [presenter], B. Spearman, C. Shafor, S. Natt, B. Teem, J. Graham, E. Atkinson, R. Wachs, E. Nunamaker, K. Otto, C. Schmidt, J. Judy. "Design, Fabrication, and Characterization of a Scalable Tissue-Engineered Electronic Nerve Interface" (poster), <u>8th International IEEE EMBS Conference on Neural Engineering</u>, Shanghai, China, May 25-28, 2017.
- 188. Bohmann, N.*[presenter], E. Patrick, C. Schmidt, S. Mobini. "Inducing Myelination in Schwann Cells Using Brief Electrical Stimulation" (poster), <u>Biomedical Eng. Society (BMES) Annual Meeting</u>, Phoenix, AZ, Oct 11-14, 2017.
- 189. Agrawal, N. [presenter], R. Wachs, Y. Du, P. Allen, A. Ellington, Z. Khaing, C. Schmidt. "Oligonucleotide Hybridized Hydrogels for Sustained Release of Small Molecule (Aptamer) Therapeutics" (poster), <u>Biomedical Engineering</u> <u>Society (BMES) Annual Meeting</u>, Phoenix, AZ, October 11-14, 2017.
- 190. Griffin, J. [presenter], N.K. Agrawal, R.C. Cornelison, R.A. Wachs, C.E. Schmidt. "Injectable Hydrogels Derived from Apoptosis Decellularized Sciatic Nerve" (poster), <u>Regen. Medicine Workshop</u>, Isle of Palms, SC, March 21-24, 2018.
- 191. Agrawal, N. [presenter], R. Wachs, Y. Du, P. Allen, A. Ellington, Z. Khaing, C. Schmidt. "Oligonucleotide Hybridized Hydrogels for Sustained Release of Small Molecule (Aptamer) Therapeutics" (poster), <u>Regenerative Medicine</u> <u>Workshop</u>, Isle of Palms, SC, March 21-24, 2018.
- 192. Spearman, B. [presenter], S. Mobini, N. Agrawal, A. Rubiano, C. Simmons, C. Schmidt "Tunable Methacrylated Hyaluronic Acid-based Hydrogels for Tissue Engineering" (poster), <u>Regenerative Medicine Workshop</u>, Isle of Palms, SC, March 21-24, 2018.
- 193. Bousalis, D. [speaker], C. Lacko, R.A. Wachs, H. Kasashara, C.E. Schmidt. "Engineering Cardiac Tissue Mimics as In Vitro Test Beds to Investigate Congenital Heart Disease", <u>2018 Society for Biomaterials Annual Meeting and</u> <u>Exposition</u>, Atlanta, GA, April 11-14, 2018.
- 194. McCrary, M. [presenter], N. Vaughn*, Y.H. Song, C. Schmidt. "Addressing the Effect of DNase Treatment on ECM Preservation and Cell Removal during Sodium Deoxycholate Based Chemical Decellularization of Peripheral Nerve" (rapid fire talk & poster), <u>2018 Society for Biomaterials Ann. Meeting & Exposition</u>, Atlanta, GA, April 11-14, 2018.

- 195. Mobini, S. [speaker], C. Kuliasha, N. Bohmann*, J. Judy, K. Otto, C. Schmidt, A. Brennan. "Engineered Microtopographies to Guide and Control Cellular Response of Fibroblasts and Schwann Cells: Sharklet[™] Versus Channels", 2018 Society for Biomaterials Annual Meeting and Exposition, Atlanta, GA, April 11-14, 2018.
- 196. McCrary, M. [speaker], N. Vaughn*, Y.H. Song, and C. Schmidt. "Optimization of Sodium Deoxycholate Based Chemical Decellularization and Solubilization for the Generation of Peripheral Nerve Extracellular Matrix-Based Scaffolds", <u>Tenth Annual Symposium on Biologic Scaffolds for Regenerative Medicine</u>, Napa, CA, May 3-5, 2018.
- 197. Bousalis, D. [presenter], C. Lacko, R.A. Wachs, H. Kasashara, C.E. Schmidt. "Engineering Cardiac Tissue Mimics as In Vitro Test Beds to Investigate Congenital Heart Disease" (poster), <u>Tenth Annual Symposium on Biologic Scaffolds</u> <u>for Regenerative Medicine</u>, Napa, CA, May 3-5, 2018.
- 198. Griffin, J. [presenter], M.W. McCrary, S.R. Cerqueira, M.B. Bunge, C.E. Schmidt. "Injectable Schwann Cell Carrier for SCI Derived from Clinically Marketed Product" (poster), <u>Tenth Annual Symposium on Biologic Scaffolds for Regenerative Medicine</u>, Napa, CA, May 3-5, 2018.
- 199. Agrawal, N. [speaker], J. Griffin, D. Seroski, R. Cornelison, R. Wachs, G. Hudalla, C. Schmidt. "Injectable hydrogels derived from apoptosis decellularized peripheral nerve for spinal cord injury repair", <u>Tenth Annual Symposium on Biologic Scaffolds for Regenerative Medicine</u>, Napa, CA, May 3-5, 2018.
- 200. McCrary, M. [speaker], Y.H. Song, S. Porvasnik, R. Wachs, A. Fosang, C. Schmidt, "Discovering Spatiotemporal Patterns Of Aggrecan Fragmentation After Spinal Cord Injury", <u>Biomedical Engineering Society (BMES) Annual</u> <u>Meeting</u>, Atlanta, GA, October 17-20, 2018.
- 201. Bousalis, D. [presenter], C. Lacko, R. Wachs, S. Mobini, H. Kasahara, C. Schmidt, "Engineering Cardiac Tissue Mimics as In Vitro Test Beds to Investigate Congenital Heart Disease" (poster), <u>Biomedical Engineering Society</u> (<u>BMES</u>) Annual Meeting, Atlanta, GA, October 17-20, 2018.
- 202. Song, Y.H. [presenter], D. Visosevic*, K. Daramola*, S. Porvasnik, C. Schmidt, "Apoptosis-Mediated Decellularization Approaches for Lung Tissue Engineering" (poster), <u>Biomedical Engineering Society (BMES)</u> <u>Annual Meeting</u>, Atlanta, GA, October 17-20, 2018.
- 203. Spearman, B. [presenter], E. Atkinson, S. Mobini, C. Kuliasha, E. Nunamaker, K. Otto, C. Rinaldi, J. Judy, C. Schmidt, "Templated Extracellular Matrix-Based Hydrogel for Peripheral Nerve Regeneration in a Tissue-Engineered Electronic Nerve Interface (TEENI)" (poster), <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, Atlanta, GA, October 17-20, 2018.
- 204. Kasper, M.M. [presenter], C.S. Lacko, I. Singh, M.A. Wall*, C. Rinaldi, C.E. Schmidt, "Tunable Mechanical Properties of Magnetically Templated Hydrogels for Peripheral Nerve Repair" (poster), <u>Biomedical Engineering</u> <u>Society (BMES) Annual Meeting</u>, Atlanta, GA, October 17-20, 2018.
- 205. Vaughn, N.* [presenter], M. McCrary, Y.H. Song, C. Morley, T. Angelini, C. Schmidt, "Generation of Thermal ECM-Based Hydrogels Derived from Chemically Decellularized Peripheral Nerve" (poster), <u>Biomedical Engineering</u> <u>Society (BMES) Annual Meeting</u>, Atlanta, GA, October 17-20, 2018.
- 206. Daramola, K.* [presenter], D. Visosevic*, S. Porvasnik, Y.H. Song, C. Schmidt, "Lung Decellularization Methods Through Apoptosis" (poster), <u>Biomedical Engineering Society (BMES) Ann. Meeting</u>, Atlanta, GA, Oct 17-20, 2018.
- 207. Ngo, T.* [presenter], B. Spearman, S. Mobini, C. Schmidt, "Rheological Properties of Methacrylated Hyaluronic Acid-Based Solutions as Bioinks for 3D Bioprinting" (poster), <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, Atlanta, GA, October 17-20, 2018.
- 208. Henderson, A.* [speaker], N. Bohmann*, E. Patrick, C. Schmidt, S. Mobini, "Secretome from Electrically Stimulated Cells Increases Neurite Outgrowth & Angiogenesis In Vitro", <u>Biomedical Engineering Society (BMES) Annual</u> <u>Meeting</u>, Atlanta, GA, October 17-20, 2018.
- 209. Nieves, E.* [presenter], P. Lim*, D. Bousalis, M. McCrary, Y.H. Song, C.E. Schmidt, "Characterization of Tissue-Derived Extracellular Matrices Following Chemical Decellularization" (poster), <u>Annual Biomedical Research</u> <u>Conference for Minority Students (ABRCMS)</u>, Indianapolis, IN, Nov. 14-17, 2018.
- 210. Vaughn N.E., M.W. McCrary [presenter], Y.H. Song, C.D. Morley, T.E. Angelini, C.E. Schmidt. "Characterization of Injectable Chemically Decellularized Peripheral Nerve Scaffolds" (poster), <u>Regenerative Medicine Workshop</u>, Charleston, SC, March 18-21, 2019.
- 211. McCrary, M.W. [speaker and presenter], Y.H. Song, S. Porvasnik, R. Wachs, A. Fosang, C. Schmidt, "In Vitro Model to Mimic Aggrecan Fragmentation Profiles After Spinal Cord Injury" (poster and rapid-fire talk), <u>Society for Biomaterials Annual Meeting and Exposition</u>, Seattle, WA, April 3-6, 2019.
- 212. McCrary, M.W. [speaker and presenter], Y.H. Song, S. Porvasnik, R. Wachs, A. Fosang, C. Schmidt, "In Vitro Model to Mimic Aggrecan Fragmentation Profiles After Spinal Cord Injury" (poster and rapid-fire talk), <u>Society for Biomaterials Annual Meeting and Exposition</u>, Seattle, WA, April 3-6, 2019.
- 213. Song, Y.H. [speaker and presenter], D. Visosevic*, K. Daramola*, S. Porvasnik, M. Maynes*, C. Schmidt, "Apoptosis-Mediated Decellularization Approaches for Lung Tissue Engineering" (poster and rapid-fire talk), <u>Society for</u> <u>Biomaterials Annual Meeting and Exposition</u>, Seattle, WA, April 3-6, 2019.

- 214. Bousalis, D. [speaker], C. Lacko, P. Lim*, H. Kasahara, C. Schmidt, C. Rinaldi, "Cardiac Tissue Mimic", <u>Society for</u> <u>Biomaterials Annual Meeting and Exposition</u>, Seattle, WA, April 3-6, 2019.
- 215. Singh, I., M. Kasper, C. Lacko, C. Schmidt, C. "Effects of Microarchitecture on Schwann Cell Migration and Proliferation in Magnetically Templated Hydrogels in vitro" (poster), <u>Society for Biomaterials Annual Meeting and Exposition</u>, Seattle, WA, April 3-6, 2019.
- 216. Sedwick*, F. [presenter], A. Czeiszperger, E. Atkinson, B. Spearman, C. Kuliasha, A. Furniturewalla, C. Schmidt, J. Judy, K. Otto. "Analyzing Distal Sciatic Nerve Growth and Structure In An Implanted Peripheral Nerve Interface" (poster), <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, Philadelphia, PA, October 16-19, 2019.
- 217. Maynes*, M. [presenter], Y. Song, C. Schmidt. "Apoptosis-Mediated Lung Tissue Decellularization and Hydrogel Formation" (poster), <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, Philadelphia, PA, Oct. 16-19, 2019.
- 218. Nieves*, E. [presenter]. P. Lim*, D. Bousalis, M. McCrary, Y. Song, C. Schmidt. "Characterization of Tissue-Derived Extracellular Matrices Following Chemical Decellularization" (poster), <u>Biomedical Engineering Society (BMES)</u> <u>Annual Meeting</u>, Philadelphia, PA, October 16-19, 2019.
- 219. Ngo*, T. [presenter], B. Spearman, C. Schmidt. "3D Bioprinted Hyaluronic Acid Hydrogels as In Vitro Testbeds for Peripheral Nerve Regeneration" (poster), <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, Philadelphia, PA, October 16-19, 2019.
- 220. Alilovic*, K. [presenter], J. Mojica Santiago, C. Schmidt. "Developing Natural Based Thermally Gelling Bio-inks For 3D Tissue Engineering" (poster), <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, Philadelphia, PA, October 16-19, 2019.
- 221. Ahmad*, R. [presenter], N. Hlavac, D. Bousalis, C. Schmidt. "Evoking Regenerative Properties of Adipose-derived Stem Cells Using Electrical Stimulation" (poster), <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, Philadelphia, PA, October 16-19, 2019.
- 222. Lopez*, V. [presenter], J. Mojica-Santiago, I. Young*, S. Malany, C. Schmidt. "Mechanical Characterization Of Hydrogels To Mimic Skeletal Muscle ECM" (poster), <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, Philadelphia, PA, October 16-19, 2019.
- 223. Ngo*, T.B. [presenter], B.S. Spearman, C.E. Schmidt. "Design and Characterization of Hyaluronic Acid Bioinks to 3D Bioprint In Vitro Testbeds for Nerve Regeneration" (poster), <u>Annual Biomedical Research Conference for Minority</u> <u>Students (ABRCMS)</u>, Anaheim, CA, November 2019.
- 224. Ngo*, T.B. [presenter], B.S. Spearman, C.E. Schmidt. "Novel Approach to Peripheral Nerve Repair: 3D Bioprinted Methacrylated Hyaluronic Acid Hydrogel" (poster), <u>UG Research Showcase, Florida Capitol</u>, Tallahassee, FL, February 10, 2020.
- 225. Ngo*, T.B. [presenter], B.S. Spearman, C.E. Schmidt. "Novel Approach to Peripheral Nerve Repair: 3D Bioprinted Methacrylated Hyaluronic Acid Hydrogel In Vitro Testbeds" (poster), <u>World Biomaterials Congress (WBC)</u>, Glasgow, Scotland, May 19-24, 2020. (Meeting canceled due to COVID)
- 226. Kuliasha, C. [speaker], E. Atkinson, B. Spearman, I. Singh, M. Kasper, C. Rinaldi, C. Schmidt, K. Otto, J. Judy. "Design and In Vivo Assessment of Tissue-Engineered Electronic Neural Interfaces (TEENI)", <u>World Biomaterials</u> <u>Congress (WBC)</u>, Glasgow, Scotland, May 19-24, 2020. (Meeting canceled due to COVID)
- 227. Kasper, M. [speaker], B. Spearman, I. Singh, C. Kuliasha, J. Judy, C. Rinaldi, C. Schmidt, "Integration of Tissue-Engineered-Electronic-Nerve-Interface (TEENI) Threads into Magnetically Templated Hydrogels", <u>World</u> <u>Biomaterials Congress (WBC)</u>, Glasgow, Scotland, May 19-24, 2020. (Meeting canceled due to COVID)
- 228. Kasper, M. [presenter], B. Spearman, I. Singh, C. Rinaldi, C. Schmidt, "Integration of Tissue-Engineered-Electronic-Nerve-Interface (TEENI) Threads into Magnetically Templated Hydrogels" (poster), <u>Biomedical Engineering Society</u> (BMES) Annual Meeting (virtual), October 6-9, 2020.
- 229. Bousalis, D. [presenter], N. Hlavac, M. McCrary, N. Vaughn, C. Schmidt, "Decellularized Extracellular Matrix Hydrogel as Injectable Delivery Vehicle for Stem Cell Secretome" (poster), <u>Biomedical Engineering Society (BMES)</u> <u>Annual Meeting</u> (virtual), October 6-9, 2020.
- 230. Choi, A.* [presenter], J. Mojica Santiago, S. Malany, C. Schmidt, "Mechanical and Diffusive Properties of Matrigel-Collagen Hydrogels for Skeletal Muscle In Vitro Models" (poster), <u>Biomedical Engineering Society (BMES) Annual</u> <u>Meeting</u> (virtual), October 6-9, 2020.
- 231. Alilovic, K.* [presenter], J.A. Mojica Santiago, M.W. McCrary, C.E. Schmidt, "Developing Photo-crosslinkable Bioinks From Decellularized Tissue For Nerve In Vitro Models" (poster), <u>Biomedical Engineering Society (BMES)</u> <u>Annual Meeting</u> (virtual), October 6-9, 2020.
- 232. Kasper, M. [speaker], B. Spearman, I. Singh, C. Kuliasha, J. Judy, C. Rinaldi, C. Schmidt, "Integration of Tissue-Engineered-Electronic-Nerve-Interface (TEENI) Threads into Magnetically Templated Hydrogels", <u>11th World</u> <u>Biomaterials Congress (WBC)</u> (virtual), December 11 - 16, 2020.
- 233. Ngo*, T.B. [presenter], B.S. Spearman, C.E. Schmidt. "Novel Approach to Peripheral Nerve Repair: 3D Bioprinted Methacrylated Hyaluronic Acid Hydrogel In Vitro Testbeds" (poster), <u>11th World Biomaterials Congress (WBC)</u> (virtual), December 11 - 16, 2020.

- 234. Bousalis, D. [speaker], M. McCrary, N. Hlavac, A. Evering*, N. Vaughn*, C.E. Schmidt, "Assessing the Potential of a Decellularized Peripheral Nerve-based Hydrogel as a Spinal Cord Injury Therapeutic Delivery Vehicle", <u>Society for</u> Biomaterials Annual Meeting (Virtual), April 20-23, 2021.
- 235. Kasper, M. [speaker], M. Cydis*, A. Afridi*, C.E. Schmidt, "Development of a Hyaluronan Polymer-Protein Conjugate for Peripheral Nerve Applications", <u>Soc. Biomaterials (SFB) Annual Meeting</u> (Virtual), April 20-23, 2021.
- 236. Hlavac, N. [speaker], D. Seroski, N. Agrawal, L. Astrab, G. Hudalla, C. Schmidt, "Combination Therapeutics for Neural Injury Using Natural-based Hydrogels and Chondroitinase ABC-Galectin-3", <u>Society for Biomaterials (SFB)</u> <u>Annual Meeting</u> (Virtual), April 20-23, 2021. (Nora Hlavac - Postdoc Research Award Finalist)
- 237. Hlavac, N. [speaker], D. Seroski, N. Agrawal, L. Astrab, G. Hudalla, C. Schmidt, "Combination Therapeutics for Neural Injury Using Natural-based Hydrogels and Chondroitinase ABC-Galectin-3", <u>Society for Biomaterials (SFB)</u> <u>Annual Meeting</u> (Virtual), April 20-23, 2021.
- 238. Robles-Blasini, S.* [speaker], J. Mojica-Santiago, C.E. Schmidt, "Development of Hydrogels Using Decellularized Porcine Muscle Matrix and Collagen Blends", <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, Orlando, FL, October 6-9, 2021.
- 239. Mojica-Santiago, J.A. [speaker], K. Alilovic*, C.E. Schmidt, "Biochemical Constitution of Injectable Nerve Hydrogels Affect Efficacy for Pre-Clinical Applications", <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, Orlando, FL, October 6-9, 2021.
- 240. Manousiouthakis, E. [presenter], C.E. Schmidt, "Photocrosslinkable and Conductive Hyaluronic Acid Hydrogels using Carbon Nanotubes for 3D Printing" (poster), <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, Orlando, FL, October 6-9, 2021.
- 241. Lim, A.S. [speaker], C.E. Schmidt, K.J. Otto, "Electrochemical Characterization of MARTEENI Devices Integrating Sputtered Iridium Oxide", <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, Orlando, FL, October 6-9, 2021.
- 242. Lim, A.S. [presenter], E.W. Atkinson, L. Jiracek-Sapieha, M. Kasper, V. Rivera-Llabres, C. Kuliasha, C.M. Rinaldi-Ramos, C.E. Schmidt, J.W. Judy, K.J. Otto, "Magnetically aligned regenerative tissue-engineered electronic nerve interfaces: functional and histological evaluation and future directions" (poster), <u>Society for Neuroscience Annual</u> <u>Meeting</u>, Chicago, IL, November 13–16, 2021.
- 243. Gentry*, K. [presenter], V. Rivera-Llabres, M. Kasper, C. Schmidt, C. Rinaldi-Ramos, "Fabrication of Size Controllable MAMs as Sacrificial Templates for Magnetic Templating" (poster), <u>Annual Biomedical Research</u> <u>Conference for Minority Students (ABRCMS)</u> (Virtual), November 11, 2021.
- 244. Manousiouthakis, E. [speaker], R. Mishra, C. Schmidt, B.C. Bonning, D. Stanley, C. Goodman, "3D Cell Culture Modeling of the Midgut Epithelium of an Agricultural Pest to Aid Crop Management", <u>37th Southern Biomedical Engineering Conference (SBEC)</u>, New Orleans, LA, Dec. 3-5, 2021. *[Best Overall Presentation Award]*
- 245. Hlavac, N., D. Bousalis, E. Pallack* [speaker], Y. Li*, C.E. Schmidt, "Optimizing Stem Cell Secretome for Combination with Injectable Decellularized Scaffolds for Neural Applications", <u>37th Southern Biomedical Engineering</u> <u>Conference (SBEC)</u>, New Orleans, LA, Dec. 3-5, 2021. [Best Student Presentation Award]
- 246. Kasper, M.M. [speaker], J.A. Mojica-Santiago, B. Spearman, I. Singh, C.A. Kullasha, J.W. Judy, C.M. Rinaldi-Ramos, C.E. Schmidt, "Development of a Magnetically Aligned Regenerative Tissue Engineered Electronic Nerve Interlace for Peripheral Nerve Applications", <u>37th Southern Biomedical Engineering Conference (SBEC)</u>, New Orleans, LA, Dec. 3-5, 2021.
- 247. Evering*, A.[speaker], E. Manousiouthakis, V. Subramaniam, A. Campbell, S. Danis*, E. Pallack*, T. Angelini, C.E. Schmidt, "Exploring the mechanical properties of polyethylene glycol and glycidyl methacrylate hyaluronic acid in developing in vitro spinal cord injury testbeds", <u>48th Annual National Conference for the National Society of Black Engineers (NSBE)</u>, Anaheim, CA, March 25, 2022. [3rd Place Oral Presentation Award]
- 248. Mojica-Santiago, J. [speaker], M. Parafati, L. Malany, D. Platt, C.E. Schmidt, P. Coen, S. Malany, "Electrical pulse stimulation and compounds with anti-atrophic potential influence contractile response of patient-derived skeletal muscle cells in a microphysiological system", <u>Microphysiological Systems World Summit 2022</u>, New Orleans, LA, May 30 June 3, 2022.
- 249. Bousalis, D., A. Campbell [presenter], G. Agarwal, E. Nieves*, M. McCrary, S. Kolli*, Y.H. Song, C.E. Schmidt, "Technical Considerations and Recommendations for Assessment of Decellularized Tissues" (poster), <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, San Antonio, TX, Oct. 12-15, 2022.
- 250. Kasper, M., B.M. Smadi [presenter], A. Afridi*, M. Cydis*, Y. Li*, C.E. Schmidt, "Functional Tunability of a Hyaluronan-Protein Bioconjugate for Peripheral Nerve Applications" (poster), <u>Biomedical Engineering Society</u> (BMES) Annual Meeting, San Antonio, TX, Oct. 12-15, 2022.
- 251. Manousiouthakis, E. [presenter], S. Danis*, A. Evering*, E. Pallack*, L. Repmann*, N. Ordonez*, C.E. Schmidt, "Conductive Hyaluronic Acid Biomaterial for Extrusion 3D Bioprinting" (poster), <u>Biomedical Engineering Society</u> (BMES) Annual Meeting, San Antonio, TX, Oct. 12-15, 2022.

- 252. Pallack*, E. [presenter], E. Manousiouthakis, E. Rothi-Gonzalez, V. Chandran, G. Mitchell, C.E. Schmidt, "Differential Expression of Transcripts in Spinal Cord Injury for Development of a Biomimetic Testbed" (poster), <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, San Antonio, TX, Oct. 12-15, 2022.
- 253. Agarwal, G. [presenter], A. Campbell, A. Wanchoo, J. Fuhr*, O. Osborne*, B.G. Keselowsky, C.E. Schmidt, "Injectable and Immunomodulatory Hydrogels for Promoting Axonal Regeneration in Injured Spinal Cord" (poster), <u>Society for Biomaterials Annual Meeting</u>, San Diego, CA, April 19-22, 2023.
- 254. Manousiouthakis, E. [speaker], W.T. Stamps, R. Mishra, S. Danis*, D. Bousalis, A. Evering*, Q. Song, B.C. Bonning, D. Stanley, C.L. Goodman, C.E. Schmidt, "Toward Insect Gut Epithelia-on-a-Chip: 3D In Vitro Systems for Modeling the Invertebrate Gut Epithelium", <u>In Vitro Biology Meeting</u>, Norfolk, VA, June 10-15, 2023.
- 255. Agarwal, G. [speaker], S. Shumard*, O. Osborne*, S. Robles Blasini*, M.W. McCrary, J. Mojica Santiago, B. Ausec*, C.E. Schmidt, "Decellularized and Crosslinked Porcine Peripheral Nerve Based Hydrogel for Neural Tissue Regeneration", <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, Seattle, WA, October 12, 2023.
- 256. Manousiouthakis, E. [speaker], E. Pallack*, V. Subramaniam, I. Zmirska*, E. Rothi-Gonzalez, V. Chandran. G. Mitchell, T.E. Angelini, C.E. Schmidt, "Resolving Differential Gene Expression After Therapeutic Hypoxia Treatment for Spinal Cord Injury for the Development of a Biomimetic Hydrogel", <u>Biomedical Engineering Society (BMES)</u> <u>Annual Meeting</u>, Seattle, WA, October 12, 2023.
- 257. Agarwal, G. [presenter], A. Campbell, A. Wanchoo, J. Fuhr*, S. Robles Blasini*, B.G. Keselowsky, P. Bose, C.E. Schmidt, "Localized Delivery of Indoleamine-2,3-dioxygenase (IDO)-Galectin 3 Fused Enzyme Using Decellularized Rat Sciatic Nerve for Axonal Regeneration in Injured Rat Spinal Cord" (poster), <u>Biomedical Engineering Society</u> (<u>BMES</u>) Annual Meeting, Seattle, WA, October 12, 2023.
- 258. Machado*, A. [presenter], A. Lysandrou II*, E. Manousiouthakis, V. Subramaniam, S. Kolli*, A. Evering*, T.E. Angelini, C.E. Schmidt, "Minimizing natural polymer bioink diffusion during embedded 3D bioprinting process for spinal cord tissue mimics" (poster), <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, Seattle, WA, October 12, 2023.
- 259. Samantha*, S. [presenter], G. Agarwal, S. Robles Blasini*, C.E. Schmidt, "Injectable Decellularized Porcine Peripheral Nerve Based Hydrogel for Schwann Cells Delivery in Injured Spinal Cord" (poster), <u>Biomedical</u> <u>Engineering Society (BMES) Annual Meeting</u>, Seattle, WA, October 12, 2023.

GRANT SUPPORT:

Current Support:

Title: Functionalized Enzyme Treatments for Dual-Targeting of Inflammation in Spinal Cord InjuryAgency: National Institutes of Health (NINDS)PIs: Schmidt, Keselowsky Co-I: BoseTotal Award: \$410,031Grant Number R21 NS123596Dates: 9/1/21 - 3/30/24

Title: Tissue-Engineered Electronic Nerve Interfaces (TEENI)Agency: National Institutes of Health (NINDS)PI: Judy, Co-Is: Schmidt, Rinaldi, OttoTotal Award: \$2,393,344Grant Number:Dates: 4/15/19 - 3

Grant Number: R01 NS111518 **Dates:** 4/15/19 - 3/31/24

Pending Support:

Title: Deployment Ready [ChABC-Gal3]3 and Injectable Human Peripheral Nerve Therapeutic for Spinal Cord Injury Agency: Department of Defense (DOD) / Dept. of the Army -- USAMRAA PI: Schmidt Co-I: Hudalla Total Request: \$750,314

Title: Brain on the Bench: Brain-mimic Models and Machine Learning to Characterize and Predict Mechanical Changes Associated with Acute Brain Injuries (Phase I)

Agency: W. M. Keck FoundationPI: PizziCo-Is: Schmidt, Murfee, Huang, ShickelTotal Request: \$150,00

 Title: Engineering Stabilized Chrondroitinase ABC Combination Therapies for Targeted Regeneration and Recovery following Chronic SCI

 Agency: Craig Neilsen Foundation

 PI: Schmidt
 Co-I: Hudalla

 Total Request:
 \$547,000

 Last updated: December 15, 2023

Past Support:

| <u>Past Support</u> : | | | |
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| • | cytes in Microgravity: An In Vitro Model to Evaluate Therapeutics to | | |
| Counteract Muscle Wasting | | | |
| Agency: National Institutes of Health (NCATS | | | |
| PI: Malany, Co-I: Schmidt | Grant Number: UH3 TR002598 | | |
| Total Award (Schmidt): \$576,435 | Dates: 9/1/20 - 8/31/23 | | |
| Title: 3d-Printed Multicomponent and Spati | al Temporal Model of Spinal Cord Injury | | |
| Agency: Florida Department of Health | | | |
| PI: Schmidt | Grant Number: P01 81008 | | |
| Total Award (Schmidt): \$48,000 | Dates: 8/16/20 - 12/31/22 | | |
| Title: 3D Cell Culture modeling of the Spode | optera frugiperda (Sf) midgut epithelium | | |
| Agency: CAMTech | | | |
| PI: Schmidt | Grant Number: P01 52195 | | |
| Total Award (Schmidt): \$59,863 | Dates: 7/1/20 - 12/31/22 | | |
| Title: Combination of Secretome from Elect | rically Stimulated ASCs and Injectable ECM Scaffolds as Potential | | |
| SCI Therapy | | | |
| Agency: National Institutes of Health (NINDS) | | | |
| PI: Schmidt, Co-Is: March, Patrick | Grant Number: R21 NS111398 | | |
| Total Award (Schmidt): \$419,375 | Dates: 3/15/19 - 2/28/22 | | |
| Title: Engineering Tissue Mimics to Investig | ate Congenital Heart Disease | | |
| Agency: National Institutes of Health (NICHD) | 8 | | |
| PIs: Schmidt, Kasahara | Grant Number: R21 HD090608 | | |
| Total Award: \$407,229 | Dates: 2/1/17 - 1/31/20 | | |
| Title. Harnessing the Power of Anontosis to | Create Regenerative Acellular Biologic Scaffolds | | |
| Agency: National Science Foundation | Create Regenerative Accinital Diologic Scanolus | | |
| PI: Schmidt | Grant Number: CBET 1605223 | | |
| Total Award: \$299,998 | Dates: 8/1/16 - 7/31/19 | | |
| | | | |
| Title: Tissue-Engineered Electronic Nerve In Agency: Defense Advanced Research Projects | | | |
| PI: Judy (UF ECE), Co-Is: Schmidt, Otto | Grant Number: DARPA-14-30-AS-HAPTIX-FP-014 | | |
| Total Award: \$2,553,117 | Dates: 9/16/15 -3/31/19 | | |
| | to Mimia Inium | | |
| Title: Engineering In Vitro ECM Test Beds t Agency: National Institutes of Health (NINDS) | | | |
| PI: Schmidt | Grant Number: R21 NS096330 | | |
| Total Award: \$400,548 | Dates: 2/1/16 - 1/31/19 | | |
| | | | |
| | Schwann cell transplantation efficacy following spinal cord injury | | |
| Agency: Conquer Paralysis Now (CPN) Challe PI: Bunge (U. Miami), Co-I: Schmidt | nge, Collaboration Award | | |
| Total Award: \$100,000 | Dates: 12/1/16 - 11/30/18 | | |
| | | | |
| Title: Magnetically Templated Regeneration | | | |
| Agency: National Institutes of Health (NINDS) | Grant Number: R21 NS093239 | | |
| PI: Rinaldi (UF BME), Co-I: Schmidt Total Award: \$400,979 | Dates: 7/1/15 - 6/30/18 | | |
| , | | | |
| Title: Development of Multiferroic Nanocom | posites for 3D Electroactive Cell Scaffolds | | |
| Agency: National Science Foundation | Course Normal and DMD 14105(4 | | |
| PI: Andrew (UF MSE), Co-PI: Schmidt Total Award: \$390,000 | Grant Number: DMR 1410564 Dates: 7/15/14 - 6/30/18 | | |
| | | | |
| Title: Hydrogels and Oligonucleotide Hybridization for Sustained Delivery of Small Molecule Therapeutics | | | |
| Agency: National Science Foundation Bis Schwidt, Co. Bis Ellipston (UT Austin) — Cront Number: CDET 1255712 | | | |
| PI: Schmidt, Co-PI: Ellington (UT Austin) | Grant Number: CBET 1355713 | | |
| Total Award: \$600,751 | Dates: 8/1/12 - 7/31/17 | | |
| | | | |

| Title: Engineering Tissue Mimics to Investiga Agency: University of Florida Opportunity Fun PI: Schmidt, Co-I: Kasahara (UF COM) Total Award: \$85,000 | 8 | |
|---|--|--|
| Title: Novel Acellular Grafts with PTP-sigma Agency: Craig Neilsen Foundation | Receptor Inhibition after SCI | |
| PI: Schmidt Total Award: \$300,000 | Grant Number: 222456 Dates: 6/1/12 - 2/28/16 | |
| Title: 3D Acellular Vascular Beds: Character Agency: National Institutes of Health (NIBIB) | rization and Re-endothelialization | |
| PI: Schmidt, Co-I: Suggs Total Award: \$394,942 | Grant Number: R21 EB013358 Dates: 4/1/11 - 3/31/15 | |
| Title: Crystal Templated Polysaccharide Hyd Agency: National Science Foundation | | |
| PI: Schmidt Total Award: \$655,000 | Grant Number: DMR 0805298 Dates: 8/15/08 - 7/31/14 | |
| Title: Hydrogel Systems for Purification and Agency: National Institutes of Health (NINDS) | Differentiation of Mid-Brain NPCs | |
| PI: Schmidt Total Award: \$399,412 | Grant Number: R21 NS074162 Dates: 9/1/11 - 8/31/14 | |
| Title: Neurotrophin Delivery Using Injectable Agency: Mission Connect PI: Grau (Texas A&M), Co-I: Schmidt Total Award: \$50,000 | e Hydrogels for Increased Plasticity after Spinal Cord Injury Dates: 10/1/12 - 9/31/13 | |
| complication of adhesion or tethering betwee Agency: National Institutes of Health PI: Schmidt | | |
| Total Award (Schmidt): \$220,088 | Dates: 4/1/12 - 3/31/14 Films to Address the Postsurgical Complication of Adhesion, or | |
| Tethering Between Opposing Tissue Surfaces Agency: Alafair Biosciences PI: Schmidt | | |
| Total Award: \$120,000 | Dates: 12/1/11 - 11/30/13 | |
| Title: Decellularized Graft for Improved Ang Agency: Remeditex PI: Schmidt | jiogenesis | |
| Total Award: \$571,396 | Dates: 1/20/12 - 2/19/14 | |
| Title: Development of Lung Tissue for Vascu Agency: Gillson-Longenbaugh Foundation PI: Schmidt | larized Tissue Scaffolds | |
| Total Award: \$50,000 | Dates: 6/1/11 - 5/30/12 | |
| Title: Development of Lung Tissue for Vascu Agency: Anderson Charitable Foundation PI: Schmidt | larized Tissue Scaffolds | |
| Total Award: \$50,000 | Dates: 7/1/11 - 6/30/12 | |
| Title: "Direct Write" Techniques to Create Submicron, Arbitrary Protein Structures in Hyaluronan Hydrogels Agency: National Science Foundation | | |
| PI: Schmidt, Co-PI: Shear Total Award: \$495,722 | Grant Number: CBET 0829166 Dates: 9/1/08 - 5/31/12 | |

| Title: Anti-adhesion barrier validation in rat peritoneal model Agency: University Medical Center at Brackenridge, Seton Medical Center PI: Peterson, Co-I: Schmidt | | | | |
|--|--|--|--|--|
| Total Award: \$45,000 | Dates: 5/21/11 - 5/21/12 | | | |
| Title: Neural Progenitor Cell (NPC) Differentiation in 3D HydrogelsAgency: Gillson-Longenbaugh FoundationPI: SchmidtTotal Award: \$50,000Dates: 6/1/10 - 5/30/11 | | | | |
| Title: Neural Progenitor Cell (NPC) Differentiation in 3D Hydrogels Agency: Anderson Charitable Foundation PI: Schmidt | | | | |
| Total Award: \$50,000 | Dates: 7/1/10 - 6/30/11 | | | |
| Title: 2010 Biomedical Engineering Society I Agency: National Science Foundation PI: Schmidt | | | | |
| Total Award: \$17,000 | Dates: 8/1/10 – 7/31/11 | | | |
| Title: Fabrication of Novel Biomimetic Polyn Agency: National Institutes of Health (NIBIB) PI: Schmidt Total Award: \$ 1,051,393 | ners Using Combinatorial Peptide Screening Technologies Grant Number: R01 EB004529 Dates: 7/1/05 - 6/30/10 | | | |
| Title: Micro- and Nano-mechanical and Che Agency: National Institutes of Health (NIBIB) PI: Schmidt, Co-I: Chen Total Award: \$ 397,220 | mical Guidance of Neurons Grant Number: R21 EB003416 Dates: 9/1/07 - 8/30/10 | | | |
| Title: MRI-R2: Acquisition of High Resolution Environmental Scanning Electron Microscope (ESEM) for Characterization of Hydrogels, Nano-/Micro-Structures, & Cell-Material Interfaces Agency: National Science Foundation PI: Schmidt, Co-PIs: Roy, ShearGrant Number: CBET 0959037 | | | | |
| Total Award: \$ 544,314 | Dates: 12/31/09 - 11/31/10 | | | |
| Title: MRI: Acquisition of a Time-of-Flight Se Agency: National Science Foundation | condary Ion Mass Spectrometer | | | |
| PI: Barbara, Co-PIs: Korgel, Schmidt, Zhu Total Award: \$ 698,600 | Grant Number: DMR 0923096 Dates: 8/1/09 - 7/30/10 | | | |
| Title: Novel In Situ Crystallization Patterning of 3D Hydrogels for Regeneration of Branched Nerve Networks Agency: Texas Higher Education Coordinating Board, Advanced Research Program PI: Schmidt | | | | |
| Total Award: \$ 150,000 | Dates: 6/1/08 - 5/31/10 | | | |
| Title: SBIR Phase I - Transcutaneous electrical stimulation of conductive polymers to promote nerve repairAgency: National Institutes of Health (SBIR Sub-contract from TDA Research, Inc.)Subcontract PI: SchmidtSubcontract Amount: \$ 40,000Dates: 10/1/08 - 10/1/10 | | | | |
| Title: Processing Human Nerve Tissue for In Agency: Buncke Clinic PI: Schmidt | nmunohistological Analysis | | | |
| Total Award: \$ 6,804 | Dates: 4/1/09 - 12/31/09 | | | |
| Title: Detection of Cytokine Secretion by Antibody-linked Hydrogel Grids Agency: Gillson-Longenbaugh Foundation | | | | |
| PI: Schmidt Total Award: \$ 65,250 | Dates: 7/1/09 - 6/30/11 | | | |

| tibody-linked Hydrogel Grids Dates: 7/1/2009 - 6/30/10 |
|--|
| Iolecules that Promote Nerve Growth y of Texas at Austin) Dates: 7/1/08 - 6/30/09 |
| exas System) |
| Dates: 7/1/08 - 1/31/09 |
| ng of 3D Hydrogels for Regeneration of Branched Nerve Networks |
| Dates: 7/1/08 - 6/30/09 |
| ng of 3D Hydrogels for Regeneration of Branched Nerve Networks |
| Dates: 7/1/08 - 6/30/09 |
| ion and Research Training) - Cellular and Molecular Imaging for Grant Number: DGE 0333080 Dates: 9/1/03 - 8/30/08 |
| lecular Mechanisms of Growth Cone Motility & Nerve Regeneration Grant Number: CBET 9733156 Dates: 6/1/97 - 5/31/03 |
| Promote Nerve Regeneration Grant Number: CBET 0336403 Dates: 6/1/02 - 5/31/06 |
| -dependent Mechanisms of Wound Healing |
| Grant Number: CBET 0500969 Dates: 6/1/05 - 5/31/08 |
| h) - Nanocrystal Quantum Dot Interfacing with Living Cells Grant Number: CBET 0303442 |
| Dates: 7/1/03 - 6/30/04 Dates: 10/1/01 - 6/31/02 |
| able Electrically Conducting Polymers for Nerve Regeneration Dates: 9/1/97 - 2/28/00 |
| |

| Title: CAREER Award Industrial Matching Agency: Sulzer Medica Corporation PI: Schmidt Total Award: \$ 25,000 | Funds Dates: 12/1/99 - 11/30/00 | | |
|--|---|--|--|
| Title: CAREER Award Industrial Matching Agency: LifeCell Corporation PI: Schmidt Total Award: \$ 25,000 | Funds Dates: 10/1/98 - 9/30/99 | | |
| Title: Quantitative Analysis of Neurite Outg Agency: Whitaker Foundation Total Award: \$ 331,313 | rowth in Response to an Electrical Stimulus PI: Schmidt Dates: 9/1/98 - 3/28/03 | | |
| Title: Development Award - Molecular Base Integrated Biomedical Engineering Education Agency: Whitaker Foundation Total Award: \$ 3,000,000 | d Diagnosis, Treatment, and Prevention of Disease: Vertically on and Research PI: Diller, Co-PIs: Kortum, Schmidt, Pandy Dates: 9/1/01 - 8/31/05 | | |
| Title: Electronic Nanoparticle-tissue Composites for Targeted Biomolecule DeliveryAgency: Texas Higher Education Coordinating Board, Advanced Research Program (ARP)PI: Schmidt, Co-PI: KorgelTotal Award: \$ 244,520Dates: 1/1/02 - 5/31/04 | | | |
| Title: Synthesis of a Biodegradable, Electric: Agency: Welch Foundation Total Award: \$ 150,000 | ally Conducting Polymer PI: Schmidt Dates: 6/1/02 - 5/31/05 | | |
| Title: SBIR Phase II - New Electrically Conducting Copolymers for Nerve Regeneration ApplicationsGrant Number: R44 NS041686Agency: National Institutes of Health (SBIR Sub-contract from TDA Research, Inc.)PI: Luebben, TDA Research, Inc., UT-Austin Subcontract PI: SchmidtTotal Award (subcontract): \$ 200,000Dates: 1/1/05 - 12/30/06 | | | |
| Title: SBIR Phase I - New Electrically Conducting Block Co-polymers for Nerve Regeneration Applications Agency: National Institutes of Health (SBIR Sub-contract from TDA Research, Inc.) PI: Luebben, TDA Research, Inc., UT-Austin Subcontract PI: Schmidt Total Award: \$ 100,000 (sub-award: \$ 28,000) Dates: 10/1/01 - 3/31/03 | | | |
| Title: SBIR Phase II - Ink-Jet Printed Nerve ConduitsAgency: National Institutes of Health (SBIR Subcontract from MicroFab, Corp.)PI: Hayes, MicroFab Corp., UT-Austin Subcontract PI: SchmidtTotal Award: \$ 107,500 (sub-award)Dates: 7/1/03 - 6/30/05 | | | |
| Title: SBIR Phase I - Microdispensing Technology for Bioabsorbable Polymer-Based Nerve Conduits Agency: National Institutes of Health (SBIR Subcontract from MicroFab, Corp.) PI: Hayes, MicroFab Corp., UT-Austin Subcontract PI : Schmidt Total Award: \$ 100,000 (sub-award: \$ 14,000) Dates: 10/1/01 - 8/31/02 | | | |
| Title: Neural Tissue Engineering Approache Agency: Gillson-Longenbaugh Foundation PI: Schmidt Total Award: \$ 644,500 | Dates: 6/1/99 - 5/30/08 | | |
| Title: Hyaluronan-based Interpenetrating Networks for Spinal Cord Injury RegenerationAgency: Anderson Charitable FoundationPI: SchmidtTotal Award: \$ 40,000Dates: 7/1/2007 - 6/30/2008 | | | |
| Title: Study protocol for evaluation and development of detergent treatment process for human peripheral nerve Grant Number: UTA06-101 Agency: Axogen Inc. (Sponsored Research Agreement) | | | |
| PI: Schmidt Total Award: \$ 49,311 | Dates: 1/1/06 - 9/30/06 | | |

| Last updated: December 15, 2023 | | C. Schmi |
|---|---|-----------------|
| Title: Use of Bioengineered Nerve Grafts fo Agency: David Van Wagener Spinal Cord Fun PI: Schmidt | nd | |
| Total Award: \$ 10,000 | Dates: 3/1/07 - 2/28/08 | |
| Title: Development of Human Acellular Gr Agency: Lone Star Paralysis Foundation PI: Schmidt | | |
| Total Award (subcontract only): \$ 10,000 | Dates: 1/1/06 - 12/30/06 | |
| Title: Ultrafast Nanoscale Optical Imaging Agency: The W.M. Keck Foundation PI: Shih | | |
| Total Award: \$1,100,000 | Dates: 1/1/99 - 5/31/00 | |
| Title: Research Intern Award Agency: The University of Texas at Austin, O PI: Schmidt | office of Graduate Studies | |
| Total Award: \$ 16,620 | Dates: 9/1/03 - 8/31/04 | |
| Title: Research Experience for Undergradu Agency: National Science Foundation PI: Schmidt | | |
| Total Award: \$12,000 | Dates: 1/30/01 – 5/31/03 | |
| Title: Endothelial Migration on SIS Tissue Agency: Cook Biotech Inc. (Sponsored Resea PI: Schmidt | rch Agreement) | |
| Total Award: \$8,277 | Dates: 7/1/02 - 6/30/03 | |
| Title: Cell Seeding and Analysis of Tissue-E Agency: Sulzer Innotec (Sponsored Research PI: Schmidt | Agreement) | |
| Total Award: \$ 70,000 | Dates: 6/1/96 -5/31/01 | |
| Title: Research Grant Development of Ar Agency: The University of Texas at Austin PI: Schmidt | ngiogenic Hydrogels for Nerve Regeneration Studies | |
| Total Award: \$ 6,000 | Dates: 12/1/00 - 8/31/01 | |
| Title: BME Seed Grant - Role of Neovascula Agency: BME Center at Texas Medical Cente PI: Narayana; Co-PIs: Patrick, Schmidt Total Award: \$20,000 | arizatin in Spinal Cord Injury: A Multidisciplinary A r (funded in part by Whitaker Foundation) Dates: 9/1/02 - 8/31/04 | Approach |
| | | |
| Title: Supplemental Grant for High School Electronic Nanoparticle Composites for Agency: Texas Higher Education Coordinatin PI: Schmidt, Co-PI: Korgel | or Targeted Biomolecule Delivery | |
| Total Award: \$3,600 | Dates: 5/1/03 - 7/1/03 | |

EDUCATION & TEACHING

PH.D. SUPERVISIONS COMPLETED (30 TOTAL):

| Name | Degree, Date, Fellowships | Thesis | Current Employment |
|-----------------------|---|--|--|
| Tyrell J. Rivers | PhD Chemical Engineering July 2, 2001 NIH Training Grant GEM Fellowship; UT Austin | "Design, Synthesis, and Characterization of a Novel Bio- degradable, Electrically Conducting Biomaterial" | Executive Director, Corporate Development AstraZeneca Gaithersburg, MD |
| Elizabeth J. Furnish | PhD Chemical Engineering July 16, 2001 NSF Graduate Research Fellowship; UT Austin | "The Role of Gelsolin Upregulation and Overexpression in Neurite Outgrowth for PC12 Cells" | Business Entrepreneur, Chandler, AZ |
| Terry W. Hudson | PhD Chemical Engineering April 21, 2003 NIH Training Grant; UT Austin | "Creation of Decellularized Nerve Tissue" | Denali Therapeutics San Mateo, CA |
| Jennie M. Baier Leach | PhD Chemical Engineering July 31, 2003 NIH Training Grant; UT Austin | "Hyaluronic Acid Hydrogel Biomaterials for Soft Tissue Engineering Applications" | Associate Professor Chemical & Biological Engineering Univ. Maryland-Baltimore County |
| Jessica O. Winter | PhD Chemical Engineering July 30, 2004 NSF Graduate Research Fellowship; NSF IGERT Fellowship; UT Austin | "Development and Optimization of Quantum Dot-Neuron Interfaces" | Distinguished Professor Chemical Engineering Ohio State University |
| Archit Sanghvi | PhD Biomedical Engineering May 18, 2005; UT Austin | "Phage Display Technology for Surface Functionalization of a Synthetic Biomaterial" | Regional Manager Pearl Hospitality Houston, TX |
| Natalia Gomez | PhD Chemical Engineering August 4, 2006; UT Austin | "Studies on Neuron Responses to Simultaneous & Competing Extracellular Cues" | Amgen Thousand Oaks, CA |
| Curt Deister | Ph.D. Chemical Engineering December 2006 NSF IGERT Fellowship; UT Austin | "Neurotrophic Factor Combinations & Extracellular Matrix-based Hydrogels for Nerve Regeneration" | Axogen, Inc. Alachua, FL |
| Scott Zawko | Ph.D. Chemical Engineering June 2008; UT Austin | "Modification of Hyaluronan Materials" | Kymanox Durham, NC |
| Nathalie Guimard | Ph.D., Chemistry, Dec. 2008; UT Austin | "Synthesis of Novel Biodegradable Electroactive Materials" | Smith and Nephew Zurich, Switzerland |
| Jonathan D. Nickels | Ph.D., Biomedical Engineering, December 2009; UT Austin | "Characterization and Applications of Affinity-based Surface Modification of Polypyrrole" | Associate Professor Chemical Engineering University of Cincinnati |
| Shalu Suri | Ph.D., Biomedical Engineering, February 2010; UT Austin | "Photopolymerizable Scaffolds of Native Extracellular Matrix Components for Tissue Engineering Applications " | Associate Director of the NSF Cell Manufacturing ERC, Georgia Institute of Technology |
| Jae Lee | Ph.D., Chemical Engineering, May 2010; UT Austin | "Electroconductive Neural Interfaces for Neural Tissue Applications" | Associate Professor Gwangju Institute of Science & Technology, Korea |

| Name | Degree, Date, Fellowships | Thesis | Current Employment |
|---------------------------|--|--|---|
| Stephanie K. Seidlits | Ph.D., Biomedical Engineering, May 2010 NSF IGERT Fellowship; UT Austin | "Defined Hydgrogel Microenvironments for Optimized Neuronal Culture" | Associate Professor Biomedical Engineering University of Texas, Austin |
| Leandro Forciniti | Ph.D., Chemical Engineering, May 2011; UT Austin | "Directing Neuronal Behavior Via Polypyrrole Based Conductive Biomaterials" | Becton Dickinson Franklin Lakes, NJ |
| John Fonner | Ph.D., Biomedical Engineering, Aug 2011; UT Austin | "Molecular Investigation of Polypyrrole and Surface Recognition by Affinity Peptides" | Texas Advanced Computing Center Austin, TX |
| Eric Spivey | Ph.D., Biomedical Engineering, April 2012; UT Austin | "Multiphoton Lithography Of Mechanically And Functionally Tunable Hydrogels" | Research Assistant Professor, Vanderbilt University |
| Hieu Nguyen | Ph.D., Biomedical Engineering, Dec. 2012 NDSEG Graduate Fellowship; UT Austin | "Controlling neural cell behavior with electric field stimulation across a conductive substrate" | Research Scientist University of Texas at Austin |
| Sarah Mayes | Ph.D., Biomedical Engineering, May 2013; UT Austin | "Hyaluronic Acid and Alginate Blend Hydrogel Films for the Prevention of Postsurgical Adhesions" | Chief Scientific Officer and Co- Founder, Alafair Biosciences Austin TX |
| Ryan Nagao | Ph.D., Biomedical Engineering, May 2013; UT Austin | "Creation of an Optimized Acellular Scaffold or Improved Vascular Engineering" | Nova Nordisk Seattle, WA |
| Richelle Thomas | Ph.D., Chemical Engineering, December 2013; UT Austin | "Novel Templating of Three Dimensional Hyaluronic Acid Soft Tissue Scaffolds" | Owens Corning, OH |
| Sydney Geissler | Ph.D., Biomedical Engineering, August 2014; NSF Graduate Research Fellowship; UT Austin | "Natural Biomaterials for Enhanced Oligodendrocyte Differentiation and Spinal Cord Injury Repair" | Straumann Group Basel, Switzerland |
| Derek Hernandez | Ph.D., Chemical Engineering, August 2014; UT Austin | "Micron scale three-dimensional printing techniques to modulate chemical, mechanical, and topographical cues for cell applications" | ION Biosciences San Marcos, TX |
| R. Chase Cornelison | Ph.D., Chemical Engineering, August 2015; UT Austin | "Injectable Peripheral Nerve Matrix for Spinal Cord Injury Repair" | Assistant Professor, Biomedical Engineering, University of Massachusetts, Amherst |
| Nikunj Agrawal | Ph.D., Biomedical Engineering, Dec. 2018; Univ. of Florida | "Biomaterial Platforms Engineered for Controlled Release of Small Molecule Therapeutics in Spinal Cord Injury Applications" | Product Development Engineer, Axogen, Inc. Alachua, Florida |
| Christopher Lacko | Ph.D., Biomedical Engineering, Dec. 2018; Univ. of Florida | "Magnetically Templated Scaffolds: A Novel Tissue Engineered Hydrogel for Peripheral Nerve Injury Repair" | Integra LifeSciences Scotch Plains, New Jersey |
| Benjamin Spearman | Ph.D., Biomedical Engineering, Dec. 2019; Univ. of Florida | "Advanced Uses for Methacrylated Hyaluronic Acid in Peripheral Nerve Tissue Engineering" | Product Development Engineer, Axogen, Inc. Alachua, Florida |
| Michaela Mertz McCrary | Ph.D., Biomedical Engineering, May 2020; Univ. of Florida | "Development of Spinal Cord Injury In Vitro Model Systems and In Vivo Therapeutic Strategies" | DHHS/NIH/NCI Technology Transfer Center (TTC) Fellow Washington DC |
| Deanna Bousalis | Ph.D., Biomedical Engineering, May 2021; Univ. of Florida | "Decellularized Tissues as Platforms for Disease Understanding and Therapeutic Development" | Center for Devices and Radiological Health at FDA Washington DC |
| Mary Kasper | Ph.D., Biomedical Engineering, May 2022; Univ. of Florida | "Engineering Bioactive Hyaluronan- Based Hydrogel Scaffolds for Peripheral Nerve Applications" | Aqua Cultured Foods Chicago, IL |

M.S. THESIS SUPERVISIONS COMPLETED (13 TOTAL):

Joel Collier, Biomedical Engineering, UT Austin, Graduated Aug. 1998.

Current Employment: Theodore Kennedy Professor, Biomedical Engineering, Duke University.

John Carnagey, Chemical Engineering, UT Austin, Graduated Dec. 1999.

- Prachi Dixit, Chemical Engineering, UT Austin, Graduated May 1999.
- Julie Fischbeck, Chemical Engineering, UT Austin, Graduated August 1999.
- Aruna Kotwal, Chemical Engineering, UT Austin, Graduated Dec. 1999.
- Francisco Serna, Biomedical Engineering, UT Austin, Graduated May 2007.
- Mike Hixson, Biomedical Engineering, UT Austin, Graduated December 2001.
- Shangjing Xin, Biomedical Engineering, University of Florida, Graduated May 2015.
- Alex Hyyti, Biomedical Engineering, University of Florida, Graduated Dec. 2014.
- Brittany Russ, Biomedical Engineering, University of Florida, Graduated May 2016.
- Jonathan Griffin, Biomedical Engineering, University of Florida, Graduated August 2018.
- Nicole Bohmann, Biomedical Engineering, University of Florida, Graduated May 2020.
- Bryan Ibarra, Biomedical Engineering, University of Florida, Graduated August 2021.

POSTDOCTORAL AND RESEARCH ASSOCIATE SUPERVISIONS COMPLETED (16 TOTAL):

Jeff Moehlenbruck (Postdoctoral Associate), Ph.D. Neurobiology, University of Texas at Austin, 1996 -1997.
Joo-Woon Lee (Postdoctoral Associate), Ph.D. Analytical Chemistry, SUNY Buffalo, NY, Fall 2004-2006.
Eduardo Pena (Postdoctoral Associate), Ph.D., Materials Science, Spring 2008 – Spring 2009.
Scott Zawko (Postdoctoral Associate and Research Associate), Ph.D. Chemical Engineering, UT Austin, Summer 2008 – 2010, Spring 2012 – May 31, 2013, respectively. *Current Employment*: Kymanox, Durham, NC
Diana Guiterrez (Research Associate), Ph.D. Chemistry, University of York, England, Sept. 1, 2010 – June 30, 2014. *Current Employment*: Assistant Professor, Lancaster University.
Hyma Durgam (Research Associate/Lab Manager), M.S. Biology, Osmania University, India, Oct. 2000-May 31, 2013.
Zin Khaing (Postdoctoral Associate and Research Assistant Scientist), Ph.D. Neurobiology, Mount Sinai School of Medicine, New York, NY, Spring 2006 – Sept. 2014. *Current Employment*: Research Professor, Univ. Washington.
Sydney Geissler (Postdoctoral Associate), Ph.D. Biomedical Eng., UT Austin, Sept. 2014 – Dec. 2014. *Current Employment*: Straumann Group, Basel, Switzerland

Rebecca Wachs (Postdoctoral Associate), Ph.D. Biomedical Eng., RPI, Troy NY, July 1, 2014 – Nov. 2016. *Current Employment*: Assistant Professor, University of Nebraska.

- Sahba Mobini (Postdoctoral Associate), Ph.D. Biomedical Eng., Amirkabir Univ. of Technology, Sept 2016 Sept. 2018. *Current Employment:* Faculty, Cuenta oficial del Consejo Superior de Investigaciones Científicas (CSIC)
- Stacy Porvasnik (Research Associate/Lab Manager), M.S., Medical Sciences, March 2013 March 2019.
- Young Hye Song (Postdoctoral Associate), Ph.D. Biomedical Eng., Cornell, July 2016 June 2019.
- Current Employment: Assistant Professor, University of Arkansas.
- Nora Hlavac (Postdoctoral Associate), Ph.D. Biomedical Engineering, Virginia Tech, January 2019-June 2021. *Current Employment*: STEM Director, Charleston County School District, South Carolina.
- Jorge Alexis Mojica Santiago (Postdoctoral Associate), Ph.D. Biomedical Engineering, Cornell, July 2018-2022. *Current Employment*: 3D Systems, Houston, Texas.

Eleana Manousiouthakis (Postdoctoral Associate), Ph.D. Biomedical Engineering, Tufts, November 2019-present.

PH.D. SUPERVISIONS IN PROGRESS (2 TOTAL):

Alexander Lim, Biomedical Engineering

Allison Campbell, Biomedical Engineering

POSTDOCTORAL AND RESEARCH ASSOCIATE SUPERVISIONS IN PROGRESS (2 TOTAL):

Blanca Ostmark (Research Associate/Lab Manager), B.S., Agriculture/ Plant Science, May 2019-present.

Gopal Agarwal (Postdoctoral Associate), Ph.D. Biotechnology, National Institute of Pharmaceutical Education and Research-Ahmedabad, India, January 2022-present.

UNDERGRADUATE STUDENT RESEARCH SUPERVISIONS (200+ TOTAL OVER CAREER)

STUDENT RESEARCH AWARDS AND HONORS (SELECTED): Graduate Students and Postdocs:

Selected Participant and Travel Award, Nathalie Guimard, European School of Nanosciences and Nanotechnology (ESONN) 2006 Summer School Grenoble, France, Aug. 28-Sept. 16, 2006.

Graduate Student GOLD Research Award, Jessica Winter, MRS Annual Fall Meeting, Boston, Dec. 1-5, 2003.
 Graduate Student Research Award, Jessica Winter, BMES Annual Fall Meeting, Nashville, October 1-4, 2003.
 Graduate Student Travel Awards, Archit Sanghvi, BMES Annual Fall Meeting, Nashville, October 1-4, 2003; Shalu Suri, BMES Annual Fall Meeting, St. Louis, MO, October 2008.

Doh Wonsuk Memorial Award for Research, U.S. Chapter of Korean Institute of Chemical Engineering: Jae Lee, 2009. 60th Interdisciplinary Meeting of Nobel Laureates, Leandro Forciniti, Lindau, Germany, Summer, 2010.

Acta Student Award for manuscript: "Photopatterned collagen-hyaluronic acid interpenetrating polymer network hydrogels", Shalu Suri, 2010.

Baxter Early Career Development Award, Stephanie Seidlits, 2010.

Second Place, Most Outstanding Poster, First Annual Translational Neuroscience Symposium (NeuroTexas Institute Research Foundation, St. David's HealthCare), Sydney Geissler, Spring 2011.

International Research Fellowship Award, ICMR (International Center for Materials Research), Richelle Thomas, 2011. National Science Foundation Graduate Research Fellowship, Sydney Geissler, 2011.

Fulbright Scholarship, Richelle Thomas, University of the West Indies in Barbados, Summer 2012.

Burroughs Wellcome Collaborative Research Travel Grant, Richelle Thomas, U. West Indies (Barbados), Summer 2012.

Burroughs Wellcome Collaborative Research Travel Grant, Craig Milroy, Univ. Wollongong (Australia), Summer 2012.

NSF East Asia Pacific Summer Institutes (EAPSI) award, Craig Milroy, Univ. Wollongong (Australia), Summer 2012.

Whitaker International Summer Grant, Univ. Wollongong (Australia), Craig Milroy, Summer 2012.

BMES Innovation and Career Development Award, Dr. Zin Khaing, Fall 2013.

BMES Innovation and Career Development Award, Dr. Becky Wachs, Fall 2014.

National Science Foundation Graduate Research Fellowship, Benjamin Spearman, 2016.

UF Outstanding International Student Award, Nik Agrawal, 2017.

UF BME Department Excellence Award for Postdocs, Dr. Young Hye Song, 2018.

NIH F31 Research Grant Award, Deanna Bousalis, 2019.

UF BME Graduate Student Excellence Award, Deanna Bousalis, 2020.

UF BME Department Excellence Award for Postdocs, Dr. Nora Hlavac, 2020.

Breathing Research and Therapeutics (BREATHE) Postdoctoral Fellowship, Dr. Eleana Manousiouthakis, 2022.

Best Overall Presentation Award, 37th Southern Biomedical Engineering Conference, Dr. Eleana Manousiouthakis, 2022. UF BME Department Excellence Award for Postdocs, Dr. Gopal Agarwal, 2023.

Undergraduate Students:

Undergraduate Research Fellowship (URF) (\$1000 Grant for Research Project), UT-Austin:

M. Velasquez (1998–99); K. Wouters (1998–99); J. Camp (1998–99; 1999-00); E. Askenasy (1999–00; 2000-01); N. Porbandarwalla (2000–01; 2001–02); K. Larsen (2000–01); G. Hwang (2000–01); T. Liu (2000–01); A. Wentz (2001–02); L. Humphries (2001-02); K. Lee (2002-03); C. Collins (2002-03); S. Lundy (2004-05); S. Hsu (2004-05); P. Hossain (2004-05; 2005-06); R. Rosenberger (2004-05; 2005-06); R. Lee (2005-06); M. Jen (2005-06; 2006-07); J. Tang (2006-07); T. Shu (2006-07); C. Smid (2006-07); K. McKarty (2006-07); Z. Bevis (2007-08); B. Fechtel (2007-08); Candice Massingill (2007-08); J. Heisler (2007-08); S. Huyhn (2007-08); I. Buchanan (2007-08); J. Syeda-Nawaz (2007-08); Y. Kou (2007-08).....

Undergraduate Research Poster Presentation Award, Dept. of Chemical Engineering, UT-Austin: P. Dixit (Sp '97); J. Camp (Sp '98); R. Thakar (Fa '99); E. Askenasy (Sp '00); K. Larsen (Sp '00)

Undergraduate Research Poster Presentation Award, Dept. of Biomedical Engineering, UT-Austin:

J. Smith (Fa '06); P. Hossain (Fa '06)

Univ. Co-op/George H. Mitchell Award for Academic Excellence in UG Research, UT: S. Lundy (Sp'05, \$5000 Award) Beckman Research Scholar, UT-Austin: Yafei Ouyang (2011, \$19,000 Award)

Biomedical Engineering Summer Fellowship, UT-Austin: Brian Milman (Summer 2011, \$4000 Award)

Whitaker International Summer Grant, Ross Malik, Universidad Carlos III de Madrid (Spain), Summer 2012.

13th NSF International Summer School on Biocomplexity, Biodesign and Bioinnova: from Gene to System, Istanbul, Turkey, Alex Sabin, Summer 2014

University Scholars Award, University of Florida, Alex Sabin and Jay Park, 2014-2015.

National Science Foundation Graduate Research Fellowship, Philip Vu, 2014.

National Science Foundation Graduate Research Fellowship, Ella Hoogenboezem, 2017.

Attribute of a Gator Engineering Award, Ella Hoogenboezem, 2017.

McNair Scholarship, Tran Ngo, 2019.

National Science Foundation Graduate Research Fellowship, Monica Wall, 2019. *C. William Hall Scholarship and BME UG Excellence Award*, Tran Ngo, 2020.

UF BME UG Student Excellence Award, Kata Alilovic, 2020.

Best Student Presentation Award, 37th Southern Biomedical Engineering Conference, Emily Pallack, 2022. Goldwater Scholarship, Emily Pallack, 2022.

National Science Foundation Graduate Research Fellowship, Tran Ngo, 2022.

3rd Place Oral Presentation, 48th Annual National Society of Black Engineers (NSBE) Conf., Ashley Evering, 2022. National Science Foundation Graduate Research Fellowship, Emily Pallack, 2023.

PH.D. THESIS COMMITTEES:

Over 80 committees during time at UT Austin; Over 50 committees to date at UF.

GRADUATE STUDIES (UT)/AFFILIATE (UF) COMMITTEE MEMBERSHIPS:

UT: Chemical Engineering, Molecular Biology, Biochemistry, Neuroscience, Materials Science UF: Chemical Engineering, Materials Science and Engineering

FORMAL COURSE INSTRUCTION:

Graduate School and Postdoctoral:

| 1991 | Teaching assistant and guest lecturer (Fluid Dynamics), U. Illinois |
|------------|---|
| 1992 | Teaching assistant (Unit Operations Laboratory), U. Illinois |
| 1993 | Teaching assistant (Independent Projects Laboratory), U. Illinois |
| 1991, 1995 | Guest lecturer (Graduate Cellular Bioengineering), U. Illinois, MIT |

Faculty (UT-Austin):

| Faculty (01-Austin). | |
|----------------------|---|
| Fall 1996 | CHE 354, Unit Operations I, 30 students |
| Spring 1997 | CHE 354, Unit Operations I, 41 students |
| Fall 1997 | CHE 379/384 (undergrad/grad), Cell and Tissue Engineering, 52 students |
| Spring 1998 | CHE 354, Unit Operations I, 41 students |
| Fall 1998 | CHE 354, Unit Operations I, 44 students |
| Spring 1999 | CHE 354, Unit Operations I, 35 students |
| Fall 1999 | CHE 379/384, BME 385 (undergrad/grad), Cell and Tissue Engineering, 42 students |
| Spring 2000 | CHE 354, Unit Operations I, 72 students |
| Fall 2002 | BME 314, Engineering Foundations of BME, 9 students |
| Spring 2003 | BME 379/385, CHE 384 (undergrad/grad), Cell and Tissue Engineering, 42 students |
| Spring 2004 | BME 314, Engineering Foundations of BME, 58 students |
| Fall 2004 | BME 379/CHE 379 (undergraduate only), Cell and Tissue Engineering, 26 students |
| Spring 2005 | BME 314, Engineering Foundations of BME, 40 students |
| Fall 2005 | BME 382J (graduate only), Cell and Tissue Engineering, 7 students |
| Spring 2006 | BME 314, Engineering Foundations of BME, 37 students |
| Fall 2006 | BME 379/CHE 339T, Cell and Tissue Engineering, 73 students |
| Spring 2007 | BME 314, Engineering Foundations of BME, 30 students |
| Fall 2007 | BME 379/CHE 339T, Cell and Tissue Engineering, 55 students |
| Spring 2008 | BME 301, World Health and Biotechnology, 50 students |
| Spring 2009 | BME 301, World Health and Biotechnology, 60 students |
| Fall 2009 | BME 379/CHE 339T, Tissue Engineering, 35 students |
| Spring 2010 | UGS 303 (Undergraduate Signature Course), Biotechnology and World Health, 50 students |
| Fall 2010 | BME 382J, Cell and Tissue Engineering, 14 students |
| Spring 2011 | UGS 303 (Undergraduate Signature Course), Biotechnology and World Health, 54 students |
| Fall 2011 | BME 379, Tissue Engineering, 42 students |
| Spring 2012 | UGS 303 (Undergraduate Signature Course), Biotechnology and World Health, 53 students |
| Fall 2012 | BME 382J, Cell and Tissue Engineering, 8 students |
| Faculty (UF): | |
| Fall 2013 | Guest Lecture in BME1008, Introduction to Biomedical Engineering |
| Fall 2013 | Guest Lecture in BCH4905, Science for Life |
| Fall 2014 | Guest Lecture in BME1008, Introduction to Biomedical Engineering |
| Fall 2015 | Guest Lecture in BME1008, Introduction to Biomedical Engineering |
| Fall 2016 | Guest Lecture in BME1008, Introduction to Biomedical Engineering |
| Fall 2019 | Guest Lecture in IDH3931, Bench to Market Regenerative Medicine, Honors Program |
| Fall 2020 | Guest Lecture in IDH3931, Bench to Market Regenerative Medicine, Honors Program |
| Spring 2023 | Guest Lecture in IDH3931, Bench to Market Regenerative Medicine, Honors Program |
| | |

TEACHING AND MENTORING HONORS AND AWARDS:

| I EACHING AND MENT | OKING HONOKS AND AWAKDS. |
|--------------------|--|
| 1991 & 1992 | University of Illinois Excellence in Teaching Award |
| June 1996 | NSF Engineering Education Scholar, Carnegie Melon University |
| 1998 | Lockheed Martin Departmental Teaching Award |
| 1998 | Halliburton/Brown and Root Young Faculty Excellence Award |
| 1999 | James W. Vick Texas Excellence Award for Academic Advising |
| 2000 & 2001 | Nominee for Friar Centennial Teaching Fellowship |
| 2000 | Lockheed Martin College of Engineering Award for Outstanding Engineering Teaching by an |
| | Assistant Professor |
| 2000 | Faculty Appreciation Award in Recognition of Commitment to Excellence in Teaching, Student |
| | Engineering Council |
| 2001 | Invited "Rising Star" panelist for "A Galaxy of Stars" Future Directions in Chemical Engineering |
| | Education Panel, American Society of Engineering Education (ASEE) Annual Meeting, |
| | Albuquerque, NM, June 26, 2001. |
| 2002 | El Paso Energy Foundation Faculty Achievement Award for Teaching Excellence |
| 2014 | Women's Initiatives Committee's (WIC) Mentorship Excellence Award, AIChE |
| | |

EDUCATIONAL-RELATED INVITED TALKS, PANELS, AND TUTORIALS:

Schmidt, C.E., "Preparing for an Academic Career", ASEE Student Chapter, University of Texas at Austin, Fall 1998.

- Panel member, "A Galaxy of Stars" Panel on "Future Directions in Chemical Engineering Education", <u>American Society of</u> <u>Engineering Education (ASEE) Annual Meeting</u>, Albuquerque, NM, June 26, 2001.
- Schmidt, C.E. "Interdisciplinary Graduate Student Education: IGERT Optical Molecular Bio-Engineering Program at the University of Texas", <u>Association of American Medical Colleges (AAMC) Graduate</u>, Research, and Education (<u>GREAT</u>) Group Annual Meeting, Austin, TX, April 24, 2004.
- Speaker and Panel Participant, "Negotiating the Ideal Faculty Position: A Workshop for Women in Engineering", <u>University</u> of Texas at Austin, October 2004.
- Schmidt, C.E. "Tutorial on Neural Engineering", Advances in Biomaterials, Bionanotechnology, Biomimetic Systems and Tissue Engineering: Tutorial Session II, <u>AICHE Annual Fall Meeting</u>, Austin, TX, Nov 7-12, 2004.
- Schmidt, C.E. "Interdisciplinary Graduate Student Training", <u>University of Texas Houston Graduate School of Biomedical</u> <u>Sciences (GSBS)</u> Faculty Retreat (invitation from Dean of GSBS), Clear Lake, TX, May 13, 2006.
- Schmidt, C.E. "Insights into Mentoring/Teaching Students in the Lab and the Classroom", Graduate Student Chalk Talk, <u>Biomedical Engineering, Duke University</u>, Durham, NC, Sept. 14, 2006.
- Schmidt, C.E. "Ethical Responsibilities in an Academic Career", <u>NSF IGERT (Integrative Graduate Education and Research Training)</u> Program in Cellular and Molecular Imaging for Diagnostics and Therapeutics, Ethics Seminar Series, Austin, TX, 2006, 2007.
- Schmidt, C.E. "Juggling Motherhood and a Career in Bioengineering" Panel Speaker, <u>Women in BMES Luncheon</u>, <u>Biomedical Engineering Society Annual Meeting</u>, Austin TX, Oct. 8, 2010.
- Schmidt, C.E. "Small, Simple Steps to Survival and Success". Invited Keynote Lecture, <u>Women's Initiatives Committee</u> (WIC) Luncheon, American Institute of Chemical Engineers (AIChE) Annual Meeting, Minneapolis, MN, Oct 17, 2011.
- Schmidt, C.E. "Small, Simple Steps to Survival and Success", <u>Graduate Women in Biomedical Engineering Group</u>, <u>University of Minnesota</u>, St. Paul, MN, September 28, 2015.
- Schmidt, C.E. "Small, Simple Steps to Survival and Success", <u>Women in Biomedical Engineering Group, RPI</u>, Troy, NY, April 14, 2016.
- Schmidt, C.E. "Balancing Academic Pressures & Research Creativity: It's All About T&P (and, that's not Tenure and Promotion!)", Invited Speaker and Panelist for "Round Table Panel Discussion: Life-long learning", <u>World Biomaterials</u> <u>Congress</u>, Montreal, Canada, May 20, 2016.
- Schmidt, C.E., "Picture a Scientist: Building Diversity in Academia", Invited Speaker and Panelist, <u>Anti-Racism and Equity</u> <u>Spring Plenary Symposium, Pitt Senate Research Committee, University of Pittsburgh,</u> Virtual Platform, April 8, 2021.

OTHER MAJOR EDUCATIONAL EFFORTS:

2000 - 2003One of key faculty involved with implementing new Biomedical Engineering Department at
UT-Austin and developing new undergraduate BME curriculum

CONTINUING EDUCATION INSTRUCTION:

| Aug. 1997- 1999, 2004 | Guest Faculty: "Engineering Strategies for Nerve Regeneration", Continuing Education |
|-----------------------|--|
| - | Course "Advances in Tissue Engineering", Rice Univ., Houston, TX. |
| March 2005 | Guest Faculty: "Nerves and Tissue Engineering", Tissue Engineering Symposium: An |
| | ISAKOS Approved Course, Wake Forest University Medical School, Winston-Salem, NC. |

EDUCATIONAL WORKSHOP & PANEL PARTICIPATION: NSF Engineering Education Scholars Workshop; Pittsburgh, PA June 1996 August 1996 ASPEN Process Simulation Course, Cambridge, MA **EDUCATIONAL-RELATED GRANT SUPPORT:** Title: IGERT (Integrative Graduate Education and Research Training) - Cellular and Molecular Imaging for **Diagnostics and Therapeutics** Agency: National Science Foundation PI: Peppas (previously, Richards-Kortum), Co-PIs: Schmidt, Broadbelt Dates: 9/1/03 - 8/30/08 Total Award Amount: \$3,871,200 Title: Development Award - Molecular Based Diagnosis, Treatment, and Prevention of Disease: Vertically **Integrated Biomedical Engineering Education and Research** Agency: Whitaker Foundation PI: Diller, Co-PIs: Kortum, Schmidt, Pandy Dates: 9/1/01 - 8/31/05 Total Award Amount: \$ 3,000,000 Title: Supplemental Grant for High School Science & Math Teachers Agency: Texas Higher Education Coordinating Board PI: Schmidt, Co-PI: Korgel Dates: 5/1/03 - 7/1/03 **Total Award Amount: \$3,600** Title: CAREER Award - Understanding the Molecular Mechanisms of Growth Cone Motility & Nerve Regeneration Agency: National Science Foundation **PI:** Schmidt Dates: 6/1/97 - 5/31/03 Total Award Amount: \$ 272,000

LEADERSHIP, ADMINISTRATION & SERVICE

ADMINISTRATIVE APPOINTMENTS AND LEADERSHIP ACCOMPLISHMENTS:

University of Florida:

Department Chair, Biomedical Engineering, Jan. 1, 2013 - May 15, 2023

- More than doubled faculty size by hiring 22 faculty members
- More than tripled department staff size from 5 to 21
- Increased number of women faculty in BME from 2 to 16 (department 55% women faculty in 2023)
- Increased number of Black and Hispanic faculty from 1 to 7 (department 24% URM in 2023)
- Three to four-fold increase in research expenditures from 2013 to 2023
- Undergraduate BME program first became ABET accredited in Fall 2019
- UG program ranked #10 among public BME UG programs in 2023 (U.S. News & World Report, USNWR)
- Graduate program rank climbed ~30 spots total since 2013 (ranked #12 among public BME programs in 2023)
- Secured dedicated teaching labs and \$300K for Cell/Tissue Engineering Teaching Lab
- Introduced a new "BME alumni pinning" tradition for all BME graduates (also, a fundraising initiative)
- Created a new Industry Partners Program, with nine members participating in various levels of engagement; established cash fund resulting in over \$250k in philanthropic gifts
- Secured foundation gifts to support faculty research (\$350k; Adenbaum and Longenbaugh Foundations)
- Secured endowment for a new named professorship (\$1M; Integra LifeSciences)
- Secured endowments for community outreach (\$75k) and student scholarships (\$100k)
- Secured bequest to endow the William Harper Graduate Scholarship (\$450k)
- Created three new endowed faculty fellowships for assistant professors (\$150K each)
- Executed strong marketing/communications effort (e.g., CrossLink magazine, 9 issues), with new dedicated staff
- Implemented a highly successful Distinguished Leadership Seminar Series
- Added new faculty professional development and mentoring programs (e.g., external mentor program)
- Initiated many new technical, networking, and social events to foster collaboration and community
- Implemented proactive honors and awards nominations process, with many successful recognitions
- Created a strong standing External Advisory Board (EAB) with industry and academic members
- Created engaged Alumni Advisory Board (AAB) with contributing alumni
- Restructured administrative team to allow for more innovation in academic programs

University of Texas at Austin:

Executive Committee of BME, 1999 - 2004 and 2010 - 2012 Graduate Adviser of BME, 2001 - 2004

Graduate Recruiter of BME, 2001 – 2004

- Founding member of BME Department at UT Austin.
- Helped secure Whitaker Education and NSF IGERT training grants for department and new building
- Implemented departmental-wide graduate recruiting event (versus individual recruiting)
- Worked with college on hiring women engineering faculty through targeted initiatives

FORMAL LEADERSHIP AND DIVERSITY TRAINING/WORKSHOPS:

Whitaker Academic Leadership Program, Selected Participant, Leesburg, VA, February 27-March 2, 2003.

Institute for Academic Leadership (IAL) Department Chairs Workshop, State University System of Florida, Howie-in-the-Hills, FL, Sept. 15-19, 2013.

Advanced Leadership for Academics and Professionals (ALAP), University of Florida, Fall 2013 - Spring 2014. "Implicit Bias: Understanding the Unconscious Roots of Thought", Annual Provost Symposium, January 26-27, 2017. "The Role of University and UF Faculty in Addressing the Rise of Extremism on Campus and in the Nation", Annual

Provost Symposium, February 1-2, 2018.

Strategic Communication for Engineering Scholars Workshop, University of Florida, Sept. - Oct. 2018. AIMBE Anti-Racism Summit, virtual format, Jan. 28-29, 2021.

Stronger Together Webinar Series: "Understanding and Cultivating Your Cultural Intelligence", "Engaging in Productive Conversations on Race", "Inside Out. Emotionally Intelligent Conversations About Race", University of Florida, September - October 2021.

AIMBE Diversifying Academic Leadership Workshop, virtual format, Jan. 27-28, 2022.

DEPARTMENTAL COMMITTEE ASSIGNMENTS AND SERVICE:

University of Florida:

Affiliate Faculty Member, Chemical Engineering, April 2013-present.

Affiliate Faculty Member, Materials Science and Engineering, April 2013-present.

Member, Departmental Comprehensive Exam Committees (2-3 annually), Biomedical Engineering, 2015-present.

Member, Ex Officio, Departmental Seminar Committee, Biomedical Engineering, 2013-2023.

Member, Ex Officio, Honors and Awards Committee, Biomedical Engineering, 2013-2023.

Member, Ex Officio, Executive Committee, Biomedical Engineering, 2013-2023.

Member, Ex Officio, Faculty Search Committee, Biomedical Engineering, 2013-2023.

Member, Ex Officio, Inclusion, Diversity and Access Faculty Committee, Biomedical Engineering, 2021-2023.

Member, Ex Officio, Engagement, Outreach and Public Relations Committee, Biomedical Engineering, 2021-2023.

University of Texas at Austin, Chemical Engineering (CHE):

Member, CHE 353 Curriculum Review Committee, CHE, 1996.

Member, Ad Hoc Committee to Evaluate Ph.D. Degree Requirements, CHE, Fall 1997.

Member, Ad Hoc Committee on TA Policy, Chemical Engineering, Fall 1998.

Member, Ad Hoc Committee to Examine Team Building, Chemical Engineering, Spring 1999.

Member, Transport Qualifying Exam Committee, Chemical Engineering: 1996 - 2001

University of Texas at Austin, Biomedical Engineering (BME):

Member, Graduate Curriculum Subcommittee, Biomedical Engineering Program, Spring 1997.

Member, Curriculum Subcommittee, BME Program/Department, 2001 - 2008.

Member, Graduate Admission Committee, BME Program/Department, 2001 - 2005.

Member, Fellowship Committee, Department, 2002 - 2004.

Chair, Graduate Studies Committee for BME, Fall 2002 - Summer 2004.

Member, Graduate Studies Executive Committee for BME, Fall 2002 - Fall 2008.

Member, BME Department Chair Search Committee, 2007-2008.

Chair, BME Department Chair Search Committee, 2008 - 2010.

Chair, BME Department Faculty Search Committee, 2008 - 2012.

Member, BME Department Graduate Studies Executive Committee, 2011-2012.

Member, BME Qualifying Exam Coordinating Committee, 2012 – 2012.

COLLEGE AND UNIVERSITY COMMITTEE ASSIGNMENTS AND SERVICE:

University of Florida, 2013-present

Member, College of Engineering Diversity Committee, Fall 2013.

Member, Innovations For International Development Working Group, Fall 2013.

Member, President's Goal Setting Task Force for UF (Chair: Winfred Phillips), Spring 2015-Fall 2015.

Chair, Department Chair Search Committee for Materials Science and Engineering, Spring 2015.

Faculty Representative, University Athletic Association (UAA) Board of Directors, July 1, 2013 – June 30, 2021. Member, Audit Committee, UAA Board, July 1, 2013 – June 30, 2021.

Member, Internal Advisory Board, NINDS T32 "Interdisciplinary Training in Movement Disorders", 2019-present.

Member, Internal Research Advisory Committee, Emerging Pathogens Institute, 2018-present.

Member, UF ASPIRE - SEA Change Inclusive Hiring Best Practices Task Force, UF Provost's Office, Sp-Su 2022.

Member, Associate Dean for Research and Facilities Search Committee, UF HWCOE, Summer 2022.

University of Texas at Austin, College of Engineering, 1996-2012

Chair, Women in Engineering Program Committee, College of Engineering, Fall 1999 – Spring 2001.

Member, Women in Engineering Program Committee, College of Engineering, Fall 1996 – Summer 1999.

Member, Scholastic Appeals Committee, Spring 2000 - Spring 2001.

Member, Women in Engineering Program Committee, College of Engineering, Fall 2002 – 2010.

Member, Hocott Award Review Committee (Chair: B. Streetman), College of Engineering, Summer 2005

Member, Lockheed Martin Awards Review Committee, College of Engineering, Spring 2007

Member, Lockheed Martin Awards Review Committee, College of Engineering, Spring 2008

University of Texas at Austin, Inter-College and University, 1996-2012

Member, "Explore UT" University Committee, Spring 2000 – March 2001.

Chair/Organizer, "Biotechnology, Bioinformatics and Biosensors" graduate track in the Cell and Molecular Biology Graduate Program, Spring 2000.

Member, Advisory Group to the Graduate and Professional Education Committee of the Commission of 125 (Chair: W. Powers), Fall 2002.

Member, Co-op (Mitchell) Awards Committee, Spring 2002, Spring 2003, Spring 2004.

Member, Office of Sponsored Projects (OSP) Director Search Committee (Chair: S. Brown), Spring 2005 - Fall 2005.

Co-Director, NSF IGERT Program in Cellular and Molecular Imaging for Diagnostics and Therapeutics, 2003 - 2008.

Member, NSF IGERT Steering Committee, 2001 - 2008.

Member, Faculty Council, Fall 2005 - 2007.

Member, Research Policy Committee, 2006-2007.

Organizer and Founder, "Frontiers of Neuroscience: From Basic Research to Clinical Applications" Seminar Series (joint seminar series between UT Austin and Austin Medical Community, 2008-2010.

Member, Institute for Cellular and Molecular Biology (ICMB) Advisory Committee, College of Natural Sciences, September 1, 2006 – Aug. 31, 2009.

University Faculty Representative, Federal Demonstration Partnership (FDP), Summer 2007 - Fall 2009.

Faculty Grievance Committee, Fall 2010 – 2012.

Member, Steering Committee, Texas Materials Institute, 2010 – 2012.

SERVICE TO UNIVERSITY STUDENT ORGANIZATIONS:

Faculty Advisor, FIMRC UT Chapter, UT Austin, 2009 – 2012.
Faculty Advisor, Biomedical Engineering Society (BMES), UT Austin, 2003.
Faculty Advisor, Society of Women Engineers (SWE), UT Austin, 1997 - 2001.
Faculty Advisor, Omega Chi Epsilon (CHE Honor Society), UT Austin, 2000 - 2001.

NATIONAL/PROFESSIONAL SERVICE ACTIVITIES:

| Aug. 1997, 1998, 1999 | Invited Guest Faculty - Topic: "Tissue Engineering Strategies for Peripheral Nerve |
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| | Regeneration", Continuing Education Course "Advances in Tissue Engineering", Rice |
| | University, Houston, TX. |
| June 1997 – April 1998 | Membership Chair, Tissue Engineered Products Special Interest Group (TEPSIG), Society for |
| | Biomaterials. |
| April 1998 – Aug. 2000 | Program Chair, Hybrid Artificial Organs Special Interest Group, Society for Biomaterials. |
| April 1998 – Aug. 2000 | Vice-Chairperson, Tissue Engineering Special Interest Group (TESIG), Society for Biomaterials. |
| Fall 1999 – Fall 2001 | Vice Programming Chair, Area 8b (Biomaterials), American Institute of Chemical Engineers |
| | (AIChE) National Chapter. |
| Fall 2001 – Fall 2003 | Programming Chair, Area 8b (Biomaterials), American Institute of Chemical Engineers (AIChE) |
| | National Chapter. |
| Fall 2002 | Advisory Workshop for National Research Council on "Challenges for the Chemical Sciences in |
| | the 21st Century: Health & Medicine", Beckman Center, National Academies, Irvine, CA |

| Fall 2004 – Spring 2005 | Member, International Program Committee, The IASTED (International Association of Science and Technology for Development) Conference on Biomedical Engineering: BioMED 2005, Innsbruck, Austria, Feb. 2005. |
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| Fall 2006 – Spring 2007 | Member, International Program Committee, The IASTED (International Association of Science and Technology for Development) Conference on Biomedical Engineering: BioMED 2007, Innsbruck, Austria, Feb. 2007. |
| Spring 2006 | Member, Awards and Nominations Committee, Society for Biomaterials. |
| Fall 2007 – Spring 2008 | Member, International Program Committee, The IASTED (International Association of Science and Technology for Development) Conference on Biomedical Engineering: BioMED 2008, Innsbruck, Austria, Feb. 2008. |
| Fall 2007 | Invited Workshop Leader, NIH Grant Writers Workshop, Biomedical Engineering Society Meeting, Los Angeles, CA, Sept. 2007. |
| Fall 2007 – Fall 2009 | Federal Demonstration Partnership, Faculty Representative for The Univ. of Texas at Austin. |
| Spring 2008 | Invited Participant, American Chemical Society (ACS) Biochemical Technology Division (BIOT) Strategic Planning Meeting, Washington DC, June 6-8, 2008. |
| Fall 2008 – Fall 2009 | MESD (Materials Engineering and Science Division) Director, AICHE. |
| Spring 2009 | Local Liaison of the ChE Division of American Society of Engineering Education (ASEE). |
| Summer 2009 | NSF ADVANCE Career Mentor, Northeastern University, Chemical Engineering |
| Fall 2010 | Women in BME Luncheon Panel on Balancing Personal Life and a Professional Career, BMES |
| 1 ull 2010 | Annual Meeting, Austin, TX, October 8, 2010. |
| Fall 2010 – Fall 2012 | Chair, Diversity Committee, Biomedical Engineering Society (BMES). |
| Fall 2011 – Fall 2014 | Board of Directors, Biomedical Engineering Society (BMES). |
| Fall 2013 | Chair, Rehabilitation and Neuroengineering AIMBE Fellows Election Committee. |
| Spring 2014 – 2015 | Chair-Elect, College of Fellows, AIMBE. |
| Fall 2012 – Fall 2015 | Chair, National Meetings Committee, BMES. |
| Fall 2013 – Fall 2015 | Member, Fellows Selection Committee, BMES. |
| Spring 2015 – Sp 2017 | Member, Awards and Nominations Committee, Society for Biomaterials (SFB). |
| Spring 2015 – Sp 2017 Spring 2015 – Sp 2016 | Chair, College of Fellows, AIMBE. |
| April 2016 | Conference Chair, 25 th Anniversary Meeting, AIMBE, Washington DC, April 3-4, 2016. |
| April 2017 - April 2018 | President-Elect and Board of Directors, AIMBE |
| April 2017 - April 2018 April 2018 - April 2020 | President and Board of Directors, AIMBE |
| Spring 2018 – Sp 2019 | Member, Nominations Committee, BMES. |
| April 2020 - April 2021 | Past-President and Board of Directors, AIMBE. |
| Fall 2019 – Spring 2020 | NIBIB Strategic Planning Committee. |
| Sp 2020 – Fall 2020 | Member, COVID-19 Task Force for Annual Meetings, BMES. |
| Su 2020 - Fall 2020 | Member, Fellows Selection Committee, BMES. |
| Spring 2022 | Judge, Life Sciences Division, Blavatnik National Awards for Young Scientists, New York |
| Spring 2022 | Academy of Sciences |
| Spring – Fall 2022 | Member, Nomination Committee, Academy of Science, Engineering and Medicine of Florida (ASEMFL) |
| Spring 2023 | Member, Executive Director Search Committee, AIMBE. |
| EDITORIAL BOARDS & F | EXTERNAL ADVISORY COMMITTEES: |
| Fall 2016 – present | Section Editor for Neural Engineering, Current Opinion in Biomedical Engineering |
| Fall 2012 – Fall 2016 | Deputy Editor-in-Chief, Journal of Materials Chemistry B. |
| Spring 2006 - present | Editorial Board, International Journal of Nanomedicine. |
| Spring 2006 - present | Editorial Board, Journal of Biomaterials Science, Polymer Edition. |
| Spring 2007 - present | Editorial Board, Journal of Biomedical Materials Research, Part A. |
| Fall 2010 - present | Editorial Board, <i>Nanomedicine</i> |
| Fall 2014 - present | Editorial Board, Journal of Neural Engineering |
| Fall 2002 – Fall 2008 | Editorial Advisory Board of the <i>Encyclopedia of Biomaterials and Biomedical Engineering</i> (EBBE), Marcel Dekker. |
| Fall 2011 – present | Advisor, Cambridge Texts in Biomedical Engineering, Series Editors: Chien, Saltzman |
| Spring 2013 – 2015 | Member, Engineering Advisory Board, Biomedical Engineering, University of Alabama, |
| Spring 2015 – 2015 | Birmingham, AL. |
| Fall 2010 | Chair, External Review Committee for the Department of Chemical Engineering, College of |
| | Engineering, The University of Michigan, Ann Arbor, MI. |

| Fall 2010 - Fall 2012 | Chair, External Advisory Committee, NeuroEngineering IGERT Program, The University of |
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| | Illinois at Urbana-Champaign, Urbana, IL. |
| Fall 2010 - Su 2019 | Member, External Advisory Committee, Science and Technology Center on Emergent Behaviors |
| | of Integrated Cellular Systems (EBICS) (MIT, University of Illinois at Urbana-Champaign and |
| | Georgia Institute of Technology) |
| Fall 2011 | Member, External Review Committee, Department of Biomedical Engineering, Univ. Florida. |
| Fall 2014 | Member, External Review Committee, Dept. Bioengineering, Univ. Illinois, Urbana, IL. |
| Spring 2015 | Chair, External Review Committee, Department of Biomedical Engineering, Texas A&M |
| | University, College Station, TX. |
| Fall 2016 - present | Member, External Advisory Board, Biomedical Engineering, WPI, Worcester, MA. |
| Spring 2020 – present | Member, Scientific Advisory Board for Columbia U. P41: Tissue Engineering Resource Center. |
| Spring 2023 | Chair, External Review Committee, Department of Biomedical Engineering, Texas A&M |
| | University, College Station, TX. |

SYMPOSIA AND CONFERENCES ORGANIZED:

- 1. "Young Faculty Forum", co-organized with Kristi Anseth (University of Colorado), <u>American Institute of Chemical</u> <u>Engineers (AIChE) National Meeting</u>, Los Angeles, CA, November 1997.
- 2. "Young Faculty Forum", co-organized with Anne Robinson (University of Delaware), <u>American Institute of Chemical</u> <u>Engineers (AIChE) Annual Meeting</u>, Miami, FL, November 1998.
- "Neurological Biomaterials Symposium", co-organized with Molly Shoichet (University of Toronto) and Ravi Bellamkonda (Case Western Reserve University), Materials <u>Research Society (MRS) Annual Fall Meeting</u>, Boston, MA, December 2000. (*funding secured from the Whitaker Foundation*)
- 4. "Biomaterials for Tissue Engineering Symposium", co-organized with Joyce Wong, Lonnie Shea, Christopher Chen, Anne Plant, Art Coury, <u>Materials Research Society (MRS) Annual Fall Meeting</u>, Boston, MA, December 2003. (*funding secured from the Whitaker Foundation and industrial sponsors*)
- 5. Symposium organizer: "Topical Conference", co-organized with Nicholas Peppas, Kristi Anseth, Angela Dillow, <u>AICHE Annual Fall Meeting</u>, Austin, TX, November 2004.
- 6. "Electroactive and Conductive Polymers and Carbon Nanotubes for Biomedical Applications" (Symposium QQ), coorganized with Tracy Cui, Diane Hoffman-Kim, Silvia Luebben, <u>Materials Research Society (MRS) Annual Fall</u> <u>Meeting</u>, Boston, MA, November 2007. (*funding secured from industrial sponsors*)
- 7. Symposium organizer: "Biomaterials", co-organized with Carmen Scholz and Gabriel Luna, <u>MacroMex: Mexican-American Conference on Advances in Polymer Science</u>, Los Cabos, Baja California Mexico, December 2008.
- 8. Symposium organizer: "Honorary Series in Biomaterials", <u>American Institute of Chemical Engineers (AIChE) National</u> <u>Meeting</u>, Nashville, TN, November 2009.
- 9. Conference Chair, <u>BMES Annual Meeting</u>, Austin, TX, Sept. 2010.
- 10. Co-Track Chair (with Kevin Otto), "Neural Engineering Track", BMES Annual Meeting, San Antonio, TX, Oct. 2014.
- 11. Symposium Co-Chair (with Nicholas Peppas and Michael King), "Cell and Molecular Bioengineering (CMB) Young Innovators Session", <u>BMES Annual Meeting</u>, Tampa, FL, October 2015.
- 12. Conference Organizer, <u>AIMBE Annual Event</u>, Washington DC, April 2016.

CONFERENCE SESSIONS CHAIRED/ORGANIZED:

- 1. "Cell Adhesion and Migration", co-organized with Richard Dickinson (University of Florida), <u>American Institute of</u> <u>Chemical Engineers (AIChE) National Fall Annual Meeting</u>, Chicago, IL November 1996.
- 2. "Tissue Engineering Workshop and Panel", Chair and Panel Moderator, <u>Surfaces in Biomaterials Annual Meeting</u>, Minneapolis, MN, September 1997.
- 3. "Genes/Development", Chair, <u>10th Annual Cellular and Molecular Biology Retreat</u>, University of Texas at Austin, Bandera, TX, October 1997.
- 4. "Cell/Tissue Interactions with Biomaterials", co-organized with Scott Diamond (University of Pennsylvania), <u>American</u> <u>Institute of Chemical Engineers (AIChE) National Fall Ann. Meeting</u>, Los Angeles, CA, November 1997.
- 5. "Brain and Neural Engineering", chair, <u>17th Southern Biomedical Engineering Conference</u>, San Antonio, TX, Feb 1998.
- 6. "Cell Adhesion and Migration", co-organized with Josef Käs (University of Texas), <u>Biomedical Engineering Society</u> (<u>BMES</u>) Annual Meeting, Cleveland, OH, October 1998.
- 7. "Neural Tissue Engineering", co-organized with Molly Shoichet (University of Toronto), <u>Biomedical Engineering</u> Society (BMES) Annual Meeting, Cleveland, OH, October 1998.
- 8. "Nanotechnology in Biomedical Engineering", co-organized with Robin Coger (University of North Carolina), <u>American Institute of Chemical Engineers (AIChE) National Fall Annual Meeting</u>, Miami, FL, November 1998.
- 9. "Neural Tissue Engineering", co-organized with Molly Shoichet (University of Toronto), <u>Annual Meeting of the Society</u> for Biomaterials, Providence, RI, April 1999.

- 10. "Cell Polymer Constructs in Tissue Engineering", co-organized with Howard Matthew (Wayne State University), American Institute of Chemical Engineers (AIChE) National Fall Annual Meeting, Dallas, TX, November 1999.
- 11. "Cell Surface-Biomaterials Interactions", chair and organizer, <u>American Institute of Chemical Engineers (AIChE)</u> <u>National Fall Annual Meeting</u>, Dallas, TX, November 1999.
- 12. "Protein and Cell Interactions with Materials", co-chaired with Thomas Webster, <u>Biomedical Engineering Society</u> (<u>BMES</u>) Annual Meeting, Seattle, WA, October 2000.
- 13. "Cardiovascular Tissue Engineering IV", co-chaired with Andreas Kern (Advanced Tissue Sciences Inc.), <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, Seattle, WA, October 2000.
- 14. "Biomaterials", co-organized with Padma Naraya (National Starch and Chemical Co.), <u>American Institute of Chemical Engineers (AIChE) National Fall Annual Meeting</u>, Los Angeles, CA, November 2000.
- 15. "Nanotechnology in Bioengineering", co-organized with Surya Mallapragada (Iowa State University), <u>American Institute of Chemical Engineers (AIChE) National Fall Annual Meeting</u>, Los Angeles, CA, November 2000.
- 16. "Cardiovascular Tissue Engineering", chair, <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, Durham, NC, October 2001.
- 17. "Biomimetic Approaches to Materials Design", co-organized with Efrosini Kokkoli (University of Massachusetts at Amherst), <u>American Institute of Chemical Engineers (AIChE) National Fall Annual Meeting</u>, Reno, NV, Nov 2001.
- 18. "Fundamentals of Tissue Engineering", chair, <u>Biomedical Engineering Society (BMES) Annual Meeting</u>, Houston, TX, October 2001.
- 19. "Biomaterials I", co-organized with M. Lane Gilchrist (CCNY), <u>American Institute of Chemical Engineers (AIChE)</u> <u>National Fall Annual Meeting</u>, Reno, NV, November 2001.
- 20. "Fundamentals of Tissue Engineering", chair, <u>The Second Joint Meeting of the IEEE Engineering in Medicine and</u> <u>Biology Society And the Biomedical Engineering Society</u>, Houston, TX, October 2002.
- 21. "Biomaterials II", co-organized with M. Lane Gilchrist (CCNY), <u>American Institute of Chemical Engineers (AIChE)</u> <u>National Fall Annual Meeting</u>, Indianapolis, IN, November 2002.
- 22. "Bioinspired and Biomimetic Polymeric Materials I" and "Bioinspired and Biomimetic Polymeric Materials II", coorganized and co-chaired with Annelise Barron (Northwestern Univ.), <u>AICHE Annual Fall Meeting</u>, San Francisco, CA, Nov.17 - 22, 2003.
- 23. "F2: Overview and Challenges in Biomaterials II", co-organized and co-chaired with Joyce Wong (Boston University), <u>MRS Annual Fall Meeting</u>, Boston MA, Dec. 1-5, 2003.
- 24. "F4: Natural and Artificial Polymers", co-organized and co-chaired with Lonnie Shea (Northwestern University) <u>MRS</u> <u>Annual Fall Meeting</u>, Boston MA, Dec. 1-5, 2003.
- 25. "Tissue engineering and biomaterials", chair, ACS Spring Annual Meeting, Annaheim, CA, March 28 April 1, 2004.
- 26. "Advances in Biomaterials, Bionanotechnology, Biomimetic Systems and Tissue Engineering: PlenarySession II", coorganized and co-chaired with Angela Dillow, <u>AICHE Annual Fall Meeting</u>, Austin, TX, Nov. 2004.
- 27. "Biomimetic Materials for Cellular Interactions", co-organized and co-chaired with Sikavitsas, <u>AICHE Annual Fall</u> <u>Meeting</u>, Austin, TX, Nov. 2004.
- 28. "Biofunctional Scaffolds to Control Cell Function", co-organized and co-chaired with Laura Suggs, <u>AICHE Annual</u> <u>Fall Meeting</u>, Austin, TX, Nov. 2004.
- 29. "Smart/Conducting Biomaterials", co-organized and co-chaired with Christopher Brazel, <u>AICHE Annual Fall Meeting</u>, Austin, TX, Nov. 2004.
- 30. "Electroactive and Conductive Polymers for Biomedical Applications Actuators and Tissue Engineering", <u>MRS</u> <u>Annual Fall Meeting</u>, Boston, MA, Nov. 2007.
- 31. "Biomaterials, Matrices and Scaffolds II", co-chaired with Anthony Atala, <u>Keystone Symposium, Regenerative Tissue</u> <u>Engineering and Transplantation</u>, Breckenridge, CO, April 1 - 6, 2012.
- 32. "Biomaterial Strategies for Innervation, Nerve Repair and Integration", co-organized with Jeffrey Capadona and Shelly Sakiyama-Elbert, <u>Society For Biomaterials Fall Symposium</u>, New Orleans, LA, October 4-6, 2012.
- 33. "Biosensors, Nanobio Interfaces & Implantable Devices II", co-chaired with Dr. Anthony Guiseppi-Elie, Biomedical Engineering Society (BMES) Annual Meeting, Atlanta, GA, Oct. 26, 2012.

SCIENTIFIC PEER REVIEWS:

Journal Reviews (over 500 total reviews)

Acta Biomaterialia, Advanced Drug Delivery Reviews, Advanced Materials, Advanced Functional Materials, Angewandte Chemie, Annals of Biomedical Engineering, Artificial Organs, Biomacromolecules (ACS journal), Biomaterials, Biophysical Journal, Biotechnology and Bioengineering, Biotechnology Progress (ACS journal), Cells and Materials, Chemistry of Materials (ACS journal), FASEB Journal, Industrial and Engineering Chemistry Research (ACS journal), Interface (a journal of the Royal Society of London), Journal of Applied Polymer Science, Journal of the American Chemical Society (JACS), Journal of Biomaterials Science - Polymer Edition, Journal of Biomedical Materials Research, Journal of

Cellular Engineering, Journal of Controlled Release, Journal of Membrane Science, Journal of Neuroscience, Journal of Theoretical Biology, Langmuir (ACS journal), Macromolecules (ACS journal), Macromolecular Biosciences, Medical and Biological Engineering and Computing, Nature Biotechnology, Nature Materials, Neuroscience, Proceedings of the National Academy of Sciences, Tissue Engineering, Science Advances, Science

Reviews for US and International Granting Agencies and Foundations

National Institutes of Health (RO1, R21, R03, BRP) National Science Foundation (Individual, ERC, SBIR, CAREER, MRI) National Aeronautics and Space Administration (NASA) Petroleum Research Foundation Whitaker Foundation

<u>Other Countries</u>: Canadian Institutes of Health Research; Natural Sciences and Engineering Research Council of Canada (NSERC); Research Grants Council (RGC) of Hong Kong; University of Padua, Italy; Austrian Science Fund (FWF); Australian Research Council (ARC)

Other Peer-Reviews

Arizona State University Bioengineering Seed Grant Program, December 2000.
Oklahoma Bioengineering Center Seed Grant Program, September 1999.
Whitaker Foundation, Proposal Review for "Teaching Materials" Grant Proposal, August 1999.
Whitaker Individual Research Grant Proposals, Summer 2002.
Oxford University Press, "Tissue Engineering" Textbook by Saltzman, Summer 2002.
Kentucky Science & Engineering Foundation R&D Excellence Program Proposals, Summer 2002.
South Carolina Spinal Cord Injury Fund, Spring 2004.
Yale University Pepper Grant Program, Spring 2005.
Cornell University Biomedical Engineering Seed Grant Program, Summer 2007.
Wayne State University Research Enhancement Program, Spring 2008.

Review Panels and Site Visits

NSF Major Research Instrumentation (MRI) Review Panel, Biomedical Instrumentation, Wash D.C., May 1997.

- NSF Engineering Research Center (ERC) Site Visit Panel, Tissue Eng. Center, Georgia Tech, Atlanta, GA, Jan 1998.
- NASA Microgravity Biotechnology Panel, Washington D.C., July 1998.
- NSF Engineering Research Center (ERC) Review Site Visit Panel (2nd year review), Engineered Biomaterials, University of Washington, Seattle, WA, July 1998.
- NSF CAREER Panel, Biotechnology Program, Washington D.C., December 1998.
- NSF Engineering Research Center (ERC) Review Site Visit Panel (1st year review), Tissue Engineering Center, Georgia Tech, Atlanta, GA, May 1999.
- NIH Bioengineering Research Partnership (BRP) Review Panel (SSS-M02), Wash DC, March 22-23, 2000.
- NIH Bioengineering R01 Grant Review Panel (SSS-M01), Washington DC, March 24, 2000.
- NIH Bioengineering Research Partnership (BRP) Review Panel (SSS-M03), Washington DC, Nov.15, 2000.
- NIH Bioengineering R01 Grant Review Panel (SSS-M01), Washington DC, March 23, 2001.
- NSF CAREER Panel, Biotechnology Program, Washington D.C., December 2001.
- NIH SSS-MO1 Panel, Nov. 17, 2003.
- NIH MDCN Panel, Jan. 16, 2004.
- NIH MOSS G 01 Panel, July 14, 2004.
- NHLBI Programs of Excellence in Nanotechnology review panel, December 9, 2004.
- NIH Neurodifferentiation, Plasticity, and Regeneration Study Section, Molecular, Cellular and
- Developmental Neuroscience Integrated Review Group, Ad-hoc reviewer, October 27, 2005.
- NIH Special Emphasis Panel/Scientific Review Group 2006/10 ZDE1 MK (92) meeting, August 4, 2006.
- NIH Special Emphasis Panel ZRG1 MDCN-F 91 S, August 2007.
- NSF CAREER Panel, Biotechnology Program, Washington D.C., November 2007.
- NSF Panel, CBET, Washington D.C., June 8-9, 2009.
- NIH Panel, ZDC1 SRB Y Special Emphasis Panel for NIH PAR-07-287, Washington DC, November 2009.
- NIH Panel, Neurotechnology (NT) Study Section, San Francisco, CA, Jan. 2010.
- Veterans Administration Rehabilitation Research and Development (REHAB R&D) Grant Review Panel, Feb. 2010.
- NSF Panel, Biomaterials Review Panel 5 (PGM1), Washington D.C., February 7, 2011.
- NIH Panel, Emerging Technologies and Neurosciences, November 8, 2011.

COMMUNITY SERVICE AND OUTREACH ACTIVITIES (SELECTED):

Presentations and Panels

- 1. Speaker, "Tissue Engineering", Welch Summer Scholar Program (advanced high school summer program), University of Texas at Austin, Summer 1997.
- 2. Speaker, "Engineering Neural and Vascular Replacements for the Future", Texas Energy Society Symposium (TESS) (high school summer program), University of Texas at Austin, June 1997.
- 3. Speaker, "Tissue Engineering Approaches for Nerve and Vascular Repair". Biomedical Engineering Society Student Chapter, University of Texas at Austin, October 1997.
- 4. Speaker, "Tissue Engineering", Minority Introduction to Engineering (MITE) High School Outreach Program, University of Texas at Austin, Spring 1997, 1998.
- 5. Speaker, "Graduate School as an Option". Panel Member, Society of Women Engineers (SWE) Student Chapter, University of Texas at Austin, February 1998.
- 6. Speaker, "What is Biomedical Engineering?". Panel Member, Biomedical Engineering Society Student Chapter, University of Texas at Austin, February 1998.
- 7. Speaker, "Technology and the 21st Century", Panel Member, Honors Colloquium (advanced high school summer program), University of Texas at Austin, July 1998.
- 8. Speaker, "Engineering Human Tissues", Honors Colloquium (advanced high school summer program), University of Texas at Austin, July 1998.
- 9. Speaker, "Preparing for an Academic Career", ASEE student chapter, University of Texas at Austin, Fall 1998.
- 10. Speaker, "Tissue Engineering". 1999 Student AIChE Southwest Regional Conference, University of Texas at Austin, February 1999.
- 11. Speaker, "Tissue Engineering". Society of Women Engineers (Southwest Regional Professional Chapter), University of Texas at Austin, February 1999.
- 12. Speaker, "Engineering of Human Tissues". UT Interactive (University open house to community), University of Texas at Austin, March 1999.
- 13. Speaker, "The Future of Biomedical Therapies". Westminster Manor (Retirement Center), Austin, TX, Summer '99.
- 14. Speaker, "Tissue Engineering". Society of Women Engineers Southwest Regional Professional Conference, Marriott, Austin, TX, November 1999.
- 15. Speaker, "Advances in Biomedical Engineering", Texas Energy Society Symposium (TESS) (high school summer program), University of Texas at Austin, June 2000.
- 16. Speaker, "Tissue Engineering". Lakeway Men's Breakfast Club (retirement club), Lakeway, TX, October 4, 2000.
- 17. Speaker, "Biomedical Research and Informed Consent", NSF IGERT (Integrative Graduate Education and Research Training) Program in Optical Biomedical Engineering, Ethics Seminar Series, Austin, TX, 2001-2005.
- Speaker, "Ethical Responsibilities in an Academic Career", NSF IGERT (Integrative Graduate Education and Research Training) Program in Cellular and Molecular Imaging for Diagnostics and Therapeutics, Ethics Seminar Series, Austin, TX, .2006-2007.
- 19. Speaker, "Recent Advances in Biomedical Engineering Research". UT Retired Faculty-Staff Association, Austin, TX, January 31, 2001.
- 20. Speaker, "Build Your Own Body Parts". Talk at "Explore UT" Open House (University open house to community), Austin, TX, March 3, 2001.
- 21. Speaker, "Biomedical Engineering Therapies of the Future", Texas Energy Society Symposium (TESS) (high school summer program), University of Texas at Austin, June 2001.
- 22. "Engineering New Biomedical Therapies", University of Texas Alumni Association, University of Texas at Austin, June 2001.
- 23. Speaker, "Build Your Own Body Parts: Novel Biomedical Engineering Therapies". Scholia (Faculty Club), University of Texas at Austin, Austin, TX, January 14, 2002.
- 24. "Engineering New Biomedical Therapies". UT Retired Faculty-Staff Association, Health Interest Group, Austin, TX, February 4, 2002.
- 25. Speaker, "Build Your Own Body Parts". Talk at "Explore UT" Open House (University open house to community), Austin, TX, March 2, 2002.
- 26. Speaker, "Grow Your Own Body Parts". Talk for LAMP (Learning Activities for Mature People), The University of Texas at Austin, Austin, TX, March 27, 2002.
- 27. Speaker, "Neural Tissue Engineering". Honor's Colloquium Lecture, Univ. Texas, Austin, TX, July 26, 2002.
- 28. Speaker, "Tissue Engineering". Westminster Manor (Retirement Center), Austin, TX, December 2002.
- 29. Speaker, "Build Your Own Body Parts". Talk at "Explore UT" Open House (University open house to community), Austin, TX, March 2003.

- 30. Speaker, "Build Your Own Body Parts". Zilker Elementary Girl's Brown Bag Series, Zilker Elementary School, Austin, TX, March 31, 2003.
- 31. Speaker, "Tissue Engineering". Biomedical Engineering Society Student Chapter, Univ. Texas at Austin, Feb. 2004.
- 32. Speaker, "Interdisciplinary Graduate Student Education: IGERT Optical Molecular Bio-Engineering Program at the University of Texas", Association of American Medical Colleges (AAMC) Graduate, Research, and Education (GREAT) Group Annual Meeting, Austin, TX, April 24, 2004.
- 33. Speaker and Panel Participant, "Negotiating the Ideal Faculty Position: A Workshop for Women in Engineering", University of Texas at Austin, October 2004.
- 34. Panel Participant, Women in Engineering (WEP) workshop & panel on "Building your Lab", University of Texas at Austin, October 22, 2004.
- 35. Speaker, "BME Research in the College of Engineering", Parent's Weekend, College of Engineering Meeting, University of Texas at Austin, October 29, 2005.
- 36. Speaker, Panel Participant, Women in Engineering (WEP) panel on "Negotiations and Networking", University of Texas at Austin, Feb. 1, 2006.
- 37. Speaker, "Interdisciplinary Graduate Student Training", University of Texas Houston Graduate School of Biomedical Sciences (GSBS) Faculty Retreat (invitation from Dean of GSBS), Clear Lake, TX, May 13, 2006.
- 38. "Insights into Mentoring/Teaching Students in the Lab and the Classroom", Graduate Student Chalk Talk, Biomedical Engineering, Duke University, Durham, NC, Sept. 14, 2006.
- 39. Speaker and Panel Participant, "BME Research Panel", BME Freshman Interest Group, University of Texas at Austin, Austin TX, October 3, 2007.
- 40. Speaker and Panel Participant, "Research Opportunities", BMES Student Organization, University of Texas at Austin, Austin TX, October 24, 2007.
- 41. Guest Lecture in BIO 101C Introductory Biology Class on 'Tissue Engineering', April 29, 2008.
- 42. Speaker, "Engineering Functional Nerve Tissue", NSF REU Summer Undergraduate Research Program in Cellular and Molecular Imaging for Diagnostics and Therapeutics, Austin, TX, July 10, 2008.
- 43. Speaker, "Grow Your Own Body Parts", Honors Colloquium (for high school students), University of Texas at Austin, Austin TX, July 25, 2008.
- 44. Speaker, "Tissue Engineering: Developing Therapies for Damaged Neural Tissue". Exchange Club (http://austinexchange.clubexpress.com/), Radisson Hotel, Middle Fiskville Road, Austin, TX, January 21, 2009.
- 45. Guest Lecture in BIO 101C Introductory Biology Class on "Neural Tissue Engineering", March 9, 2009.
- 46. Speaker, "Grow Your Own Body Parts", Minority Introduction to Engineering (for high school minority students), University of Texas at Austin, Austin TX, June 18, 2009.
- 47. Guest Lecture in BIO 101C Introductory Biology Class on "Neural Tissue Engineering", Feb. 8, 2010.
- 48. Speaker, "What it Takes to Make it in College", College Forward Programs for Reagan and LBJ High Schools, LBJ High School, Austin TX, April 20, 2010. (College Forward provides college access and college persistence services to motivated, economically disadvantaged students, in order to facilitate their transition to college)
- 49. Speaker, "Biomedical Engineering", Longhorn Engineering Program (high school students), University of Texas at Austin, August 6, 2010.
- 50. Speaker, "Biomedical Engineering and Tissue Engineering", My Introduction to Engineering (MITE) (minority high school students), University of Texas at Austin, June 9, 2011.
- 51. Speaker, "Regenerative Therapies". Westminster Manor (Retirement Center), Austin, TX, Sept. 22, 2011.
- 52. Speaker, "Small, Simple Steps to Survival and Success". Invited Keynote lecture at Women's Initiatives Committee (WIC) Luncheon, American Inst. of Chemical Engineers (AIChE) Annual Meeting, Minneapolis, MN, Oct. 17, 2011.
- 53. Speaker, "Engineering Therapies for Wound Healing and Neural Repair". Talk for LAMP (Learning Activities for Mature People), Thompson Conference Center, The University of Texas, Austin, TX, January 18, 2012.
- 54. Speaker, "Latest and Greatest Advances in UT Engineering: Biomedical Engineering". UT NOVA, Osher Lifetime Learning Institute, Thompson Conference Center, The University of Texas, Austin, TX, January 25, 2012.
- 55. Speaker, "Biomedical Engineering, Regenerative Medicine, and the Role of Engineering in Health Care", Department of Biomedical Engineering, BME1008: Introduction to Biomedical Engineering, University of Florida, Fall 2013, 2014, 2015, and 2016.
- 56. Speaker, "Regenerative Medicine and the Role of Engineering in Health Care", UF "Science for Life" Course, The University of Florida, November 12, 2013.
- 57. Speaker, "Regenerative Medicine and the Role of Engineering in Health Care", UF ChE Alumni Professional Speakers Series, <u>Department of Chemical Engineering</u>, <u>The University of Florida</u>, January 30, 2014.
- 58. Speaker, "Simple Tips for Success", <u>Graduate Women in Biomedical Engineering Group, University of Minnesota</u>, St. Paul, MNZ, September 28, 2015.
- 59. Speaker, "Bridging the Gap: Engineering New Pathways for Regenerating Nerves", UF ChE Alumni Professional Speakers Series, <u>Department of Chemical Engineering</u>, <u>The University of Florida</u>, October 28, 2015.

- 60. Speaker, "Engineering Materials to Heal the Body: A Focus on Nerve Tissue", <u>School of Biological & Physical Sciences</u> <u>"STEMinar Series, Daytona State College</u>, Daytona, FL, January 25, 2016.
- 61. Speaker, "Engineering Materials to Heal the Body: A Focus on Nerve", Keynote for <u>Junior Science, Engineering and</u> <u>Humanities Symposium</u>, University of Florida, Gainesville, FL, January 31, 2016.
- 62. Speaker, "Simple Tips for Success", Women in Biomedical Engineering Group, RPI, Troy, NY, April 14, 2016.
- 63. Speaker, "Engineering Materials to Heal the Body", <u>Society For Biomaterials Student Chapter, University of Florida</u>, Gainesville, FL, April 21, 2016.
- 64. Speaker, "Growing New Body Parts: Fact or Fiction?", <u>SF2UF Bridge to Baccalaureate Program, Santa Fe College</u>, Gainesville, FL, October 18, 2016.
- 65. Speaker, "Biomedical Clinical Translation", UF Innovation Station Sarasota County, Sarasota, FL, August 8, 2018.
- 66. Speaker, "Engineering Day at GHS: What is Engineering?", Gainesville High School, Gainesville, FL, Nov. 13, 2018.
- 67. Speaker, "Path to Biomedical Engineering", <u>Girls Engaged in Engineering Program (middle school and high school state-wide outreach)</u>, University of Florida, Gainesville, FL, March 12, 2019.
- 68. Speaker, "Biomedical Clinical Translation", <u>Engineering Innovation Program</u>, University of Florida, Gainesville, FL, March 12, 2019.
- 69. Speaker, "Path to Biomedical Engineering", <u>Biomedical Engineering Society Student Organization</u>, University of Florida, Gainesville, FL, March 13, 2019.
- 70. Panelist, "Overcoming Adversities/Work-Life Balance", Guest Speaker, <u>Women's History Month Celebration</u>, University of Florida, Gainesville, FL, March 15, 2019.
- 71. Panelist, "Conversations with Women Leaders in the Life Sciences" <u>BioFlorida Northeast Chapter</u>, University of Florida, Gainesville, FL, June 27, 2019.
- 72. Guest Lecture in IDH3931 "Bench to Market Regenerative Medicine" class on "Neurologic Regenerative Medicine Development: Academic Perspective", <u>Honors Program, University of Florida</u>, Gainesville FL, October 25, 2019.
- 73. Speaker (remote talk), "Growing New Body Parts: Fact or Fiction?", <u>AH High School Summer Research Program</u>, American Heritage (AH) School (invited by Leya Joykutty, Director Science Research), Plantation, FL, June 26, 2020.
- 74. Guest Lecture in IDH3931 "Bench to Market Regenerative Medicine" class on "Product development from the Academic Perspective", <u>Honors Program, University of Florida</u>, Gainesville FL, October 17, 2020.
- 75. Schmidt, C.E., "Picture a Scientist: Building Diversity in Academia", Invited Speaker and Panelist, <u>Anti-Racism and Equity Spring Plenary Symposium, Pitt Senate Research Committee, University of Pittsburgh</u>, Virtual Platform, April 8, 2021.
- 76. Speaker and Panelist, "Future of BME", <u>Virtual Internship in Biomedical Engineering (VIBE) Program</u> (international free internship program for undergraduate students), Worcester Polytechnic Institute (WPI), July 7, 2021.
- 77. Speaker and Panelist, "Future of BME", <u>Virtual Internship in Biomedical Engineering (VIBE) Program</u>, Worcester Polytechnic Institute (WPI), July 24, 2022.
- 78. Guest Lecture in IDH3931 "Bench to Market Regenerative Medicine" class on "Product development from the Academic Perspective", <u>Honors Program, University of Florida</u>, Gainesville FL, March 28, 2023.

Selected Outreach and Mentor Activities

- 1. Proposal Reviewer, National Conference on Undergraduate Research Austin, TX (1996)
- 2. <u>Faculty Mentor</u>, Engineering Fall Gathering, a semester-long program to mentor freshmen engineering students during their first semester at the University Austin, TX (1996 2003)
- 3. <u>Fireside Chats</u>, host small undergraduate student gatherings in home to promote interactions with students; hosted for SWE, Tau Beta Pi, and Omega Chi Epsilon (1996 present) (usually 1-3 firesides hosted each semester)
- 4. <u>Research Sponsor/Mentor for High School Student</u>, The Science Academy of Austin LBJ High School Internship Program Austin, TX (1997)
- 5. <u>Faculty Fellow (Mentor)</u>, Moore-Hill Dormitory, served as advisor for one floor of the engineering dormitory, which involved meeting with students socially on a regular basis to provide informal advice and feedback Austin, TX (1997)
- 6. <u>Laboratory Demonstrations</u>, Careers in Engineering for Women (CEW), a week-long, UT-based program for 7th grade girls around Texas to build confidence through the completion of an engineering design project Austin, TX (1997)
- 7. <u>Laboratory Demonstrations</u>, Minority Introduction to Engineering (MITE), a week-long, UT-based program for high school minority students to increase awareness of education and research in engineering Austin, TX (1997, 2000)
- 8. <u>Cluster Facilitator</u>, LeaderShape Texas Institute, a week-long leadership development program for UT undergraduate organization leaders Austin, TX (1997, 1998)
- 9. <u>Advising Engineer (Mentor)</u>, Careers in Engineering for Women (CEW), a week-long, UT-based program for 7th grade girls around Texas to build confidence through the an engineering design project Austin, TX (1997, 1998)
- 10. High School Student Research Mentor, Welch Summer Scholars Chemistry Program, UT-Austin, (Summer 2000)
- 11. Women in Engineering Program First Year Initiative Program, student mentoring, UT-Austin (Spring 2001)

- 12. <u>NSF "Nifty 50" Middle School Outreach</u>, Supervise engineering team demos and projects to eight 6th-grade classes, O'Henry Middle School (teacher: Pam Cox), Austin TX (May 3-4, 2001)
- 13. <u>WE@UT 2001 Program</u>, student luncheon with 10-20 high school senior girls to expose them to the exciting field of engineering and to highlight UT's COE for recruiting purposes. July 26, 2001.
- 14. <u>YOU@UT Program</u>, Presentation: "Engineering at UT", Women in Engineering Program, YOU@UT high school outreach program, University of Texas, Austin, TX, November 19, 2001.
- 15. <u>WEP New Student Orientation</u>, Mentorship: Women in Engineering Program, New Student Orientation and Luncheon, February 5, University of Texas, Austin, TX, 2002.
- 16. <u>Mentorship</u>: Supervised Bradley Eisemann from Houston, TX for research in Summer 2003 as part of the Welch Summer Scholars Program.
- 17. Mentorship: Sponsored Michael (Mike) Gormley for research during summer 2003 (Mike was student at Duke).
- 18. <u>Mentorship</u>: Sponsored Dr. Charlotte May, a high school math teacher from Bowie High School in Austin, as part of the ARP/ATP summer teacher supplement program, Summer 2003.
- 19. <u>Host and Organizer</u> of Event for Women Graduate Students: "Developing a Roadmap for a Successful Career", The Engineering Faculty Women's Organization, The University of Texas at Austin, Austin, TX, January 23, 2004.
- 20. Mentoring: Fireside Chat, Biomedical Engineering Society Student Chapter, Univ. of Texas at Austin, March 10, 2004.
- 21. <u>Mentoring</u>: Research Interview and Presentation, Edwina Lai, Omega Chi Epsilon Student Chapter, University of Texas at Austin, April 12, 2004.
- 22. Tour of laboratory facilities and research summary: Women in Natural Sciences Program, Oct. 18, 2004.
- 23. Tour of laboratory facilities and research summary: Girls School of Austin; Teacher: Maggie Bowman (2004, 2006).
- 24. Mentor/Supervisor: REU Student, Mike Mojica, University of Florida, Summer 2006.
- 25. Mentor/Supervisor: Scott Burger, St. Stephen's Episcopal High School, Austin TX, Summer 2006.
- 26. <u>NIH (NIDDK) STEP-UP Mentor</u> for Kelly Huang, Summer 2009.
- 27. <u>Faculty Advisor</u>, Foundation of International Medical Relief of Children (FIMRC), University of Texas at Austin Chapter, Spring 2009-present.
- 28. <u>Presentation and Lab Tours</u>, Body Forward Challenge, Bionic Bots First Lego League team, Laurel Mountain Elementary School (4th grade), Austin, TX, October 13, 2010.
- 29. "Science Mondays" Science Lessons and Interactive Experiments, Mrs. Langham's Kindergarten Class, Hill Elementary School, Austin, TX, Jan. 27, 2010; Nov. 29, 2010; Dec. 6, 2010; Jan. 24, 2011; Jan. 31, 2011; March 28, 2011; May 2, 2011.
- 30. Interactive Science Demos and Lab Tours, Austin Area Homeschoolers High School Science Team, Nov. 21, 2011.
- 31. Tour of laboratory facilities and demos, Girls School of Austin; Teacher: Maggie Bowman, May 8, 2012.
- 32. <u>"UT Lab Day" Interactive Science Demos and Lab Tours</u>, Parkside Montessori School, Austin, Tx, 1st-3rd grade classes (60 students), May 31, 2012.
- <u>Career Day</u>, Lawton Chiles Elementary School, Gainesville, FL, talks & interactive demos to 3rd & 4th grade classes, May 17, 2013.
- 34. Lab Tours, Junior Science, Engineering and Humanities Symposium lab visits for K-12 Teachers, January 27, 2014.
- 35. Lab Outreach to Middle School Children, Lincoln Middle School, Gainesville FL, Spring 2014.
- 36. <u>Host for Two Elementary School Teachers</u> (Rebekah Prevatt and Marlina Romano from Norton Elementary School), NSF Multidisciplinary Research Experiences for Teachers (MRET) (PI: Chelsey Simmons), Summer 2019.
- 37. <u>SURF (Summer Undergraduate Research at Florida) Mentor</u> (Antonio Kalil from University of Puerto Rico Mayaguez), University of Florida, Summer 2019.
- 38. <u>SURF (Summer Undergraduate Research at Florida) Mentor</u> (Lauren Repmann from Rowan University), Virtual internship, University of Florida, Summer 2021.
- 39. <u>SURF (Summer Undergraduate Research at Florida) Mentor</u> (Sue Chong from University of Michigan), University of Florida, Summer 2022.