Rupak M. Rajachar, PhD
Curriculum Vitae

Education
2003 PhD-Biomedical Engineering, University of Michigan (UM) *[focus: tissue mechanics-biomaterials]*
1997 MS-Biomedical Engineering, UM [*focus: biomaterials*]
1994 BS-Materials Science & Engineering, UM *[focus: materials characterization, polymers]*

Professional Experience
2014-present Biomedical Engineering, Michigan Technological University, Senior Lecturer
2007-2013 Biomedical Engineering, Michigan Technological University (MTU), Assistant Professor
2004-2005 Howard Hughes Medical Institute: UW-Faculty Teaching Apprenticeship Program, Teaching Fellow
2003-2006 Bioengineering-UWEB Center, University of Washington, NHLBI-Cardiovascular Training Grant
1996-2002 Biomedical Engineering, UM, NIDCR Research Training Grant

Capstone Senior Design Awards Received at Present Position
Total external senior design support = **$112,500**

Current

2015 Advisor, Blubber-only Implantable Satellite Tag Anchoring System, MTU-NOAA.
Total Dollar: $7,500, 2015-16.

2015 Advisor, Epicardial Pacemaker Fixation II, Medtronic.
Total Dollar: $15,000, 2015-16.

Completed

2014 Advisor, Epicardial Pacemaker Fixation, Medtronic.
Total Dollar: $15,000, 2014-15.

2013 Advisor, Leadless Pacemaker Delivery Tool, Medtronic.
Total Dollar: $15,000, 2013-14.

2012 Advisor, Fixation System Design for a Leadless Pacemaker, Medtronic.
Total Dollar: $15,000, 2012-13.

2011 Advisor, Thoracic Intervention Device Delivery and Tissue Fixation, Medtronic.
Total Dollar: $15,000, 2011-12.

2010 Advisor, Implantable Leadless Pacemaker Fixation, Medtronic.
Total Dollar: $15,000, 2010-11.

2009 Advisor, Novel Antimicrobial polymer mechanical and functional analysis, Great-batch Medical.
Total Dollar: $15,000, 2009-10.

Research Awards Received at Present Position
Total external support at current institute = **$1,330,057**

Current

2015 PI, "Adhesive PEG-Fibrinogen-NO Releasing Hydrogels for Use as a Wound Healing Biomaterial,"
NIH/NIGMS (1R15 GM112082-01)
Total Dollar: $326,346, 2015-2018

2015 Consultant, "Improving Large Cetacean Implantable Satellite Tag Designs to Maximize Tag Robustness,"
NOAA (Subcontract)
Total Dollar: $50,000, Spring 2016

2014 co-I, "Virtual Breast Project: Improving Noninvasive Characterization of Tumors,"
NIH/NCI (1R15 CA179409-01A1)
Total Dollar: $452,780, 2014-2017

Completed

2012 PI, "Novel nano-mechanical platform to investigate theraputic sub-cellular mechanical stimulation," NIH/NIBIB (1R03 EB014504-01A1)
Total Dollar: $168,774, 2012-2014

2011 PI, "Vibrational coating for improvement of long-term stability of transcutaneous implants," Michigan Universities Commercialization Initiative (MUCI-R75135).
Total Dollar: $35,613, 2011-2012.

2010 PI, "Remotely activated, submicron vibrating surfaces for controlling infections and uncontrolled fibrosis at the osseointegrated limb interfaces,"
US Department of Defense, Army, CDMRP-OR090762.
Total Dollar: $146,764, 2010-2012.

2009 co-PI, "First-Year Innovation & Design in Engineering for Academic Success (IDEAS) Modules and Center," NSF-DUE0836861.
Total Dollar: $149,780, 2009-2011.

Scholarly Activities

2009 - present Grant Reviewer, NIH NIBIB Grants in Health and Science Research (Ad hoc)
2009 - present Grant Reviewer, Defense Advanced Research Projects Agency (DARPA)
2008 - present Grant Reviewer, American Institute of Biological Sciences (AIBS)
2008 - present Grant Reviewer, Office of Naval Research (ONR)
2011 Reviewer, ASME 2011 SBC- Nemacolin Resort, PA- MS/PhD-Level Paper Competition
2010 Moderator, Orthopaedic Research Society, New Orleans, LA- Bone Mechanics Session
2010 Moderator, Orthopaedic Research Society, New Orleans, LA- Bone Material Properties I
2010 Reviewer, ASME 2009 SBC- Lake Tahoe, CA- MS/PhD-Level Student Paper Competition

Abstract reviewer:
2008-2013 Orthopedic Research Society
2007-2012 ASME- Summer Bioengineering Conference
2009-2012 Society for Biomaterials
2008-2014 Biomedical Engineering Society

Patents

2007 Provisional patent application filed with the United States Patent and Trademark Office for "Bioactive Vibration-Tuneable (BVT) Coating Platform". (USPTO)-serial number:60/966,161 Filed on: 8/24/2007

Archival Refereed Journal Publications

(a) Refereed Publications/Proceedings:

1. Smith J, DeRouin A, Chen R, **Rajachar R**, Ong KG. An ultrasound application device and cell morphological analysis software to analyze ultrasonic vibrational effects on fibroblasts. Science Letters, in press, 2015
2. Lin MH, Anderson J, Pinnaratip R, Meng H, Konst S, DeRouin AJ, **Rajachar R**, Ong Kg, Lee BP. Monitoring the Long-Term Degradation Behavior of Biomimetic Bioadhesive Using Wireless Magnetoelastic Sensor. IEEE Trans Biomed Eng. 2015 Jul;62(7):1838-42.
3. Paces WR, Holmes HR, Vlaisavljevich E, Snyder KL, Tan EL, **Rajachar RM**, Ong KG. Application of sub-micrometer vibrations to mitigate bacterial adhesion. J Funct Biomater. 2014 Mar 11;5(1):15-26.
4. Liu Y, Meng H, Konst S, Sarmiento R, **Rajachar R**, Lee BP. Injectable Dopamine-Modified Poly(Ethylene Glycol) Nanocomposite Hydrogel with Enhanced Adhesive Property and Bioactivity. ACS applied materials & interfaces. 2014; Oct 8; 6(19): 16982-92.

5. Holmes HR, DeRouin A, Wright S, Riedemann TM, Lograsso TA, **Rajachar RM**, Ong KG. Biodegradation and biocompatibility of mechanically active magnetoelastic materials. Smart Materials and Structures. 2014; 23 (9):095036.
6. Schaub NJ, Britton T, **Rajachar R**, Gilbert RJ. Engineered nanotopography on electrospun PLLA microfibers modifies RAW 264.7 cell response. ACS applied materials & interfaces. 2013; 5(20):10173-84.
7. VanWagner MJ, Rhadigan J, Lancina M, Lebovsky A, Romanowicz G, Holmes H, Brunette MA, Snyder KL, Bostwick M, Lee BP, Frost MC, **Rajachar RM**. S-nitroso-N-acetylpenicillamine (SNAP) derivatization of peptide primary amines to create inducible nitric oxide donor biomaterials. ACS applied materials & interfaces. 2013; 5(17): 8430-9.
8. Brunnete M, Holmes H, Lancina M, He W, Lee BP, Frost MC, **Rajachar RM**. Inducible nitric oxide releasing poly-(ethylene glycol)-fibrinogen adhesive hydrogels for tissue regeneration. MRS Anuual Meeting; March 1-5, 2013; San Fransisco, CA2013. p. s1-6.
9. Vlaisavljevich E, Holmes HR, Tan EL, Qian Z, Trierweiler S, Ong KG, **Rajachar RM**. Magnetoelastic vibrational biomaterials for real-time monitoring and modulation of the host response. J Mater Sci Mater Med. 2013;24(4):1093-104.
10. Snyder KL, Holmes HR, VanWagner MJ, Hartman NJ, **Rajachar RM**. Development of vapor deposited silica sol-gel particles for use as a bioactive materials system. JBMR-A. 2013; 101(6):1682-93.
11. Holmes HR, Tan EL, Ong KG, **Rajachar RM**. Fabrication of biocompatible, vibrational magnetoelastic materials for controlling cellular adhesion. Biosensors. 2012. 2(1): 57-69.
12. Vlaisavljevich E, Janka L, Ong K, **Rajachar RM**, Magnetoelastic Materials as Novel Bioactive Coatings for Control of Cell Adhesion. IEEE Trans Biomed Eng. 2011 Mar; 58(3): 698-704.
13. Holmes H, Tan EL, Ong KG, **Rajachar RM**. Real-time, *In vivo* Investigation of Mechanical Stimulus on Cells with Remotely Activated Vibrational Magnetoelastic Layers, IEEE-EMBC. 2011
14. Vlaisavljevich E, Janka L, Ong K, **Rajachar RM**. Magnetoelastic Materials as Novel Bioactive Coatings for Control of Cell Adhesion, IEEE Trans Biomed Eng. 2011 Mar; 58(3): 698-704 (**COVER**)
15. Vlaisavljevich, E, Janka L, Ong KG, **Rajachar RM**. Bioactive Magnetoelastic Materials as Coatings for Implantable Biomaterials. Journal of Biomedical Devices. 2009 3 (2).
16. Vlaisavljevich, E, Janka LP, Ong KG, **Rajachar RM**. Magnetoelastic Materials as Novel Bioactive Coatings for Bone Anchored Prostheses. In: *Proceedings of the 2009 Summer Bioengineering Conference*, BED-Volume 58, RD Kamm, GW Schmid-Schonbein, GA Atheshian, and MS Hefzy, Editors., ASME, New York, 2009.
17. **Rajachar RM**, Tung E, Trung AQ, Giachelli CM. Role of Carbonic Anhydrase 2 (CAR2) in Ectopic Calcification. Cardiovasc Pathol. 2009. 18(2): 77-82
18. Osathanon T, Linnes ML, **Rajachar RM**, Ratner BD, Somerman MJ, and Giachelli CM. Microporous nanofibrous fibrin-based scaffolds for bone tissue engineering. Biomaterials 29(30): 4091-9, 2008
19. **Rajachar RM**, Trung AQ, Giachelli CM. The influence of surface mineral and osteopontin on the formation and function of murine bone marrow-derived osteoclasts. J Mater Sci Mater Med. 2008 Oct; 19(10): 3279-85.
20. Wallace JM, **Rajachar RM**, Allen MR, Bloomfield SA, Robey PG, Young MF, Kohn DH. Exercise-induced changes in the cortical bone of growing mice are bone- and gender-specific. Bone. 2007 Apr; 40(4): 1120-7.
21. Wallace JM, **Rajachar RM**, Chen X-D, Shi S, Allen MR, Bloomfield SA, Les CM, Robey PG, Young MF, Kohn DH. The phenotype of biglycan-deficient mice is bone and gender specific. Bone. Jul; 39(1): 106-16. 2006.
22. Giachelli CM, Speer MY, Li X, **Rajachar RM**, Yang H. Regulation of vascular calcification: roles of phosphate and osteopontin. Circ Res 96:717-722, 2005.
23. Ohri R, Tung E, **Rajachar RM**, Giachelli CM. Mitigation of Ectopic Calcification in osteopontin-deficient mice by exogenous osteopontin. Calcif Tissue Int. 76(4):307-15, 2005.
24. **Rajachar RM**, Tung, E, Giachelli, CM Osteopontin mediated regression of ectopic calcification. J Bone Mineral Res 19: S467-S467 Suppl. 1 OCT 2004
25. Carden A, **Rajachar RM**, Morris MD, Kohn DH, and Timlin JA. Ultra-structural changes accompanying the mechanical deformation of bone tissue: A Raman imaging study. Raman spectroscopic imaging markers for fatigue-related microdamage in bovine bone. Calcif Tissue Int, v. 72, p. 166-75, 2003.
26. **Rajachar RM** and Kohn DH. Ultra-structural level characterization of microdamage in cortical bone using Raman Spectroscopy and WAXS. In: *Proceedings of the 2001 Summer Bioengineering Conference*, BED-Volume

50, RD Kamm, GW Schmid-Schonbein, GA Atheshian, and MS Hefzy, Editors, ASME, New York, p. 306-8, 2001.

27. Timlin JA, Carden A, Morris MD, **Rajachar RM**, Kohn DH, Raman spectroscopic imaging markers for fatigue-related microdamage in bovine bone. Anal Chem, v. 72, p. 2229, 2000.
28. **Rajachar RM**, Chow DL, Curtis CE, Weissman NA, and Kohn DH, Use of acoustic emission to characterize focal and diffuse microdamage in bone**,** Acoustic Emission: Standards and Technology Update, ASTM STP 1353, S.J. Vahaviolos, Ed., ASTM, 1999.

(b) Other Publications/Proceedings:

1. Morris, MD, Finney WF, **Rajachar RM**, Kohn DH, Carden A, and Timlin JA. Bone tissue ultra-structural response to elastic deformation probed by Raman spectroscopy. Faraday Discuss, v. 126, p. 159-68; 169-83, 2004.
2. Morris MD, Carden A, **Rajachar RM**, Kohn DH. Bone microstructure deformation observed by Raman Microscopy, Proc. SPIE Vol. 4254, p. 81-89, Biomedical Diagnostic, Guidance, and Surgical-Assist Systems III, T Vo-Dinh; WS Grundfest; DA Benaron; Editors, 2001.
3. **Rajachar RM**, Chow DL, and Kohn DH. Determining mechanisms of microdamage formation and accumulation in cortical bone using acoustic emission, In: *Proceedings of the 1999 Summer Bioengineering Conference*, BED-Volume 42, V.K. Goel, R.L. Spilker, G.A. Atheshian, and L.J. Soslowsky, Editors, ASME, New York, p. 317-8, 1999.
4. Anderson JP, Nilsson S, Weissman N, Logan R, **Rajachar R**, Martin DC. "Bioactive genetically engineered protein polymer films on silicon devices", Biomolecular Materials by Design, M. Alper, H. Bayley, D. Kaplan, and M. Navia, eds., Materials Research Society Symposium Proceedings, v. 330, Materials Research Society, Pittsburgh, PA, 171-177, 1994.

Submitted Manuscripts

1. Holmes H, Vlaisavljevich E, Tan EL, Sanders J, Ong KG, **Rajachar RM**. Sub-cellular mechanical strain as a means for the real-time mediation of cell adhesion and myofibroblastic transformation. JBMR-A. 2015. (*in review*)

Conference Abstracts and Presentations

1. Holmes H, Wright S, Riedemann T, Lograsso T, Ong K, **Rajachar R**. Biodegradable magnetoelastic materials for use in mechanically active implantable devices. BMES 2013 Seattle, WA (Poster)
2. Brunette MA, Westphal NM, Holmes HR, Lancina MG, He W, Lee BP, Frost MC, **Rajachar RM**. Inducible Nitric Oxide Releasing PEG-Fibrinogen Adhesive Hydrogels for Tissue Regeneration. BMES 2013 Seattle, WA (Poster)
3. Holmes HR, Ong KG, **Rajachar RM**. Magnetoelastic Materials as Platform to Study Substrate Stiffness Related Chemotherapeutic Resistance in Hepatocellular Carcinoma Cells. MRS 2013 San Francisco, CA. (Podium)
4. Holmes H, Tan EL, Ong KG, **Rajachar RM**. The Effect of Sub-Micron Mechanical Stimuli on Hepatocellular Carcinoma Cells. BMES 2012 Atlanta, GA (Poster)
5. Brunette MA, Holmes HR, Lancina MG, He W, Lee BP, Frost MC, **Rajachar RM**. Fabrication of PEG-Fibrinogen Hydrogels for Controlled Release of Nitric Oxide. BMES 2012 Atlanta, GA (Poster)
6. Lancina MG, Snyder KL, Frost MC, **Rajachar RM**. Primary Amine Derivatized Natural Polymer Electrospun Fibers for the Controlled Release of Nitric Oxide. BMES 2012 Atlanta, GA (Poster)
7. Lebovsky AM, Lancina MG, Snyder KL, Perles BD, Ong KG, Frost MC, **Rajachar RM**. Mechanically Controlled Nitric Oxide Releasing Natural Polymers for Tissue Engineering. BMES 2012 Atlanta, GA (Poster)
8. Holmes H, Tan EL, Vlaisavljevich E, Paces W, Ong KG, **Rajachar RM**. Control of Cell Phenotype with Sub-Micron Level Vibrations. BMES 2011 Hartford, CT (Podium)
9. Holmes H, Tan EL, Ong KG, **Rajachar RM**. Real-time in vivo investigation of mechanical stimulus on cells with remotely activated vibrational ME layers. IEEE-EMBC 2011 Boston, MA (Poster)
10. Holmes H, Vlaisavljevich E, Tan EL, Ong KG, **Rajachar RM**. Magnetoelastic Materials as novel bioactive coatings to improve integration of percutaneous implants. ASME-BED 2011 Nemacolin Resort, PA (Podium)
11. E Brown, U Mendez, M Roberts, C Yarina, E Bouta, K Snyder, J Zuidema, **RM Rajachar**, R Gilbert, J Goldman. Biomaterial Screening for Lymphatic Regeneration and the Prevention of Lymphedema Following Lymphatic Injury. SFB 2011. Orlando FL (Poster)

12. Snyder K L, Das D, Hartman N, D'Ambrosio C, **Rajachar, RM**. Development of a Novel Vapor Deposited Silica Sol Particles for Use as a Bioactive Materials System. ORS 2011 Newport Beach, CA (Poster)
13. Vlaisavljevich E, Janka LP, Ong KG, **Rajachar RM**. Bioactivated Magnetoelastic Materials for Use as Tunable Coatings for Implantable Biomaterials. BMES 2010. Austin, TX (Podium)
14. VanWagner MJ, J Forrest, KL Snyder, G Gierke, MC Frost, **RM Rajachar**. Nitric Oxide Releasing Fibrin as Bone Metabolism Support in Tissue Engineering Scaffolds. BMES 2010. Austin, TX (Poster)
15. Snyder K L, Hartman N, Wold K, **Rajachar RM**. Development of a Novel Silica Sol Vapor Deposition System for use in Interfacial Tissue Constructs. SFB 2010. Seattle, WA (Poster)
16. Vlaisavljevich E, Holmes H, Scott K, Ong KG, **Rajachar RM**. Magnetoelastic Materials as Novel Bioactive Coatings for Control of Cell Adhesion. SFB 2010. Seattle, WA (Podium)
17. Vlaisavljevich E, Scott K, Ong KG, **Rajachar RM**. Magnetoelastic Materials as Novel Bioactive Coatings for Control of Cell Adhesion. ORS 2010 New Orleans, LA (Poster)
18. Das DA, Snyder KL, **Rajachar RM**. Preparation and characterization of poly (ethylene glycol) functionalized sol gel scaffolds for interfacial tissue regeneration. LSA Conference. Minneapolis, MN 2010 (Poster)
19. Holmes H, Vlaisavljevich E, Ong KG, **Rajachar RM**. Magnetoelastic Materials as Means to Control and Monitor Cellular Adhesion. LSA Conference. Minneapolis, MN 2010 (Poster)
20. Snyder KL, Hartman NJ, Jang-Stewart S, **Rajachar RM**. Collagen-Vaporized Bioglass Composite Scaffolds for Interfacial Tissue Regeneration. BMES Annual Meeting 2009, Pittsburgh, PA (Poster)
21. Vlaisavljevich E, Janka LP, Ong KG, **Rajachar RM**. Magnetoelastic Materials as Novel Bioactive Coatings for Bone Anchored Prostheses. ASME-BED 2009 Lake Tahoe, CA (Poster)
22. Vlaisavljevich E, Janka LP, Ong KG, **Rajachar RM**. "Bioactive Magnetoelastic Materials as Coatings for Implantable Biomaterials" Design of Medical Device Conference 2009, Minneapolis MN (Poster)
23. Vlaisavljevich E, Janka LP, Ong KG, **Rajachar RM**. "Bioactivated Magnetoelastic Materials for Use as Tunable Coatings to control cell adhesion to biomaterial implants" BMES Annual Meeting 2008, St. Louis, MO (Podium)
24. Janka LP, Jang-Stewart S, Vlaisavljevich E, Ong KG, **Rajachar RM**. ""Bio-activated magnetoelastic (ME) materials for use as antimicrobial coatings in percutaneous biomedical devices" BMES Annual Meeting 2008, St. Louis, MO (Podium)
25. Hartman N, Wendland C, Snyder K, Jang-Stewart S, **Rajachar RM**. "Woven Fiber Scaffolds for Interfacial Tissue Engineering" BMES Annual Meeting 2008, St. Louis, MO (Poster)
26. Janka LP, Jang-Stewart S, Hembolt A, Ong KG, **Rajachar RM**. "Characterization of chitosan coated magnetoelastic materials for use as a non-fouling coating in percutaneous implants" Design of Medical Device Conference 2008, Minneapolis MN (Poster)
27. **Rajachar RM**, Tung E, Trung AQ, Giachelli CM. Osteopontin mediated regression of ectopic calcification. ASBMR Conference, 2004, Seattle, WA. (Poster)
28. **Rajachar RM**, Tung E, Trung AQ, Ying-Yang H, Giachelli CM. Osteopontin mediated inhibition and regression of ectopic calcification. International Vascular Biology Meeting (IVBM), 2004, Toronto, ON. (Poster)
29. **Rajachar RM**, Wallace JM, Kohn DH. Age-related changes in microdamage mechanisms in C57/Bl6 mouse femoral cortical bone. Orthopaedic Research Society (ORS) Annual Meeting, 2004, San Francisco, CA. (Podium)
30. **Rajachar RM**, Carden A, Morris MD, Kohn DH. Ultra-structural level characterization of microdamage in cortical bone using raman spectroscopy and WAXS. ASME Summer Bioengineering Conference, 2001 Big Sky, MT. (Podium)
31. **Rajachar RM**, Kohn DH. The role of nano-apatite in mineralized tissue damage and regeneration. Nanoscience and Nanotechnology: Shaping Biomedical Research-National Institutes of Health/BECON 2000. (Poster)

Ph.D. Dissertation

Rupak M Rajachar (University of Michigan- August 2003): Effects of age-related ultra-structural level changes in bone on microdamage mechanisms.

Reviewer for Scientific Journals

Ad-hoc referee for the following journals (average 2-3 reviews total per year):

1) IEEE- Biomedical Engineering

2) ACS- Biointerfaces
3) Acta Biomaterialia
4) Journal of Biomedical Materials Research Part A and B
5) Journal of Biomechanics
6) Biomaterials
7) Tissue Engineering Part A

University and Departmental Committees

Committee member- Institutional Animal Care and Use Committee (IACUC), 2010-2013
Reviewer- Michigan Technological University SURF Award, 2008-present
Committee member- Biotechnology Research Center- Student Travel Award Committee, 2009-present
Committee member- Faculty Search, 2009
Committee member- Strategic Faculty Hiring Initiative, 2008-2009
Committee member- Animal Facility Planning Committee, 2008
Coordinator- Biomedical Engineering Graduate Seminar, 2008
Committee member- Biomedical Engineering Department Graduate Committee, 2008-2009
Graduate Coordinator- Biomedical Engineering Department, 2007-2008
Representative, Biomedical Engineering Department - Graduate Student Council, 2007-2008
Committee member- Faculty search committee, 2006-2008
Committee member- BME curriculum committee, 2006-2008

Teaching Activities (Awards and student evaluations)

Awards

2012 Letter of Recognition from University Provost for Excellence in Teaching
2010 University Teaching Award in the College of Engineering
2010 Elected to the University Academy for Teaching Excellence

Evaluations

BE4510/5510	Cardiovascular Engineering (S2007, S09, S11, S13, F14): *4.71/5.00 [20-35 students]*
BE2600	Introduction to Biomedical Engineering- Biomaterials Module (F07-F12): (Team taught)
BE3500	Biomedical Materials (F07-F12): *4.51/5.00 [55-70]*
BE3750	Introduction to Biomechanics (S08): *4.45/5.00 [54]*
BE4930/5930	Industrial and Clinical Issues (Bioethics/GMP) (S10, S12, S13, S14): *4.85/5.00 [15-25]*
BE4900	Design Fundamentals-Device Testing and Regulations Module (S12-S15): (Team taught)
BE4940/5940	Tissue Engineering (F12): *4.81/5.00 [24]*
BE2800	Biomaterials I: Fundamental Materials Science & Engineering (S13, S14): *4.51/5.00 [60-75]*
BE3800	Biomaterials II: Materials properties, processing, and bio-interactions (F14): *4.62/5.00 [67]*

Student Advising [Name (current position)]

Graduate Students:

Katherine Snyder (PhD-Biomedical Engineering)	2008 - 2013 (Grad: 05/2013)
David Weyland (MS-Biomedical Engineering, SMART Scholar)	2012 - 2014
Rattapol Pinnaratip (MS-Biomedical Engineering, PhD-MTU)	2012 - 2015
Christina Ylitalo (MS-Biomedical Engineering)	2012 - 2014
Ee Lim Tan (PhD-Biomedical Engineering)	2006 - 2010 (Grad: 05/2010)

Post-Doctoral Fellow:

Connor McCarthy (Current Post-Doc)	2015 - present
Jennifer Sanders (MTU-School of Forestry- Research Scientist)	2012 - 2014
Ee Lim Tan (Research Scientist, Institute of Microelectronics, Singapore)	2011 - 2012

Undergrad Students (current positions and awards):

Hannah Fisher	2015 - present

Breanne Spalding	2015 - present
Carly Joseph	2014 - present
Nicole Westphal (Teach for America)	2012 - 2014
Hallie Holmes (Goldwater Scholar, Departmental Scholar, PhD-UW)	2009 - 2014
Margaret Brunette (SURF-MTU, Stevenson Fellow, PhD-MAYO)	2012 - 2014
Mike Lancina (SURF-MTU, PhD-UVC)	2011 - 2013
Steven Trierweiler (Michigan Space Grant Fellow)	2012 - 2014
Karl Koivisto (MD- University of Michigan)	2011 - 2013
Uziel Mendez (SURF-UCSD, PhD-UM, NSF)	2011 - 2013
Will Paces (MS-MTU)	2010 - 2012
Allison Lebovsky (SurModics)	2011 - 2012
Zichen Quan (PhD-MTU)	2010 - 2012
Nicholas Schaub (PhD RPI, Post-Doc-NIST)	2010 - 2011
John Zuidema (PhD-RPI, Post-Doc-UCSD)	2009 - 2010
Jessica Forrest (Beckman Coulter)	2009 - 2011
Natalie Hartman (MBA- UT-Dallas)	2008 - 2010
Donisha Das (PhD- Columbia)	2009 - 2011
Michael Van Wagner (MD- Michigan State)	2009 - 2011
Eli Vlaisavlevich (PhD-University of Michigan, Goldwater Scholar, NSF)	2008 - 2010
Katrina Sanders (Boston Scientific)	2008 - 2009
Keara Scott (Beckman Coulter)	2008 - 2009
Kate Wold (PhD- Colorado State)	2008 - 2010
Samantha Jang-Stewart (MD, practicing in Nova Scotia)	2007 - 2009
Logan Janka (Kimberley Clark)	2007 - 2009

Biomedical Engineering Society MTU Chapter:

Faculty Advisor- (including community outreach and service)	2007- Present