

Maureen E. Lynch
University of Massachusetts-Amherst
Department of Mechanical & Industrial Engineering
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EDUCATION

Cornell University, Ithaca, NY

PhD, Mechanical Engineering, Minor specialization: Physiology, July 2010
MS, Mechanical Engineering, August 2008

Clemson University, Clemson, SC

BS, Mechanical Engineering, Departmental Honors, Cum laude, Minor Degree: Bioengineering, May 2005

PROFESSIONAL AND RESEARCH EXPERIENCE

Assistant Professor, University of Massachusetts-Amherst Mechanical & Industrial Engineering and the Institute for Applied Life Sciences 1/2015 – current

- Investigate the role of the osteocyte on secondary metastatic tumor growth in the skeleton.
- Determine the role of skeletal mechanical forces on the interactions between bone metastatic breast cancer cells and mesenchymal stem cell-derived osteogenic cells.
- Develop 3D *in vitro* loading platforms to determine the effects of multi-modal mechanical stimuli.

The Hartwell Foundation Postdoctoral Research Fellow, Cornell University, Biomedical Engineering 8/2010 – 12/2014 **Adviser: Claudia Fischbach**

- Investigated the role of skeletal mechanical forces on secondary metastatic tumor growth and bone growth.
- Developed *in vivo* and 3D *in vitro* loading models to study the integrated effects of applied mechanical loading and metastasis in bone.

Graduate Research Assistant, Cornell University, Mechanical Engineering 8/2005 – 7/2010 **Adviser: Marjolein van der Meulen**

Cornell University-Hospital for Special Surgery Program in Biomechanical Engineering

- Investigated the effects of aging, hormone withdrawal, and sex on the adaptive response to applied loading in mouse cancellous bone.
- Characterized the *in vivo* stress-strain relationship during applied loading via strain gauging.
- Quantified the effects of mesenchymal stem cell therapy on the mechanical performance of equine tendons.

Undergraduate Research Assistant, Clemson University, Mechanical Engineering **Adviser: Richard Figliola**

Mechanical Engineering Honors Thesis Program 8/2004 – 5/2005

- Designed prototypes and conducted functionality/feasibility tests for a novel hemoaccess device for use in dialysis patients. Conducted in collaboration with a cardiac surgeon from the Greenville Hospital System.

Undergraduate Researcher, Clemson University, Bioengineering **Adviser: Martine LaBerge**

NSF- NIH Biomaterials and Bioinformatics Summer Institute (BBSI) 5/2003 – 8/2004

- Quantified frictional wear damage of a novel hydrogel during hemiarthroplasty via non-contact profilometry.

Co-op Intern, General Electric Energy, Greenville, SC; Schenectady NY 8/2001 – 8/2004

HONORS AND AWARDS

Faculty Research Grant/Healey Endowment Grant, University of Massachusetts 2016 – 2017

Kappa Delta/Orthopaedic Research Society Travel Award	Spring 2013
'Best Poster' at the Annual Meeting of the Orthopaedic Research Society	January 2013
Annual Cancer-Induced Bone Disease Meeting Travel Grant	Fall 2012
The Hartwell Foundation Individual Biomedical Research Award	2012 – 2014
Diversity Programs in Engineering, Cornell University:	
General Motors Postdoctoral Fellow of the Year	2010 – 2011
Graduate Student of the Month	April 2010
Sibley School Exceptional Teaching Assistant Award, Cornell University	2008
Graduate Research Fellowship Program, National Science Foundation	2007 – 2010
Honors College Research Grant, Clemson University	2004 – 2005
National Institutes of Health BBSI Mini-Grant, Clemson University	2003 – 2004

PEER-REVIEWED PUBLICATIONS

1. Liu B, Han S, Modarres-Sadeghi Y, **Lynch ME**. "Perfusion applied to a 3D model of bone metastasis results in evenly dispersed mechanical stimuli." Submitted to *Biotechnology & Bioengineering*. In revision.
2. He F, Chiou AE, Loh HC, **Lynch ME**, Seo B, Song YH, Lee MJ, Hoerth R, Bortel EL, Willie B, Duda G, Estroff LA, Masic A, Wagermaier W, Fratzl P, Fischbach C. "Multiscale characterization of the mineral phase at skeletal sites of breast cancer metastasis." *Proceedings of the National Academy of Sciences* 114:10542-10547, 2017. [doi: 10.1073/pnas.1708161114](https://doi.org/10.1073/pnas.1708161114).
3. **Lynch ME**, Chiou AE, Lee MJ, Polamraju P, Marcott SC, Lee Y, Fischbach C. "3D mechanical loading modulates the osteogenic response of mesenchymal stem cells to tumor-derived soluble signals." *Tissue Engineering Part A*. 22:1006-15, 2016. [doi:10.1089/ten.tea.2016.0153](https://doi.org/10.1089/ten.tea.2016.0153).
4. **Lynch ME** and Fischbach C. "Biomechanical forces in the skeleton and their relevance to bone metastasis: biology and engineering considerations." Invited Review *for Advanced Drug Delivery Reviews*, 79-80: 119-34, 2014. [doi: 10.1016/j.addr.2014.08.009](https://doi.org/10.1016/j.addr.2014.08.009).
5. Barney LE, Jansen LE, Polio SR, Galarza S, **Lynch ME**, Peyton SR. "The predictive link between matrix and metastasis." *Curr Opin Chem Eng*. 11:85-93, 2016. doi.org/10.1016/j.coche.2016.01.001.
6. Main RP, **Lynch ME**, van der Meulen MCH. "Load-induced changes in bone stiffness and cancellous and cortical bone mass following tibial compression diminish with age in female mice." *The Journal of Experimental Biology*, 217: 1775-83, 2014. [doi: 10.1242/jeb.085522](https://doi.org/10.1242/jeb.085522).
7. **Lynch ME**, Brooks DJ, Mohanan S, Lee MJ, Polamraju P, Dent KC, Bonassar L, van der Meulen MCH, Fischbach C. "In Vivo Tibial Compression Decreases Osteolysis and Tumor Formation in a Human Breast Cancer Metastasis Model." *Journal of Bone and Mineral Research*, 28: 2357-2367, 2013. [doi: 10.1002/jbmr.1966](https://doi.org/10.1002/jbmr.1966).
8. Infanger DW, **Lynch ME**, Fischbach C. "Engineered Culture Models for Studies of Tumor-Microenvironment Interactions." *Annual Review of Biomedical Engineering*, 15: 29-53, 2013. [doi: 10.1146/annurev-bioeng-071811-150028](https://doi.org/10.1146/annurev-bioeng-071811-150028).
9. **Lynch ME**, Main RP, Xu Q, Schmicker TL, Schaffler MB, Wright TM, van der Meulen MCH. "Tibial Compression increases Cortical and Cancellous Bone Mass in Adult Female Mice." *Bone*, 49: 439-46, 2010. [doi: 10.1016/j.bone.2011.05.017](https://doi.org/10.1016/j.bone.2011.05.017).
10. **Lynch ME**, Main RP, Walsh DJ, Xu Q, Schaffler MB, Wright TM, van der Meulen MCH. "Cancellous bone adaptation to tibial compression is not sex-dependent in growing mice." *Journal of Applied Physiology*, 109:685-691, 2010. [doi: 10.1152/jappphysiol.00210.2010](https://doi.org/10.1152/jappphysiol.00210.2010).
11. Main RP, **Lynch ME**, van der Meulen MCH. "In vivo tibial stiffness is maintained by whole bone morphology and cross-sectional geometry in growing female mice." *Journal of Biomechanics*, 43:2689-2694, 2010. [doi: 10.1016/j.jbiomech.2010.06.019](https://doi.org/10.1016/j.jbiomech.2010.06.019).
12. Schnabel LV, **Lynch ME**, van der Meulen MCH, Yeager AC, Kornatowski MA, Nixon AJ. "Mesenchymal stem cells and insulin-like growth factor-I gene enhanced mesenchymal stem cells improve structural aspects

of healing in equine flexor digitorum superficialis tendons.” *Journal of Orthopaedic Research*, 27: 1392-1398, 2009. doi: [10.1002/jor.20887](https://doi.org/10.1002/jor.20887).

In Preparation:

1. **Lynch ME**, Kelly NH, Main RP, Wan PT, Wright TM, van der Meulen MCH. “Estrogen deficiency and tibial compression alter cancellous architecture in mice through different mechanisms.” Submission for *Bone*.

BOOK CHAPTERS

Lynch ME and van der Meulen MCH. Mechanical Properties of Bone Tissue. In Murat C. Cehreli, DDS, PhD (Ed.), *Biomechanics of Dental Implants: Handbook of Researchers*. Hauppauge, NY: Nova Science, 2011.

PEER-REVIEWED CONFERENCE PRESENTATIONS

Podium Presentations:

Sarazin B, Hagen MJ, Burton A, **Lynch ME** (2017) Bone-Homing Versus Primary Breast Cancer Cells Differentially Alter Osteocyte Function in 3D. *Biomedical Engineering Society Annual Meeting*.

Chiou, AE, **Lynch ME**, Fischbach C (2016) Breast Cancer Cell-derived Factors Promote Osteogenic Differentiation of Mesenchymal Stem Cells. *Biomedical Engineering Society Annual Meeting*.

He F, **Lynch ME**, Hoerth R, Seo BR, Willie B, Wagermaier W, Duda G, Fratzl P, Fischbach C (2015) Advanced breast cancer remotely alters the nanostructure of the bone metastatic site. *Biomedical Engineering Society Annual Meeting*.

Lynch ME, Lee MJ, Polamraju R, Bonassar L, Fischbach C (2013) Mechanical Loading Inhibits Metastasis-mediated Osteolysis via Effects on Osteoclasts. *Biomedical Engineering Society Annual Meeting*.

Lynch ME, Brooks DJ, Lee MJ, Fischbach C (2012) Mechanical Loading Decreases Osteolysis and Tumor Formation via Direct Effects on Bone Remodeling. *International Conference on Cancer-Induced Bone Disease*.

Selected for American Medical Association Continuing Medical Credit Program.

Lynch ME, Pathi S, Dent K, Brooks D, van der Meulen MCH, Fischbach C (2011) In Vivo Tibial Compression Increases Bone Mass in a Breast Cancer Metastasis Model. *Biomedical Engineering Society Annual Meeting*, 2-9-E.

Lynch ME, Main RP, Schmicker TL, Wright TM, van der Meulen MCH (2009) Mechanosensitivity to Mechanical Loading Reduced with Age in the Murine Tibia. *Trans Orthop Res Soc* 34: 52.

Poster Presentations:

Rummler M, Ziouti F, Seliger A, **Lynch ME**, Jundt F, Willie B (2017) Targeted Remodeling of the Tumor Microenvironment Via Mechanical Stimulation Defines a Novel Therapeutic Strategy in Myeloma Bone Disease. *American Society of Hematology Annual Meeting*.

Liu B, Han S, Hedrick B, Modarres-Sadeghi Y, **Lynch ME** (2017) Tumor Cells Experience Uniformly Distributed Mechanical Cues in a 3D Bone Scaffold During Perfusion. *Biomedical Engineering Society Annual Meeting*.

Rummler M, Ziouti F, Seliger A, **Lynch ME**, Jundt F, Willie B (2017) Mechanical loading leads to bone formation in vivo in osteolytic Multiple Myeloma. *Amer Soc Bone Miner Res*, MO0209.

Sarazin B, Hagen MJ, Burton A, **Lynch ME** (2017) Bone-Homing versus Primary Breast Cancer Cells Differentially Alter Osteocyte Function in 3D. *Annual Skeletal Research Symposium, Massachusetts General Hospital/Harvard University Center for Skeletal Research*.

Liu B, Han S, Hedrick B, Modarres-Sadeghi Y, **Lynch ME** (2017) Perfusion through a 3D Bone Scaffold Results in Uniformly Distributed Fluid Stresses and Velocities. *Annual Skeletal Research Symposium, Massachusetts General Hospital/Harvard University Center for Skeletal Research*.

Keys JT, Hagen MJ, Sarazin B, **Lynch ME** (2016) Breast Cancer Paracrine Signals Alter Osteocyte Phenotype in a 3D Bone Scaffold. *Biomedical Engineering Society Annual Meeting*.

Liu B, Chang G, Kornilowicz G, Han S, Modarres-Sadeghi Y, **Lynch ME** (2016) Loading-Induced Interstitial Fluid Flow Was More Heterogeneous Than Matrix Strains In A 3D Bone Metastasis Model. *Biomedical Engineering Society Annual Meeting*.

Lynch ME, Lee MJ, Polamraju R, Bonassar L, Fischbach C (2013) Mechanical Loading Inhibits Metastasis-mediated Osteolysis via Effects on Osteoclasts. *Gordon Conference for Biomaterials & Tissue Engineering*.

Selected 'Best Tumors Poster'.

Invited presentation for the American Academy of Orthopaedic Surgeons Annual Meeting.

Lynch ME, Brooks DJ, Mohanan S, Dent KC, van der Meulen MCH, Fischbach C (2013) In Vivo Tibial Compression Decreases Tumor Formation and Osteolysis in a Model of Human Breast Cancer Metastasis. *Trans Orthop Res Soc* 38:1195.

Lynch ME, Brooks DJ, Lee MJ, Madans AB, Ramshankar SR, Fischbach C (2012) 3D Culture Models for Investigating the Role of Mechanical Loading in Bone Metastasis. *Biomedical Engineering Society Annual Meeting*.

Lynch ME, Pathi S, Dent K, Brooks D, van der Meulen MCH, Fischbach C (2011) Tibial Compression Increases Bone Mass in a Breast Cancer Metastasis Model. *International Conference on Cancer-Induced Bone Disease*, P128.

Lynch ME, Main RP, Schaffler MB, Wright TM, van der Meulen MCH (2011) Estrogen Deficiency and Mechanical Loading Alter Cancellous Architecture Through Different Mechanisms in Aging Mice. *Amer Soc Bone Miner Res Forum on Aging and Skeletal Health*, P13.

Lynch ME, Main RP, Wright TM, van der Meulen MCH (2010) Effects of Estrogen-Deficiency on Cancellous Bone Adaptation Varies with Age and Loading Duration in Mice. *Trans Orthop Res Soc* 35: 610.

Main RP, **Lynch ME**, Ko FC, van der Meulen MCH (2010) Estrogen receptor-alpha is critical to cancellous and cortical adaptation to load in the mouse tibia. *Trans Orthop Res Soc* 35: 679.

Main RP, **Lynch ME**, Schmicker TL, Walsh DJ, van der Meulen MCH (2009) Applied loads increase bone geometry but not tibial stiffness in growing female mice. *Amer Soc Bone Miner Res*, M034.

Main RP, **Lynch ME**, Schmicker TL, van der Meulen MCH (2009) Changes in cortical bone stiffness and geometry in response to applied load vary with age in female mice. *Soc Integr Biol*, Jan 3-7, 88.1.

Walsh DJ, Main RP, **Lynch ME**, van der Meulen MCH (2009) Bone tissue composition changes following in vivo loading in male and female murine tibiae. *Trans Orthop Res Soc* 34: 270.

Main RP, **Lynch ME**, van der Meulen MCH (2009) The nature of mechanical stimuli drives structural and stiffness adaptation in mature female mice. *Trans Orthop Res Soc* 34: 692.

Lynch ME, Main RP, Walsh DJ, Wright TM, van der Meulen MCH (2008) Cancellous Bone Adaptation to Non-Invasive Mechanical Loading. *Trans Orthop Res Soc* 33: 933.

Main RP, **Lynch ME**, van der Meulen MCH (2008) Tibial strains decrease with in vivo loading in the mouse. *Trans Orthop Res Soc* 33: 909.

Lynch ME, Main RP, Wright TM, van der Meulen MCH (2008) Mechanical Loading Prevents Bone Loss due to Hormone-Deficiency in Female Mice. *Amer Soc Bone Miner Res*, M474.

SEMINARS AND INVITED TALKS

"Mechanical Regulation of Bone Cancer," Cornell University, Spring 2017

"Mechanical Regulation of Bone Metastatic Cancer," University of Colorado-Boulder, Spring 2017

"The Effects of Mechanical Loading on Bone Metastatic Breast Cancer," Worcester Polytechnic Institute, Fall 2016.

“The Effects of Mechanical Loading on Bone Metastatic Breast Cancer,” New York City Bone Seminar Series, Spring 2016.

“The Effects of Mechanical Loading on Bone Metastatic Breast Cancer,” Penn State University, Biomedical Engineering Seminar Series, Spring 2016.

“The role of mechanical cues in breast cancer bone metastasis,” 2014 World Congress of Biomechanics, Boston, MA.

“Mechanical Loading Decreases Osteolysis and Tumor Formation via Effects on Bone Remodeling,” Mechanical & Aerospace Engineering Department colloquium series, 2013, Cornell University.

ONGOING RESEARCH SUPPORT

NSF CBET-1605060

PI: Lynch, Co-PI: Modarres-Sadeghi. \$425,000 (\$281,500 to Lynch)

‘Mechano-regulation of bone metastatic cancer: linking cell strain to cell function’

In this project, we define a mechano-regulatory algorithm that links experimental metastatic cancer cell function and computational cellular deformations.

07/01/2016 – 06/31/2019

UMass, President’s Office Science and Technology Initiatives Fund

PI: Lee and Crosby, Co-I: Lynch, et. al. \$125,000. (\$13,000 to Lynch)

‘Biomechanics for Disease Diagnosis and Cell Engineering’

7/1/2016 – 6/30/2017.

UMass, Faculty Research Grant/Healey Endowment Grant

PI: Lynch. \$12,625

‘Osteocytes: New Paradigm for Understanding and Treating Bone Metastatic Cancer’

In this project, we conduct pilot studies that identify a role for osteocytes in cancer-induced bone disease and the potential underlying mechanisms.

06/01/2016 – 05/31/2017

Center for Evolutionary Materials Seed Grant

Co-Is: Lynch and Albertson (\$4000 total)

‘Designing a new high-throughput lateral flow chamber to assess bone tissue development in vivo under different mechanical environments’

01/01/2017 – 06/01/2017

PENDING RESEARCH SUPPORT

NSF BMMB

PI: Lynch, Co-PI: Flaherty. \$418,437.00 (\$281,500 to Lynch)

‘Integrating bone metastatic cancer cell and osteogenic cell mechanobiology’

In this project, we determine the impacts of local ‘Mechanical Niches’ in the skeleton on bidirectional signaling between cancer cells and osteogenic cells.

07/01/17 – 06/30/20

TEACHING EXPERIENCE

University of Massachusetts-Amherst, Assistant Professor

- MIE 497T: Orthopaedic Biomechanics. Mechanical Engineering, Fall 2017.
- MIE 597/697T: Orthopaedic Biomechanics. Mechanical Engineering, Spring 2015, 2016.
- MIE 402: Senior Lab II, Mechanical Engineering, Spring 2015, Fall 2016.
- MIE 397B: System Dynamics, Mechanical Engineering, Spring 2016.

Cornell University, Guest Lecturer

- MAE 4640: Orthopaedic Tissue Mechanics. Mechanical Engineering, Spring 2014.

- BME 6670: Nanobiotechnology. Biomedical Engineering, Fall 2012.
- MAE 6640: Mechanics of Bone. Mechanical Engineering, Fall 2010.
- MAE 212: Mechanical Properties & Selection of Engineering Materials. Mechanical Engineering, Spring 2008.

Cornell University, Teaching Assistant, Mechanical Engineering

- MAE 212: Mechanical Properties & Selection of Engineering Materials, Spring 2008.
- MAE 327: Mechanical Performance and Property Laboratory, Spring 2007.

Cornell University, Office of Engineering Learning Initiatives

- Graduate Teaching Assistant Fellow, 2010 – 2011
- Graduate Teaching Assistant Specialist, 2008 – 2011
- The Leadershape Institute, Cluster Facilitator, Spring 2011

PROFESSIONAL MEMBERSHIP

Cancer and Bone Induced Society	2015 – current
American Society of Bone and Mineral Research	2013 – current
Biomedical Engineering Society	2011 – current
International Bone and Mineral Society (now CABS)	2011 – 2014

PROFESSIONAL SERVICE

Journal Reviewer

Journal of Bone and Mineral Research	2016 – current
Clinical Orthopaedics and Related Research	2013 – current
Tissue Engineering	2013 – current
Bone	2010 – current
Journal of Orthopaedic Research	2010 – current
Osteoporosis International	2009 – current
Acta Biomaterialia	2014 – current
Journal of Biomechanics	2015 – current
Journal of Biomaterials Science	2016 – current
Annals of Biomedical Engineering	2017 – current
ACS Biomaterials Science & Engineering	2016 – current

Peer-Reviewer for Conference Abstract Submissions

Biomedical Engineering Society Annual Meeting	2013 – current
American Society for Bone and Mineral Research	2017 – current

National Science Foundation

Graduate Research Fellowship Program	2015 – current
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Conference-Related Service

World Congress of Biomechanics	2018
Session Co-Chair: Bone Marrow Properties and Mechanobiology	
Cancer and Bone Society Annual Conference	2017
Session Co-Chair: New Models for Cancer in Bone/Bone Biomechanics session	
Young Investigator Session Leader: How to Network at Scientific Meetings	
Biomedical Engineering Society	2017
Session Co-Chair: Cancer Mechanobiology	
Session Co-Chair: Engineering Replacement Tissues	

SERVICE AND OUTREACH

University of Massachusetts-Amherst:

Member, Materials Advisory Committee for the PSE MRSEC	Spring 2017 – current
Panelist, Panel for Aspiring STEM Professionals	Spring 2015, 2016
MIE Faculty adviser: Society of Biomedical and Mechanical Engineering	Fall 2015 – current

Faculty Mentor, GWIS	Spring 2015 – Fall 2017
Faculty Mentor, SPUR/PREP	Summer 2017
Cornell	
Expanding Your Horizons	2005 – 2014
<i>Conference Chair</i>	2010 – 2012
<i>Committee Chair</i>	2008, 2009, 2013
<i>Workshop Leader</i>	2007 – 2010
<ul style="list-style-type: none"> • Expanding Your Horizons is a national one-day conference to stimulate interest in math and science in middle school-aged girls through hands-on workshops. The Cornell chapter hosts 300 – 400 girls, the largest in the country. 	
Graduate Professional Women’s Network, Mentorship Chair	2013 – 2014
Cornell Center for Materials Research Outreach Program	2005 – 2010
REU Graduate Panel	
Homeschool Science Program Lecture Series: Catapults	
NYC Weekend Teacher Workshop	
Partnership for Research and Education for Materials	
Hands-on FutureTech Workshop, Norfolk State, Norfolk, VA	
Families Learning Science Together	
Materials Science Teacher Workshops	
Science Teaching Teacher Workshops	
Society of Women Engineers and Office of Admissions, Cornell	2007 – 2010
Prospective Candidates’ Weekend, Lead Lab Demonstrations	
Diversity Programs in Engineering	2007 – 2014
CUEmpower Mentor	2010 – 2012
Student Panel ‘Mastering your A & B Exams’	
Science Cabaret On Air, WICB 91.7 Ithaca	June 2010
Mechanical & Aerospace Graduate Student Organization	2005 - 2010
PhD Student Panel	
Student Seminar Talk	
“ <i>In Vivo Skeletal Loading</i> ”	
“ <i>Overcoming Bone Loss with Mechanical Forces</i> ”	
Organizing Committee Member	
Cornell MAE/BME Biomechanics Seminar Organizer	2008 – 2011
Cornell MAE Graduate Student Organization, Treasurer	2006 – 2007
Clemson, Pi Tau Sigma, Fundraising Officer	2004 – 2005

MENTORED/SUPERVISED STUDENTS:

University of Massachusetts-Amherst:

Graduate Program:

- Boyuan Liu (Spring 2015 – current, Mechanical Engineering, PhD Committee Chair)
- Wenbo Wang (Fall 2015 – current, Mechanical Engineering, MS Committee Chair)
- Gina Georgadelleris (2016 – current, Mechanical Engineering, MS Committee Chair)
- Lauren Jansen (2015 – Summer 2017, Chemical Engineering, PhD Committee Member)
- Zhi Gao (2016 – Summer 2017, Mechanical Engineering, MS Committee Member)
- Akshay Pujari (2016 – Summer 2017, Mechanical Engineering, MS Committee Member)

Undergraduate Program:

- Gabriel Kornilowicz (Spring 2016 – current, Mechanical Engineering, Commonwealth Honors College Thesis Adviser)
- Eric Brazell (Spring 2017 – current, Mechanical Engineering, Commonwealth Honors College Thesis Adviser)
- Tim Duplantier (Summer 2017 – current, Mechanical Engineering, Undergraduate Research Adviser)

- Annie Burton (Summer 2016 – Spring 2017, Chemical Engineering, Undergraduate Research Adviser)
- Blayne Sarazin (Spring 2016 – current, Mechanical Engineering, Undergraduate Research Adviser)
- Julie Boshar (Spring 2016 – Spring 2017, Chemical Engineering, Commonwealth Honors College Thesis Adviser)
- Jeremy Keys (Spring 2015 – Spring 2016, Mechanical Engineering, Commonwealth Honors College Thesis Adviser)
- Steven Ayotte (Fall 2015 – Spring 2016, Chemical Engineering, Commonwealth Honors College Thesis Adviser)

Cornell University:Graduate Program:

- *Meredith Horne (2012 – 2013, Biomedical Engineering)
- *Tyger Howell (2012 – 2013, Biomedical Engineering)
- *Anna Goodroe (Summer 2012, Cornell Leadership Program for Veterinary Students)
- *Andrew Madans (2011 – 2012, Biomedical Engineering)
- *Siddharth Ramshankar (2011 – 2012, Biomedical Engineering)
- *Ellen Hart (Summer 2011, Cornell Leadership Program for Veterinary Students)
- Tee Pamon (2009 – 2010, Biomedical Engineering)
- Kirsten Stoner (2009 – 2010, Biomedical Engineering)

Undergraduate Program:

- *Yeonkyung Lee (2013 – 2014, Chemistry)
- *Stephen Marcott (2013 – 2014, Human Ecology)
- *Praveen Polamraju (2012 – 2014, Biological & Environmental Engineering)
- *Karen Chin (2013, Biological & Environmental Engineering)
- *Min Joon Lee (2011 – 2013, Biological Sciences)
- *Kelsey Dent (2010 – 2011, Biological & Environment Engineering)
- Theresa Galie (2009 – 2010, Mechanical & Aerospace Engineering)
- Kirsten Stoner (2008 – 2009, Mechanical & Aerospace Engineering)
- Thomas Schmicker (2008 – 2009, Biological Sciences)
- Bassam Ghali (Spring 2008, Mechanical & Aerospace Engineering)
- Dan Walsh (2007 – 2009, Biological Sciences)

*direct supervisor