Name and academic rank: Janet L. Gbur, Ph.D.
Case Western Reserve University

Degrees:

Ph.D. Materials Science and Engineering	Case Western Reserve University (CWRU)	2018
M.S.E. Mechanical Engineering	Youngstown State University (YSU)	2011
B.E. ICP-Materials Engineering	Youngstown State University (YSU)	2008
B.S. Biology/Pre-Medicine	Kent State University (KSU)	2006

Related experience:

Research Assistant Professor, Materials Science and Engineering, CWRU	2022-present
Research Biomedical Engineer, VA Northeast Ohio Healthcare System	2022-present
Investigator, Advanced Platform Technology (APT) Center, Louis Stokes Cleveland VA Medical Center	2019-present
Adjunct Faculty, Mechanical Engineering, YSU	2018-present
Senior Research Associate, Materials Science and Engineering, CWRU	2021-2022
Research Associate, Materials Science and Engineering, CWRU	2018-2021
Graduate Assistant, Materials Science and Engineering, CWRU	2011-2018
Visiting Graduate Student, Biomedical Engineering, Cleveland Clinic, Lerner Research Institute	2013-2015
Spring Teaching Assistant, EMSE 303 Mechanical Behavior, CWRU	2013
Fall Teaching Assistant, EMSE 372 Materials Related to Design, CWRU	2012
Spring Teaching Assistant, EMSE 303 Mechanical Behavior, CWRU	2012
Engineering Intern-Research, CleveMed	2007-2012
Research Assistant IV, Mechanical and Industrial Engineering, YSU	2010-2011
Fall Teaching Assistant, ENGR 1550 Engineering Concepts, YSU	2010
Summer Lab Assistant II, Mechanical and Industrial Engineering, YSU	2010
Spring Lab Assistant I, Mechanical and Industrial Engineering, YSU	2010

Consulting and patents:

Patent application: “Electrode for Measuring Electrophysiological Signals,” Application No. 12/509,858
Filing date July 27, 2009, Attorney docket No. CMD-071

Professional society membership:

ASEE, American Society for Engineering Education	2016- present
ASM International	2011- present
Women in Materials Engineering Committee Member	2018-2023
Women in Materials Engineering Retention Subcommittee	2020-present
Women in Materials Engineering Retention Subcommittee Chair	2018-2020
ASTM International	2011- present
Board of Directors	2022-2024
E04, Metallography – E04 Student Speaking Contest Chair	2017
E04, Metallography – E04 Second Vice Chair	2018-present
E08, Fatigue and Fracture – E08.05.04 Fatigue and Fracture of Advanced Materials Vice Chair	2018-present
E28, Mechanical Testing – Committee Member	2011-present
F04, Medical and Surgical Materials and Devices – Committee Member	2012-present
MSA, Microscopy Society of America	2015-present
Executive Council Treasurer	2020-2026
Student Council Past President	2018-2019
Student Council President	2017-2018
Student Council President Elect	2016-2017
Pre-meeting Congress for Students, Postdocs, and Early-career Professionals - Physical Sciences Co-Chair	2017
MRS, Materials Research Society	2011-present
MSNO, Microscopy Society of Northeastern Ohio	2011-present
Trustee	2019-present
Student Board Member	2016-2018
SWE, Society of Women Engineers	2011-present
TMS, The Minerals, Metals and Materials Society	2011-present
Biomaterials Committee, Committee Member	

Certifications:

Certificate of Achievement in Metallography, ASM International	2017
Nitinol for Medical Devices, ASM International	August 2016
Scanning Electron Microscopy, ASM International	June 2016
Mechanical Testing Certificate, ASM International	April 2016
Introduction to Metallurgical Lab Practices Certificate, ASM International	February 2016
Metallurgy for the Non-Metallurgist Certificate, ASM International	January 2016
Advanced Metallographic Techniques Certificate, ASM International	December 2015
Titanium and Its Alloys Certificate, ASM International	October 2015
Metallographic Techniques Certificate, ASM International	September 2015
Microscopy of Soft-Matter Materials Certificate, MSNO	July 2015
Faculty Preparation Certificate, CWRU	July 2015
NIH Responsibility in Research	May 2012

Honors and awards:

Cleveland VA – APT Steven Garverick Innovation Incentive Program Award Winner ($50,000)	2020
Zeta Tau Alpha Ohio Distinguished Alumna	2020
YSU Best Practices in Student Learning Poster Showcase Academic Winner ($500)	2019
YSU Penguin Women on the Move	2019
Swansea University Research as Art External International Award (£50)	2018
ASTM International Committee E04 on Metallography Award of Appreciation	2018
ASM International Student Paper Award ($500)	2016
TMS Henry DeWitt Smith Scholar ($2,000)	2016
ASTM International Graduate Scholarship Recipient ($10,000)	2015
Zeta Tau Alpha Foundation, Ruby Leigh Orgain Founders Grant Recipient ($9,000)	2015
ASTM Committee E08, M. R. 'Mitch' Mitchell Best Student Presentation Award ($200)	2014
YSU Graduate Commencement Speaker	May 2011
Omicron Delta Kappa	2010
Golden Key International Honour Society	2009
Order of the Engineer	2007
Honor Ring, Zeta Tau Alpha Fraternity (highest service award given nationally to an individual)	2002
Who's Who Among Students in American Universities and Colleges	1995-1996
Arby's Scholarship Award for Outstanding Undergraduate Student Leader	1995
Order of Omega	1995

Institutional and professional service:

University committees and service:

YSU, Pete's Pride, Member	2014-2020
CWRU, Technical Standards Workshop, Moderator	2019
CWRU, Engineering Standards Workshop, Event Organizer	2015
CWRU, Materials Research Society University Chapter, Founding President	2013
CWRU, WISER Program, Volunteer for Introduce a Girl to Engineering Day	2013
CWRU, Graduate Materials Society, President	2012-2013
ASM Materials Camp Student Assistant at YSU	2010
YSU, Board of Trustees Student Trustee, Student Affairs Committee	1995
YSU, Board of Trustees Student Trustee, Intercollegiate Athletics Committee	1995

Community, professional and public discipline related service:

MS&T, Next Generation Biomaterials – Next Generation Biomaterials III, Session Chair	2019
MS&T, Characterization of Materials and Properties through Metallography, Mechanical Testing and Analysis - From Fundamentals to the Cutting Edge — Quantification, Classification and Simulation of Microstructures and Properties II, Session Chair	2019
Solon Middle School Science Fair, Judge	2011, 2013 2014, 2019
Choose Ohio First Poster Conference, Judge	2015
Lake to River Science Day, Judge	2015

Marching Auxiliaries National Championships, Twirling Panel Judge	2015
Hawken School, STEMM Symposium Judge	2013-2014
Northern Strut Twirling Teams, Owner/Director	1995-2014
Boardman High School, Spartan Twirler Instructor	2002-2013
	2015-2016
The Junior League of Youngstown	1997-2013
Pink Ribbon Tea Committee Member	1997-2013
Board of Directors	1997-2001
CWRU, Intersections Judge	2012, 2018
Youngstown Panhellenic Association, Membership Co-Chair	1999-2001
Zeta Tau Alpha Fraternity	1993-2021
Cleveland East Alumnae Chapter, Communications Chair	2019-2021
National Co-Chair Advisor Academy for Leadership Development	2000-2004
Province President XII-A	1997-2000
Zeta Gamma Chapter, General Advisor	1996-1997

Professional development:

Courses and seminars:

Engineering Materials, MECH 2606, YSU Mechanical Engineering, 2018-2022.

Engineering Concepts, ENGR 1550, YSU First-Year Engineering, 2019-2021.

Engineering Computing, ENGR 1560, YSU First-Year Engineering, 2020-2021.

Research Topics in Biomechanics & Biomaterials with required hours in Engineering Ethics, Ohio and Pennsylvania PE/PS Continuing Professional Development (CPD) Seminar, "Effects of Nonmetallic Inclusions on the Lifetime Performance of Superelastic Nitinol Fine Wire" and "Case Studies: Wire-based Devices in Medical Applications," September 2018.

Publications:

"Plasma Focused Ion Beam Serial Sectioning as a Technique to Characterize Nonmetallic Inclusions in Superelastic Nitinol Fine Wires: J. L. Gbur, R. Kelley, J. J. Lewandowski, Microscopy and Microanalysis, 2020, 26(6).

"Inclusion Effects on the Lifetime Performance of Superelastic Nitinol Wires" J. L. Gbur (J. J. Lewandowski – advisor), Dissertation, CWRU Department of Materials Science and Engineering, April 13, 2018.

"Promoting Technical Standards Education in Engineering" J. L. Gbur and D. Solomon, ASEE Annual Conference & Exposition, New Orleans, Louisiana, 2016, 10.18260/p.26005.

"Flex Bending Fatigue of Dental Archwires" J. L. Gbur, K. N. Gupte, and J. J. Lewandowski, Microscopy and Microanalysis, 2016, 22 (Suppl 3), 1742.

"Fatigue and Fracture of Wires and Cables for Biomedical Applications" J. L. Gbur and J. J. Lewandowski, International Materials Reviews, 2016, 61(4).

"Mechanical Characterization of 316 LVM Wires: A Comparative Study of Flex Bending Fatigue and Rotating Bending Fatigue and its Utility in Fatigue Testing for Biomedical Applications" J. L. Gbur, ASTM Student Grant Paper, 2013.

"Biomechanical Response of Composite Bone Following Removal of Proximal Femoral Fixation Hardware" J. L. Gbur (H. Marie – advisor), Thesis, YSU Department of Mechanical and Industrial Engineering, May 4, 2011.

Funded grants:

"Development of Flexible, Printed Lead Body for Use in Minimally Invasive Pain Management Systems." (J. Gbur, PI), VA RR&D SPiRE Award, 121 RX003736-01A1, 1/1/22-12/31/23, Funded $230,000.

"Development of Flexible, Printed Lead Body for Use in Minimally Invasive Pain Management Systems." (J. Gbur, PI), Louis Stokes Cleveland VA Medical Center, Advanced Platform Technology Center and Cleveland Medical Research and Education Foundation, Steven Garverick Innovation Incentive Award, 12/1/20-1/4/21, Funded $50,000.

"Pre-clinical Testing of High Density Nerve Interface" (D. Tyler, PI), Materials Science Engineer, Contract # B640018, 10/1/2020-9/30/2023, Funded $450,000.

"Implantable, In-Line High Density 32-Channel Connector," Biomedical Engineer (D. Shire, PI) VA RR&D Merit Review 10/1/19-9/30/21, Funded.

"iSens: Implanted Somatosensory Electrical Neurostimulation and Sensing" Research Assistant (D. Tyler, PI), DARPA HAPTIX, N66001-15-C-4014, 5/15/15-6/14/20, Funded $13,204,657.

"Mechanical Characterization of 316 LVM Wires: A Comparative Study of Flex Bending Fatigue and Rotating Bending Fatigue and its Utility in Fatigue Testing for Biomedical Applications" (J. L. Gbur, PI), CWRU, ASTM International Student Grant, 11/19/2012-4/30/2013, Funded $500.

"Self Abrading Rapidly Applied (SARA) Electrode" Research Assistant (S. Weimer, PI), Cleveland Medical Devices, Inc., National Institute of Health 5R44NS053116-03, 9/30/2005-8/31/2015, Funded $469,640.

"Self Abrading Rapidly Applied (SARA) Electrode" Research Assistant (S. Weimer, PI), Cleveland Medical Devices, Inc., National Institute of Health 2R44NS053116-02A1, 9/30/2005-8/31/2013, Funded $571,880.

"Biomechanical Evaluation of Proximal Femur Failure Strength after Partial/Full Implant Removal" Research Assistant (H. Marie, PI), YSU, St. Elizabeth Health Partners Medical Research Committee, 5/1/2010-5/1/2011, Funded $10,000.

"Novel Fast Install EEG Electrode" Research Assistant (S. Weimer, PI), Cleveland Medical Devices, Inc., National Institute of Health 1R43NS053116-01A2, 8/1/2008-1/31/2010, Funded $182,648.

"Adherence Activity & Outcome Measure Belt for Yoga" Research Assistant (M. Tarler, PI), Cleveland Medical Devices, Inc., National Institute of Health 1R43AT004122-01, 9/30/2006-9/29/2009, Funded $245,093.

"Clinical Step Recorder" Research Assistant (M. Tarler, PI), Cleveland Medical Devices, Inc., National Institute of Health 5R44HL083996-03, 10/1/2002-6/30/2009, Funded $695,678.

"Ultrathin Sensor of Force Direction and Magnitude" Research Assistant (M. Tarler, PI), Cleveland Medical Devices, Inc., National Institute of Health 5R44HD041853-03, 3/21/2002-2/28/2009, Funded $414,497.

"Hot Flash Ambulatory Monitor" Research Assistant (M. Tarler, PI), Cleveland Medical Devices, Inc., National Institute of Health 1R43AT003215-01, 9/30/2005-8/31/2008, Funded $250,000.

Invited talks:

"Fatigue and Fracture of Drawn Filled Tubes Used in Neuromodulation and Cardiovascular Applications" J. L. Gbur and J. J. Lewandowski, MS&T Next Generation Biomaterials Symposium, Portland, Oregon, October 2019.

"Characterizing Inclusion Populations in Superelastic Nitinol and Correlation to Mechanical Behavior" J. L. Gbur and J. J. Lewandowski, MS&T Characterization of Materials and Properties through Metallography, Mechanical Testing and Analysis - From Fundamentals to the Cutting Edge - Quantification, Classification and Simulation of Microstructures and Properties I Symposium, Portland, Oregon, October 2019.

"Challenges to Characterization of Non-metallic Inclusions in Superelastic Nitinol Fine Wires" J. L. Gbur and J. J. Lewandowski, Microscopy Society of the Ohio River Valley Fall Meeting, Beavercreek, Ohio, October 2018.

"Incidence and Characterization of Corrosion in Stainless Steel Percutaneous Lead Systems Located Exterior to the Body" J. L. Gbur, D. J. Tyler, and J. J. Lewandowski, MS&T Characterization & Methods in Failure Analysis Symposium, Columbus, Ohio, October 2018.

"Review of Fatigue and Fracture of Wires in Biomedical Applications with Comparisons to Recent E2948 ILS Data" J. L. Gbur and J. J. Lewandowski, ASTM International, E08.05 Fatigue of Advanced Materials, Atlanta, Georgia, November 2017.

Contributed talks:

"Characterizing Microcleanliness in Superelastic Nitinol Wires and Effects on Lifetime Performance" J. L. Gbur and J. J. Lewandowski, Physical Sciences (PS6 - Biomaterials, polymers and polymer-based composites), 19th International Microscopy Congress, Sydney, Australia, September 2018.

"Fracture and Fatigue Behavior of Silver-cored Drawn Filled Tube Strands for Biomedical Applications" J. L. Gbur and J. J. Lewandowski, TMS Annual Meeting – Biomaterials and Biomedical Applications I, Phoenix, Arizona, March 2018.

"Characterizing Inclusions in Nitinol Fine Wires using Correlative Microscopy" J. L. Gbur, J. Peppler, J. J. Lewandowski, ASTM E04 Symposium Commemorating 100 Years of E04 Development of Metallographic Standards, Atlanta, Georgia, November 2017.

"Characterizing Inclusions and the Effects on the Fatigue Behavior of Superelastic Nitinol Fine Wire" J. L. Gbur, J. Peppler, J. J. Lewandowski, Fatigue Design and Material Defects – Advanced Materials, Lecco, Italy, September 2017.

"The Effects of Inclusions on the Fatigue Performance of Superelastic Nitinol Fine Wires" J. L. Gbur and J. J. Lewandowski, TMS Annual Meeting – Advanced Materials in Dental and Orthopedic Applications, San Diego, California, February 2017.

"Comparison of Strain Measurement Techniques for Tension Testing of Fine Nitinol Wires" J. L. Gbur, B. Palmer and J. J. Lewandowski, MS&T Heterogeneity during Plastic Deformation – Synergy Between Experimental Investigation and Simulation, Salt Lake City, Utah, October 2016.

"Fatigue and Fracture of Wire-Based Systems used in Biomedical Applications" J. L. Gbur and J. J. Lewandowski, MSE Congress – Biomaterials Applications, Darmstadt, Germany, September 2016.

"MRS Chapter Efforts in Promoting Technical Standards Education in Engineering" J. L. Gbur and D. Solomon, MSE Congress – USA-Germany Networking Symposium, Darmstadt, Germany, September 2016.

"Promoting Technical Standards Education in Engineering" J. L. Gbur and D. Solomon, ASEE's 123rd Annual Conference & Exposition, Technical Literacy and Philosophy of Engineering Division, New Orleans, Louisiana, June 2016.

"Fatigue Analysis of Nitinol and Beta Titanium Arch Wires" J. L. Gbur, B. Benini, J. J. Lewandowski, TMS Annual Meeting – Advanced Materials in Dental and Orthopedic Applications Symposium, Orlando, Florida, March 2015.

"Review: Fatigue and Fracture of Wires/Strands/Cables in Biomedical Applications" J. L. Gbur, J. J. Lewandowski, ASTM Committee E08 on Fatigue and Fracture Student Presentation Competition, New Orleans, Louisiana, November 2014.

"Fracture and Fatigue of Wires and Cables for Biomedical Applications" J. L. Gbur, J. J. Lewandowski, MS&T Next General Biomaterials Symposium, Pittsburgh, Pennsylvania, October 2014.

"Fracture and Fatigue of Wires Used in the Biomedical Industry" J. J. Lewandowski, H. Lavvafi, J. L. Gbur, J. J. Lewandowski, MS&T Next Generation Biomaterials: Metals for Medical Applications Symposium, Montreal, Quebec, Canada, October 2013.

"Fatigue Analysis of Laser-Treated Nitinol Wires" J. L. Gbur, H. Lavvafi, M. Young, J. J. Lewandowski, TMS Annual Meeting – Physical and Mechanical Metallurgy of Shape Memory Wires Symposim, San Antonio, Texas, March 2013.

"Bending Fatigue of Laser Machined 316LVM and Nitinol Wires," J. L. Gbur, H. Lavvafi, M. Young, J. J. Lewandowski, ASTM Committee E08 on Fatigue and Fracture Student Presentation Competition, Atlanta, Georgia, November 2012.

"Rotating Bending Fatigue and Flex Bending Fatigue of Nitinol and 316LVM Wires Used in the Biomedical Industry," J. L. Gbur, H. Lavvafi, J. R. Lewandowski, M. Young, J. J. Lewandowski, MS&T Novel Methods for Deformation Testing of Metals and Materials Symposium, Pittsburgh, Pennsylvania, October 2012.

"Parametric Studies on Femtosecond laser cutting of Ni-Ti Shape Memory Alloys," H. Lavvafi, J. L. Gbur, J. R. Lewandowski, M. Young, J. J. Lewandowski, MS&T Novel Methods for Deformation Testing of Metals and Materials Symposium, Pittsburgh, Pennsylvania, October 2012.

"Effects of Ultrafast Laser Micromachining on Structure and Mechanical Properties of 316 LVM Stainless Steel," H. Lavvafi, J. L. Gbur, M. Young, D. Davinski, J. J. Lewandowski, TMS Fatigue and Corrosion in Metallic Materials: Fundamentals, Modeling and Prevention Symposium, Orlando, Florida, March 2012.

"Biomechanical Response of Composite Bone Following Removal of Proximal Femoral Fixation Hardware" J. L. Gbur, STEM Showcase, YSU, April 2011; Quest, YSU, Youngstown, Ohio, April 2011.

Posters:

"Characterization of Corrosion in Stainless Steel Percutaneous Leads Located Exterior to the Body Using Advanced Imaging Techniques" J. L. Gbur, R. Johnston, D. J. Tyler, and J. J. Lewandowski, PMCx60 and M&M Annual Conference, Portland, Oregon 2019; MSNO May Annual Conference at John Carroll University, Cleveland, Ohio, May 2019; Research ShowCASE, CWRU, Cleveland, Ohio, April 2019.

"Incorporating Technical Standards Education into Existing Engineering Materials Course Structure" J. L. Gbur, YSU Best Practices in Student Learning Poster Showcase, Youngstown, Ohio, April 2019.

"Characterizing Non-metallic Inclusions in Superelastic Nitinol Fine Wires and Effects on Mechanical Properties" J. L. Gbur and J. J. Lewandowski, PMCx60 and M&M Annual Conference, Baltimore, Maryland, August 2018.

"Navigating Legacy Data for the Fatigue and Fracture of Wires/Cables in Biomedical Applications" J. L. Gbur and J. J. Lewandowski, THERMEC – Student Posters, Paris, France, July 2018.

"The Effects of Inclusions on the Lifetime Performance of Superelastic Nitinol Wires" J. L. Gbur and J. J. Lewandowski, MSNO May Annual Conference at John Carroll University, Cleveland, Ohio, May 2018; Research ShowCASE, CWRU, Cleveland, Ohio, April 2018.

"Comparison of Characterization Techniques for Inclusions in Fine, Superelastic Nitinol Wire" J. L. Gbur, J. Peppler, and J. J. Lewandowski, MS&T – Next Generation Biomaterials, Pittsburgh, Pennsylvania, October 2017.

"Characterizing Inclusions in Superelastic Nitinol Wires" J. L. Gbur, J. Peppler, and J. J. Lewandowski, PMCx60 at M&M Annual Conference, St. Louis, Missouri, August 2017; MSNO May Annual Conference at John Carroll University, Cleveland, Ohio, May 2017; Research ShowCASE, CWRU, Cleveland, Ohio, April 2017.

"Load-to-Failure of Composite Bone Following Removal of Proximal Femoral Fixation Hardware" J. L. Gbur, H. Marie, and J. A. Shaer, MS&T Next Generation Biomaterials Symposium, Salt Lake City, Utah, October 2016.

"Flex Bending Fatigue of Dental Archwires" J. L. Gbur, K. N. Gupte and J. J. Lewandowski, M&M Annual Conference, Columbus, Ohio, July 2016; MSNO May Annual Conference at John Carroll University, Cleveland, Ohio, May 2016.

"A Review of Fatigue and Fracture of Wires and Cables for Biomedical Applications" J. L. Gbur, J. J. Lewandowski, Research ShowCASE, CWRU, Cleveland, Ohio, April 2016.

"Evaluation of Dental Archwires Following Flex bending Fatigue" J. L Gbur, K. N. Gupte, B. Benini, J. J. Lewandowski, TMS Annual Meeting – Advanced Materials in Dental and Orthopedic Applications Symposium, Nashville, Tennessee, February 2016.

"A Review of Fracture and Fatigue of Stranded and Coiled Wires Used in Biomedical Applications" J. L. Gbur, J. J. Lewandowski, MS&T Next Generation Biomaterials Symposium, Columbus, Ohio, October 2015.

"Tension and Flex Bending Fatigue of Dental Archwires" J. L. Gbur, K. N. Gupte, I. A. Roth, B. Benini, J. J. Lewandowski, Research ShowCASE, CWRU, Cleveland, Ohio, April 2015.

"Fatigue and Fracture of Wires and Cables for Biomedical Applications" J. L. Gbur, J. J. Lewandowski, Research ShowCASE, CWRU, Cleveland, Ohio, April 2014.

"Rotating Bending and Flex Bending Fatigue of Oxide-Finished Nitinol Wire" J. L. Gbur, J. J. Lewandowski, TMS Annual Meeting – Biological Materials Science Symposium, San Antonio, Texas, March 2013; Research ShowCASE, CWRU, Cleveland, Ohio April 2013.

"Nitinol Commercialization Accelerator – Ohio Third Frontier" J. L. Gbur, J. R. Lewandowski, H. Lavvafi, M., Young, D. Schwam, J. D. McGuffin-Cawley, M. V. Nathal, S. Padula II, J. J. Lewandowski, Research ShowCASE, Case Western Reserve University, Cleveland, Ohio, April 2013; TMS Annual Meeting – General Poster Session, San Antonio, Texas, March 2013; MSNO May Annual Conference at John Carroll University, Cleveland, Ohio, May 2012; and TMS Annual Meeting – General Poster Session, Orlando, Florida, March 2012.

Mentored Undergraduate Students:

Daniel Rakowsky	CWRU/Cleveland VA Student Researcher, Fall 2022.
Matthew Fabian	CWRU/Cleveland VA Student Researcher, Summer 2022. – "Mechanical Testing of High-Density Connector" M. Fabian, J. L. Gbur, and D. Shire, Intersections, Case Western Reserve University, Cleveland, Ohio, August 2022.
Gabby Hyatt	CWRU/Cleveland VA Student Researcher, Summer 2022, Fall 2022. – "Development of Sensorized Glove to Indicate Pressure Changes" G. Hyatt, J. L. Gbur, and D. Shire, Intersections, Case Western Reserve University, Cleveland, Ohio, August 2022.
Mitchell Melander	CWRU/Cleveland VA Student Researcher, Fall 2022. CWRU/Cleveland VA APT-SIP Wen H. Ko Intern, Summer 2022. CWRU/Cleveland VA Student Researcher, Spring 2022.
Ashten Guth	YSU, MECH 4808 Mechanical Systems Design I/II Project Mentor, Fall 2021 and Spring 2022.
Aaron Whitaker	YSU, MECH 4808 Mechanical Systems Design I/II Project Mentor, Fall 2021 and Spring 2022.
Kyle Levine	YSU, MECH 4808 Mechanical Systems Design I/II Project Mentor, Fall 2021 and Spring 2022.
Diego Martinez	CWRU, Fall 2021 and Spring 2022.
Shreeya Chugh	CWRU, EMSE 125 Freshman Research, Fall 2021.
Frank (Paco) Sheeran	CWRU, EMSE 399 Senior Project in Materials, 2021-2022.
Hayley Wagreich	CWRU, EMSE 399 Senior Project in Materials, 2021-2022. CWRU/Cleveland VA Student Researcher, Fall 2021. – "Fatigue Performance of Nitinol and 35N LT in a Simulated Biomedical Environment." H. Wagreich, J. L. Gbur, and J. J. Lewandowski, ASM International Student Speaking Symposium, 3rd place, October 2021. CWRU/Cleveland VA Student Researcher, Summer 2021. – "Fatigue Performance of Nitinol and 35N LT in a Simulated Biomedical Environment." H. Wagreich, J. L. Gbur, and J. J. Lewandowski, Intersections, Case Western Reserve University, Cleveland, Ohio, August 2021.
Tumi Adeeko	CWRU/Cleveland VA APT-SIP Wen H. Ko Intern, Summer 2021. – "Mechanical Characterization of Nitinol Wires for Use in Orthodontics." O. Adeeko, J. L. Gbur, and J. J. Lewandowski, Intersections, Case Western Reserve University, Cleveland, Ohio, August 2021. – YSU College of STEM Co-op of the Year 2021. – Cooperative Education & Internship Association (CEIA) Intern of the Year 2022.

Juan Garcia	CWRU/Cleveland VA Student Researcher, Fall 2021, Spring 2022 and Fall 2022. – "Mechanical Characterization of Implantable Nitinol Drawn Filled Tube 10% and 30% Platinum Wires." J. P. Garcia, J. L. Gbur, and J. J. Lewandowski, ASM International Student Speaking Symposium, October 2021. CWRU/Cleveland VA APT-SIP Wen H. Ko Intern, Summer 2021. – "Mechanical Characterization of Implantable Nitinol Drawn Filled Tube 10% and 30% Platinum Wires." J. P. Garcia, J. L. Gbur, and J. J. Lewandowski, Intersections, Case Western Reserve University, Cleveland, Ohio, August 2021.
Maya Rothchild	CWRU, EMSE 125 Freshman Research, Fall 2020 and Spring 2021.
Olivia Rentsch	CWRU, EMSE 125 Freshman Research, Fall 2020 and Spring 2021.
Sylvie Crowell	CWRU, EMSE 399 Senior Project in Materials, 2022-2023. CWRU/Cleveland VA APT-SGIIP Student Researcher, Fall 2021 and Spring 2021. CWRU, EMSE 325 Undergraduate Research, Fall 2020. CWRU, EMSE 125 Freshman Research, Spring 2020.
Jackson Smith	CWRU, EMSE 325 Undergraduate Research, Spring 2020.
Nat Tomczak	CWRU, Spring 2019 and Fall 2019. CWRU, Source-STEM Research, Summer 2019.
David Scannapieco	CWRU, EMSE 325 Undergraduate Research, Fall 2017 and Summer 2017.
Cassandra Tubbs	CWRU, EMSE 125 Undergraduate Research, Spring 2017.
Jenna Krynicki	CWRU, EMSE 325 Undergraduate Research, Spring 2017 and Fall 2016.
Madeleine McAllister	CWRU, EMSE 125 Freshman Research, Spring 2016.
Ryan Sienballer	CWRU, EMSE 125 Freshman Research, Fall 2015.
Ilana Roth	CWRU, EMSE 125 Freshman Research, Spring 2015.
Kimaya Gupte	CWRU, EMSE 325 Undergraduate Research, Spring 2017, Fall 2016, Spring 2015, Fall 2015. CWRU, EBME 328 Research Training, Fall 2015.
Nicole Corbin	CWRU, EMSE 399 Senior Project in Materials, 2014-2015.
Sahi Hari	CWRU, EMSE 125 Freshman Research, Spring 2014.

<u>Mentored High School Students</u>:

Ryan Devine	The University School, Science Fair Project (Co-mentor mechanical testing), Spring 2019. "Creating a Carbon Fiber Reinforced Polymer Matrix Composite (PMC) with Improved Elastic Properties" R. Devine – Northeast Ohio Science and Engineering Fair, 3rd Place, American Institute of Chemical Engineers Award, Cleveland State University, Cleveland, Ohio, March 2019. – Western Reserve District 5 Science Day, Advancement to State, 3rd Place Polymer Award, Office of Naval Research Award, University of Akron, Akron, Ohio, March 2019. – State Science Day, Superior rating, The Ohio State University, Columbus, Ohio, May 2019.
Sahiti Tamirisakandala	Solon High School, Senior Project, Spring 2018.
Francesca Fabe	Beaumont School, AP Biology Research Project, Fall 2014 and Fall 2015. "The Effects of Fatigue on 35N LT 28Ag DFT" F. Fabe – Northeast Ohio Science and Engineering Fair, 2nd Place, Cleveland Clinic - Lerner College of Medicine Award, Cleveland State University, Cleveland, Ohio, March 2016 – BEST Medicine Engineering Fair, Silver Medal in Health and Medicine Category University of Akron, Akron, Ohio, March 2015. "Beta Ti vs. Nitinol Archwires: Time to Failure Caused by Fatigue" F. Fabe – Northeast Ohio Science and Engineering Fair, 1st Place, ASM International – Cleveland Chapter Special Award Cleveland State University, Cleveland, Ohio, March 2015. – BEST Medicine Engineering Fair, Gold Medal in Value-Driven Engineering and $1000 Scholarship to the University of Akron University of Akron, Akron, Ohio, March 2015. – Western Reserve District 5 Science Day, Advancement to State, University of Akron, Akron, Ohio, March 2015. – State Science Day, OAS Excellent Award, $2000 Capital University Scholarship, EWI Award 1st Place – Governor's Award for Excellence in Materials Science, Engineering Achievement Award 3rd Place, The Ohio State University, Columbus, Ohio, May 2015.

Micah Jaffe	Hawken School, STEMM Program Research Project, Summer 2013. "The Fatigue Strength of Nitinol and Defining Tensile Testing Methods" M. Jaffe, J. L. Gbur, J. J. Lewandowski, Hawken School STEMM Symposium, Cleveland, Ohio, November 2013.