

## Undergraduate Research Internship Program Recipients

Academic Year 2022-2023				
URIP Award Recipient	Major	Faculty Mentor	Project Title	Project Sponsor
Connor Ford	Applied Ecology and Environmental Science	Casey Huckins	Response of Aquatic Macroinvertebrates to Experimental Reduction of Aggraded Anthropogenic Streambed Sand in the Salmon Trout River	DeVlieg Foundation
AJ Lehnert	Civil Engineering	Pasi Lautala	Using lidar to help assess the safety of grade crossings with passive warning devices	DeVlieg Foundation
Tessa Tomoien	Ecology and Evolutionary Biology	Kristin Brzeski	Using DNA Metabarcoding to Evaluate Resource Partitioning Among Two Sympatric	DeVlieg Foundation
Dominika Bobik	Computer Engineering	Leo C. Ureel II	Teaching computational thinking via modeling in STEM classrooms.	DeVlieg Foundation
Joe Teahen	Computer Science	Leo C. Ureel II	MATLAB Code Critiquer	DeVlieg Foundation
Andrew Freel	Robotics Engineering	Tony Pinar	Autonomous Terrain Classification Using Lidar and Depth Cameras	DeVlieg Foundation
Jacob Maxon	Mining Engineering	Snehamoy Chatterjee	Application of Machine Learning to Predict Underground Fire Location and Size	DeVlieg Foundation
Natalie Sorensen	Geological Engineering	John Gierke	New Field Sensor Verification Testing for Monitoring Meteorology and Crop Growth	DeVlieg Foundation
Henry Summers	Materials Science & Engineering	Jaroslav Drelich	Investigation of a novel zinc-based alloy for bioabsorbable vascular stent applications	DeVlieg Foundation
Twila Martinson	Materials Science & Engineering	Paul Sanders	Degradable Whale Tag Tip	DeVlieg Foundation
Ina Klasner	Bioinformatics and Applied & Computational Mathematics	Paul Goetsch	Visualizing Cell Cycle Dynamics of Ovarian Cancer Cell Lines in Response to CDK Inhibitors	Portage Health Foundation
Kathleen Heusser	Biomedical Engineering	Sangyoon Han	Effects of Fusion Protein PAX3-FOXO1 Presence on Cancer Cell Migration, Malignancy, Traction Force Transmission, and Proliferation	Portage Health Foundation
Madeline English	Biomedical Engineering	Smitha Rao	Evaluation of Cytotoxicity and Cellular Adaptation from Contact Exposure to Lead in	Portage Health Foundation
Marli Hietala	Biomedical Engineering	Smitha Rao	Incorporating Demcidin Into a Composite Hydrogel to be Used in Wound Healing	Portage Health Foundation
William Hagelthorn	Biomedical Engineering	Smitha Rao	Coating Condition Modification of Non-Antibiotic Antimicrobial Polydopamine Surface Coating and Evaluation of Bacterial Adhesion Prevention	Portage Health Foundation
Kristoffer Larsen	Statistics	Weihua Zhou	Machine Learning to Support Clinical Decision Making of Cardiac Resynchronization Therapy for Late-Stage Heart Failure Patients	Portage Health Foundation
Derrick Simet	Biochemistry and Molecular Biology - Chemistry	Qing-Hui Chen	The Role of Acetic Acid/ Acetate in the Development of Neurodegeneration	Portage Health Foundation
Parker Courte-Rathwell	Mechanical Engineering and Exercise Science	Steven Elmer	Blood Flow Restriction training for a power-endurance sport : cross-country skiing	Portage Health Foundation
Academic Year 2021-2022				
URIP Award Recipient	Major	Faculty Mentor	Project Title	Project Sponsor
Ayodotun Aluko	Biomedical Engineering	Smitha Rao	Characterization of the Focused Ultrasound Effect on Active Agent Release Behavior from Fibrin Composite Hydrogels for Tendon Repair	Portage Health Foundation
Chloe Looman	Biomedical Engineering	Chunxiu (Traci) Yu	Optogenetic Stimulation of the Internal Globus Pallidus for the Treatment of Depression	Portage Health Foundation
Ethan Burghardt	Biochemistry – DEC graduate	Caryn Heldt	Quantifying Mass Transfer in Aqueous Two-Phase Systems for Virus Purification	Portage Health Foundation
Katherine Schnabel	Biomedical Engineering	Kevin Trewartha / Carolyn D	Type 2 Diabetic Peripheral Neuropathy effect on Mechanisms of Fall Recovery	Portage Health Foundation
Kathleen Heusser	Biomedical Engineering	Sangyoon J. Han	Imaging Breast Cancer Cell-Induced Deformation of 3D Electrospun Fiber Scaffolds	Portage Health Foundation
Lilly Van Loon	Medical Laboratory Science	Zhiying Shan	The Role of Orexin A in Salt Sensitive Hypertension	Portage Health Foundation
Morgan Smith	Biochemistry/Molecular Biology	Thomas Wemer	The Effect of Probiotic Supplementation Upon Quality of Life in a Model of Chronic	Portage Health Foundation
Sophia Bancker	Medical Laboratory Science	Zhiying Shan	Investigating Brain Inflammation Levels in Offspring Whose Mother has PTSD in a Sprague Dawley Rat Model	Portage Health Foundation
Zachary Alesch	Biomedical Engineering	Roger Guillory	Engineering polymer-free drug eluting metal oxides for Zn based cardiovascular stents	Portage Health Foundation

Caleigh Dunn	Biomedical Engineering	Bruce Lee	Improving North American Right Whale Satellite Tags Using a Degradable Tip	DeVlieg Foundation
Hunter Malinowski	Psychology (CLS)	Shane Mueller	Assessing the Effectiveness of the XAI Discovery Platform and Visual Explanations on User Understanding of AI Systems	DeVlieg Foundation
Lauren Spahn	Chemical Engineering	Rebecca Ong	Optimization of Lignin Precipitation with Functional Group Control for Use in Bio-Based Polyurethane Foams	DeVlieg Foundation
Nicki Gallup	Biomedical Engineering	Hoda Hatoum	Using 3-D Printing and Recycled Material to Design and Build a Leg Brace	DeVlieg Foundation
<b>Academic Year 2020-2021</b>				
<b>URIP Award Recipient</b>	<b>Major</b>	<b>Faculty Mentor</b>	<b>Project Title</b>	<b>Project Sponsor</b>
Brooke Batterson	History	Sarah Scarlett	Tracking the Social Mobility of French-Canadians in the Keweenaw using Archival Data, Landscape Fieldwork, and Geospatial Mapping	DeVlieg Foundation
Alannah Woodring	Sustainability Science & Society	Angie Carter	How to Implement the Best Practices of Therapy Gardens into Action and Reflection on Successes	DeVlieg Foundation
Alayna Merten	Statistics / Humanities	Fengjing Liu	Exploring the Effects of the Emerald Ash Borer on C Stocks in Ash-Dominated	DeVlieg Foundation
Ava Miller	Sustainability Science & Society	Richelle Winkler	Community Response to Renewable Energy Project Siting: A Case Study in L'Anse, MI	DeVlieg Foundation
Bailee Kimbel	Psychology / Humanities	Erich Petushek	Traumatic Injury Prevention: Validating a Novel High-Impact Online Intervention	DeVlieg Foundation
Drew Pienta	Mechanical Engineering	Weihua Zhou	Image Segmentation Using Deep Learning to Support Clinical Decision Making for Aortic Dissection Surgery	DeVlieg Foundation
Emily Wisz	Psychology	Kevin Trewartha	Aging and the Neurophysiological Basis of Motor Learning and Long-Term Retention of a Newly Acquired Motor Response	DeVlieg Foundation
Grady Boyle	Forestry	Evan Kane	Refining the Quantification of Carbon in Forest Soils	DeVlieg Foundation
Joseph Van Linn	Mechanical Engineering	Trisha Sain	Experimental Characterization of Photo-Sensitive Polymers to optimize UV Curing Parameters	DeVlieg Foundation
Justin Henderson	Mechanical Engineering	Jung Yun Bae	Development of a Wheeled Leg Robot Platform for Robust Navigation	DeVlieg Foundation
Nicole Gallup	Biomedical /Mechanical Engineering	Joshua Pearce	Using 3-D Printing to Design and Build Open Source Ventilators	DeVlieg Foundation
Samuel Haaman	Biomedical /Mechanical Engineering	Sangyoon Han	Development of Traction Force Microscopy for Topologically-Micropatterned Hydrogel Substrates	DeVlieg Foundation
Steven Beuther	Chemistry	L. Valenzano-Slough	Determination of Single PAH Molecule Heats of Combustion via Accurate Quantum Mechanical Model Chemistries: Looking for Soot Formation Mechanisms	DeVlieg Foundation
Anderson Lind & Jada Markham	Management / General Business	Jon Leinonen	Research to Expand Reach and Retention with Under-Resourced College Students	Portage Health Foundation
Emily Nelson	Biomedical Engineering	Smitha Rao	Osteoconductive Electrospun PCL $\beta$ -TCP Nanofibers	Portage Health Foundation
Ethan Burghardt	Biochemistry & Molecular Biology	Caryn Heldt	Characterization of Interfacial Properties in Aqueous Two-Phase Systems for Virus Purification	Portage Health Foundation
Hunter Dercks	Biomedical Engineering	Qing-Hui Chen	Effects of Exercise Training on SK Channel Protein Expression in Heart Failure Rats	Portage Health Foundation
Jordan Zais	Biomedical Engineering	Rupak Rajachar	Fibrin-Based Materials for the Modulation of Matrix Metalloproteinases in Tendon	Portage Health Foundation
Katie Heusser	Biomedical Engineering	Sangyoon Han	Micromechanical and Chemical Comparison Between Hydrogel and Silicone Gel Used to Quantify Cellular Traction and Adhesion	Portage Health Foundation
Lea Morath	Biomedical Engineering	Jeremy Goldman	Evaluating Novel Biodegradable Stent Materials	Portage Health Foundation
Sarah Dix	Exercise Science	Kelly Kamm	Understanding the Trends in Physical Activity via the Use of Activity Trackers With and Without the Use of the UNICEF Kid Power Program Among Rural Elementary	Portage Health Foundation
<b>Academic Year 2019-2020</b>				

URIP Award Recipient	Major	Faculty Mentor	Project Title	Project Sponsor
Ben Hubbard	Mechanical Engineering	Andrew Bamard	Reducing UAV Noise by Using Unique, Balanced Propellers on a Bi-Copter	DeVlieg Foundation
Bobby Beggs	Mechanical Engineering	Paul vanSusante	Analysis of Lunar Thermal Protective Structures for Rover Storage and Maintenance	DeVlieg Foundation
Carly Huggins	Environmental Engineering	Noel Urban	Mapping Mass Mill Stamp Sands in Keweenaw Bay, by Copper Analysis	DeVlieg Foundation
Elizabeth Kaechele	Biomedical Engineering	Sangyoon Han	Characterization of Cytoskeleton Flow in Extracellular Matrix	DeVlieg Foundation
Jessica Brown	Computer Science	Timothy Havens	Fraud Detection in Financial Data with Big Data Fuzzy Clustering	DeVlieg Foundation
Julia Boscarino	Environmental Engineering	Noel Urban	Mapping Mercury Contamination from Stamp Sands in Keweenaw Bay	DeVlieg Foundation
Lexi Steve	Mechanical Engineering	Jay Meldrum	Greenhouse Project	DeVlieg Foundation
Matthew Jacobson	Mechanical Engineering	Andrew Bamard	Carbon Nanotube Durability Testing	DeVlieg Foundation
Samantha Dertinger	Biomedical Engineering	Joshua Pearce	Designing 3D Prosthetics Using Recycled Materials	DeVlieg Foundation
Taylor Johnston	Cheminformatics	Loredana Valenzano-Sloug	Quantum Mechanical Investigation of the Nucleation and Crystal Growth Mechanisms of Active Pharmaceutical Ingredients	DeVlieg Foundation
Adison Cook	Exercise Science	Carolyn Duncan	Balance Recovery to Simulated Optic Changes	Portage Health Foundation
Alicia Ball	Chemical Engineering	Parisa Abadi	3D Bioprinting with Induced Pluripotent Stem Cells for Enhanced Cardiomyocyte Differentiation	Portage Health Foundation
Brennan Vogl	Biomedical Engineering	Smitha Rao	Carbohydrate Baits to Redirect and Mitigate Migration in Breast Cancer	Portage Health Foundation
Hannah Kariniemi	Psychology	Susan Amato-Henderson	Exploring Self-Comparison as a Predictor of Academic Success	Portage Health Foundation
Jack Wilson	Sustainability Science & Society	Angie Carter	Developing Eco-civic Agriculture in the Keweenaw	Portage Health Foundation
Jacob LeBarre	Chemical Engineering	Caryn Heldt	Non-Enveloped Virus Purification Using Cation Exchange Chromatography	Portage Health Foundation
Jana Hendrickson	Exercise Science	Steven Elmer	Engaging K-12 Students in Hands-On H-STEM Outreach	Portage Health Foundation
Kelsey LeMay	Biomedical Engineering	Jeremy Goldman	Processing of Porcine Internal Mammary Arteries for Human Bypass Graft Applications	Portage Health Foundation
Lea Morath	Biomedical Engineering	Jeremy Golman	Evaluating Novel Biodegradable Stent Materials	Portage Health Foundation
Maureen Hennenfent	Environmental Engineering	Rupak Rajachar	Evaluating Antimicrobial and Wound Healing Properties of a Hydrogen Peroxide	Portage Health Foundation
Max Reaume	Biomedical Engineering	Bruce Lee	Development of Catechol-Based Biomimetic Microgels in Hydrogen Peroxide	Portage Health Foundation
Michael Hromdad	Biochemistry & Molecular Biology	Tarun Dam	Characterization of New Bioactive Compound with Therapeutic Potential	Portage Health Foundation
Nicki Gallup	Biomedical & Mechanical Engineering	Joshua Pearce	Using 3-D Printing to Create Prosthetics and Support Members from Recycled Material	Portage Health Foundation
Shaina Royer	Biomedical Engineering	Sangyoon Han	Development of a 3D Organoid Culture System for Investigation of Reorganization and Deformation of Extracellular Matrix by Tissue Cells	Portage Health Foundation
Via Ouellette-Ballas	Psychology	Kevin Trewartha	Optimizing Motor Learning in Aging: Intrinsic Motivation, Autonomy Support and External Focus of Attention	Portage Health Foundation
Peyton Bainbridge	Chemistry	Loredana Valenzano-Sloug	Stability and Reactivity of Monomers and Oligomers of CL-20 and HMX: An Electronic Structure Investigation	Pavlis Honors College
Jason Barr	Chemistry	Loredana Valenzano-Sloug	Identification of Vapor Pressure Traces of Energetic Materials and Cosmetics Molecules via Signature Physical-Chemical Properties for Homeland Security	Pavlis Honors College
Joseph Van Linn	Mechanical Engineering	Trisha Sain	Architected Materials: Benefits of a Honeycomb Lattice Geometry	Pavlis Honors College
Katelyn Zelinski	Environmental Engineering	Melanie Kueber Watkins	Engineering Adaptions to Climate Change, an Analysis of State Department of Transportation Agencies	Pavlis Honors College
Noah Skrzypczak	Mechanical Engineering	Joshua Pearce	Development and Applications of High Temperature 3D Printing	Pavlis Honors College
<b>Academic Year 2018-2019</b>				
URIP Award Recipient	Major	Faculty Mentor	Project Title	Project Sponsor

Alicia Ball	Mechanical Engineering	Parisa Abadi	3D Bioprinting with Induced Pluripotent Stem Cells and Collagen I for Enhanced Differentiation to Cardiomyocytes	Portage Health Foundation
Abby Sutherland	Kinesiology	Steven Elmer	A new age-predicted maximum heart rate equation for upper-body exercise prescription	Portage Health Foundation
Alexander Oliver	Biomedical Engineering	Jeremy Goldman	Characterizing the Inflammatory Response to Zinc Stent Materials	Portage Health Foundation
Brennan Vogl	Biomedical Engineering	Smitha Rao	Monitoring Migration of Cancer Cells Pre-Treated with Fructose Analogs	Portage Health Foundation
Caroline Inaury	Chemical Engineering	Lei Pan	Optimizing the Chemical Additive in Wet Spray System for Dust Suppression in the Mineral Industry	Portage Health Foundation
Colleen Toorongian	Biological Sciences	John Durocher	Arterial stiffness responses to eccentric-induced muscle damage: sex differences	Portage Health Foundation
Elisha Earley	Biomedical Engineering	Jeremy Goldman	Endothelial Cell Dysfunction Characterization for Stent Applications	Portage Health Foundation
John Wilson	Social Sciences	Angie Carter	Small Farm Resilience in the Western U.P.	Portage Health Foundation
Kaylee Meyers	Biomedical Engineering	Rupak Rajachar	Evaluating the Influence of Matrix Stiffness on the Activation of MMPs in Tendinopathy	Portage Health Foundation
Kiaya Caspers	Biomedical Engineering	Rupak Rajachar	Impact of Fibrin Microparticle Crosslinking Density on Physical and Rheological Properties of Composite PEG-Fibrin Microparticle Hydrogels for use in Tendon Repair	Portage Health Foundation
Logan McMillan	Chemical Engineering	Adrienne Minerick	Medical Micro-Device for Hematocrit Testing	Portage Health Foundation
Michelle Burge	Cognitive & Learning Sci./Kinesiology	Kevin Trewartha	Motor learning as a sensitive behavioral marker of early Alzheimer's disease	Portage Health Foundation
Sarah LewAllen	Biological Sciences	John Durocher	Decentering, Acute Meditation, and Arterial Stiffness	Portage Health Foundation
Sarah Wayward	Biomedical Engineering	Smitha Rao	Understanding physiological relevance of differences in NO production in macrophages for wound healing	Portage Health Foundation
Shaina Royer	Biomedical Engineering	Sangyoon Han	Development of high reflective index silicone gel substrate for traction force microscopy (TFM) and total internal reflection microscopy (TIRF)	Portage Health Foundation
Benjamin Neely	Geological/Mining	Snehamoy Chatterjee	Grade estimation Using Dynamic Anisotropy Interpolation	Pavlis Honors College
Conner Hawry	Physics	Yoke Khin Yapn	Uniform Cutting of Small Diameter BNNTs for Biomedical Application	Pavlis Honors College
Daniel Woodall	Mechanical Engineering	Parisa Abadi	Conductive Nanostructured Substrates for Differentiation and Maturation of Cardiomyocytes	Pavlis Honors College
Joshua Langlois	Mechanical Engineering	Andrew Barnard	Active Control System for Carbon Nanotube Speakers	Pavlis Honors College
Meredith Grusnick	Chemical Engineering	Rebecca Ong	Growing maize in Upper Peninsula soil amended with AFEX-treated switchgrass	Pavlis Honors College
Sue Yon Kim	Biomedical Engineering	Sangyoon J. Han	Novel Particle Image Velocimetry Method for Traction Force Microscopy Application	Pavlis Honors College
<b>Academic Year 2017-2018</b>				
<b>URIP Award Recipient</b>	<b>Major</b>	<b>Faculty Mentor</b>	<b>Project Title</b>	<b>Project Sponsor</b>
Alicia Ball	Chemical Engineering	Parisa Abadi	Carbon Nanotube Stem Cell Growth by Immersion in Solvents	Portage Health Foundation
Allison Waara	Exercise Science	Kevin Trewartha	Determining the effects of aging and age-related cognitive decline on the ability to make optimal corrective actions during reaching movements	Portage Health Foundation
Ayla Vaughn	Biochemistry & Molecular Biology	Kelly Kamm	Understanding Determinants of Asthma Among Adults in the U.P.	Portage Health Foundation
Brennan Vogl	Biomedical Engineering	Smitha Rao	Improving Cancer Imaging using Nanoparticles	Portage Health Foundation
Courtney Kurkie	Exercise Science	Jason Carter	The Effect of In-Season Vs Out-of-Season on Sleep Efficiency and Sleep Patterns	Portage Health Foundation
Deanna Springgay	Biochemistry & Molecular Biology	Martin Thompson	Peptide-Based Nanoparticle for Cancer Therapy	Portage Health Foundation
Derek Verbigghe	Exercise Science	Tejin Yoon	Is increased activation of prefrontal cortex with cognitive demands associated with the motor unit variability?	Portage Health Foundation
Hannah Cunningham	Biomedical Engineering	Jason Carter	Lower Limb Negative Pressure: A Novel Approach for Diabetic Neuropathy	Portage Health Foundation
Josh Loiselle	Mechanical Engineering	Parisa Abadi	Culturing Induced Pluripotent Stem Cells on Carbon Nanotube Substrates to Enhance Cell Differentiation	Portage Health Foundation

Madelyn Morley	Exercise Science	Kevin Trewartha	Age Differences in Motor Learning as Determined by a Visuomotor Adaptation Task and the P3b Component	Portage Health Foundation
Michelle Burge	Exercise Science	Tejin Yoon	Prefrontal Cortex Activation During Fatiguing Contractions Following Cold Water	Portage Health Foundation
Rose Turner	Environmental Engineering	Daisuke Minakata	Perfluorinated Compounds and Advanced Oxidation Processes	Portage Health Foundation
Sonja Welch	Biomedical Engineering	Rupak Rajachar	Antimicrobial Character of Poly-Dopamine in a Fibrin-Poly-Dopamine Composite Biomaterial used for Whale Tracking Tags	Portage Health Foundation
Timothy Stone	Civil Engineering	Donald Lafreniere	Doctor's Note: A Spatial Analysis of the Built and Social Determinants of Children's Health During the Copper Boom	Portage Health Foundation
Trevor Simmons	Biomedical Engineering	Feng Zhao	The Neuroprotective Effect of Human Mesenchymal Stem Cells in a Spinal Cord Ischemia Model	Portage Health Foundation
Zoe LaLonde	Biochemistry & Molecular Biology	Qing-Hui Chen	Elevated Lactic Acid Levels are Mediated Towards Neurodegenerative Diseases	Portage Health Foundation
Abigail Kanasty	Environmental Engineering	Noel Urban	Streams Contaminated by Mine Discharge	Pavlis Honors College
Alan Labisch	Environmental Engineering	Judith Perlinger	The sources of polychlorinated biphenyl (PCB) compounds in Lake Superior fish	Pavlis Honors College
Ashley Lingle	Environmental Engineering	Noel Urban	Predicting How Fast Lakes Recover from Mercury Deposition	Pavlis Honors College
Benjamin Sovinski	Geological Engineering	Snehamoj Chatterjee	Simultaneous Simulation of Material Types	Pavlis Honors College
Elisabeth Billman-Benveniste	Chemistry	Loredana Valenzano-Sloug	Effect of Molecular Contaminants on Polycarbonate Interfaces Addressed at Quantum Chemical Level	Pavlis Honors College
Gemma Oliver	Mathematics	John Gruver	Teaching Rehearsals: from Elementary to Middle School	Pavlis Honors College
Jacob Gould	Computer Science	Keith Vertanen	Data-driven Exploration of Design Improvements for Probabilistic Text Input	Pavlis Honors College
Kirsten DePrekel	Geological Engineering	Thomas Oommen	California PSI Bridges Project	Pavlis Honors College
Meghan Campbell	Mathematics	Yeonwoo Rho	Premium Principles of Cyber Security Insurance for Electrical Grids	Pavlis Honors College
Ryan Kibler	Environmental Engineering	Pengfei Xue	Development of FVCOM model of Sandusky Bay to support restoration design	Pavlis Honors College
Sasha Beriel	Applied Physics	Claudio Mazzoleni	Determination of Temperature in Open Air from Raman Scattering Using an Atomic	Pavlis Honors College
Tania Demonte Gonzalez	Mechanical Engineering	Sajjad Bigham	Absorption Heat Pump Clothes Dryer	Pavlis Honors College
Virginia Cistaro	Geological Engineering	John Gierke	Comparison of Radial Basis Function (RBF) Approximations to Conventional Numerical Methods for Simulating 3-Dimensional Groundwater Flow	Pavlis Honors College
<b>Academic Year 2016-2017</b>				
<b>URIP Award Recipient</b>	<b>Major</b>	<b>Faculty Mentor</b>	<b>Project Title</b>	<b>Project Sponsor</b>
Erica Anderson	Geological Engineering	Thomas Oommen	The Comparison of LaharZ and Hydrological Modelling Capabilities for Determining the Potential Travel Paths of Post-Wildfire Debris Flows	DeVlieg Foundation
Aaron Dean	Mechanical Engineering	Dave Nelson	Effectiveness of Using SHRP2 Naturalistic Driving Study (NDS) Data to Study Driver Behavior at Highway- Rail Grade Crossings	DeVlieg Foundation
Alicia Ball	Chemical Engineering	Lei Pan	Microfluidic Observation of the Onset of Particle Agglomeration and Its Application in Fine Tailing Dewatering	DeVlieg Foundation
Brian Flanagan	Computer Engineering	Tim Havens	Fuzzy Classification of Natural Disasters	DeVlieg Foundation
E Yasmine Walton-Durst	Mathematics	Will Cantrell	Statistical Analysis of High Frequency Fluctuations of Temperature and Water Vapor Due to Turbulence in Michigan Tech's Cloud Chamber	DeVlieg Foundation
Erica Coscarelli	Environmental Engineering	Daisuke Minakata	Transformation of Dissolved Organic Matter in Ultraviolet Photolysis Process	DeVlieg Foundation
Mary Galbraith	Chemical Engineering	Timothy Eisele	Advanced Materials Extraction: Recovering Exotic Elements from Slag and Byproduct Tailings	DeVlieg Foundation
Mary Kate Mitchell	Chemical Engineering	Daisuke Minakata	Predicting Reverse Osmosis Removal of Toxicologically Relevant Unique Organics	DeVlieg Foundation

Samuel Gaines	Civil Engineering	Hyungchul Yoon	Structural Health Monitoring Using UAVs and Kinect Sensors	DeVlieg Foundation
Trevor Taubitz	Computer Network and System Admin	Yu Cai	The Effectiveness of Directed Phishing Attacks Against Highly Trained End Users	DeVlieg Foundation
Quelyn Bekkering	Geology	Chad Deering	Textural Analysis of Magmatic Fabrics Within the Princeton Caldera Ring Dike - May 2016 - 2017	Pavlis Honors College
Brian Burka	Chemistry	Loredana Valenzano	Engineering Metal Oxide Surfaces for Efficient Hydrocarbons Separation: A Quantum Chemical Study	Pavlis Honors College
Denada Planaj	Geological Engineering	Thomas Oommen	Modeling Shallow and Deep Seated Landslides in Wayanad District, Kerala, India	Pavlis Honors College
Joseph Iwanicki	Anthropology	LouAnn Wurst	The Archeology of Trade: A Study of a Twentieth Century Logging Camp	Pavlis Honors College
Stephanie Dietrich	Exercise Science	Jason Carter	Understanding the Role of Sleep Apnea and Objective Sleep Duration on Recovery from Mild Traumatic Brain Injury	Pavlis Honors College
Trevyn Payne	Chemical Engineering	Lei Pan	Separation of Graphite from Lithium-Ion Batteries Using Froth Flotation Technique	Pavlis Honors College
Valeria Suarez	Geological Engineering	Thomas Oommen	Risk Assessment and Slope Stability Modelling of a Transportation Corridor in Hindu Kush Range	Pavlis Honors College
Abbie Botz	Exercise Science	Jason Carter	Role of Sleep Deprivation on Sympathetic Neural Control in Older Adults	Portage Health Foundation
Andrew Bruning	Mechanical Engineering	Chang Kyoung Choi	Generating Monodisperse Ozidized Methacrylated Alginate Microbeads with Specific Encapsulation Factors	Portage Health Foundation
Brittany Tumer	Psychology	Kevin Trewartha	Assessing the Impact of Age-Related Declines in Implicit and Explicit Memory Process on Motor Learning	Portage Health Foundation
Courtney Kurkie	Exercise Science	Jason Carter	The Effect of Sleep Apnea on Post-Surgery Recovery Time	Portage Health Foundation
David Ross	Biomedical Engineering	Feng Zhao	Covalently Bonded Collagen Coating on PDMS Improved Human Mescenchymal Stem Cell Sheet Formation	Portage Health Foundation
Elisha Earley	Biomedical Engineering	Jeremy Goldman	Evaluating Novel Biodegradeable Stent Materials	Portage Health Foundation
Hannah Marti	Biomedical Engineering	John Durocher	Psychophysiological Benefits of Acute Mindfulness Meditation Practice	Portage Health Foundation
Jacob Schoenborn	Biological Sciences	Xiaoqing Tang	Blueberry Protects Pancreatic Beta Cells	Portage Health Foundation
Madelyn Morley	Exercise Science	Kevin Trewartha	The Impact of Cognitive Impairments Associated with Normal, Healthy Aging on Memory Processes Underlying Motor Learning	Portage Health Foundation
Meghan Friske	Biomedical Engineering	Smitha Rao	Characterization of Electrospun Nanofiber Scaffold for Wound Healing Applications	Portage Health Foundation
Michael Hewitt	Computer Network and System Admin	Jinshan Tang	Speckle Reduction on Ultrasound Images and Its GPU Implementation	Portage Health Foundation
Sydney Smuck	Exercise Science	Tejin Yoon	Home-based Resistance Training with Smart Devices in Middle-aged Adults	Portage Health Foundation
Thomas Bye	Exercise Science	Steve Elmer	The Effects of Respiratory Muscle Fatigue on Upper-Body Exercise Performance	Portage Health Foundation

**Academic Year 2015-2016**

URIP Award Recipient	Major	Faculty Mentor	Project Title	Project Sponsor
Anna Catton	Audio Production & Technology	Andrew Barnard	Enhancing Low Frequency Response in the MEEM Reverberation Room	DeVlieg Foundation
Ashley Hendricks	Environmental Engineering	Noel Urban	The Effects of Ice Cover on Fish Exposure to Methyl Mercury (MeHg)	DeVlieg Foundation
Chris Wilderson	Electrical & Computer Engineering	Timothy Havens	Localization of 3D Robots using Sensor-fused Monocular Cameras and Range Sensors	DeVlieg Foundation
Emily Petersen	Materials Science & Engineering	Paul Sanders	Investigation of the Development of Precipitation Hardenable Al-Sc-Zr Quaternary Alloys Through Thermodynamic Modeling, Room Temperature and Elevated	DeVlieg Foundation
Hugh Stanton	Biomedical Engineering	Feng Zhao	The Effect of Nitric Oxide Releasing Systems on Human Mescenchymal Stem Cells	DeVlieg Foundation
Lewis Marshall	Materials Science & Engineering	Joshua Pearce	Open-Source Recycling of PET Waste Plastic in 3D Printer Filament	DeVlieg Foundation
Nopparuj Saipong	Electrical & Computer Engineering	Timothy Havens	Camera Based Localization of UAV Using LED Array	DeVlieg Foundation

Stephania Vaglica	Biomedical Engineering	Andrew Bamard	Design, Construction and Testing of Rugged Non Planar CNT Transducers to Match Audio Amps and Improve Efficiency	DeVlieg Foundation
Stephanie Bean	Biochemistry	Caryn Heldt	Gold Nanoparticles Detection of Protein Amyloid Toxic Species	Portage Health Foundation
Ashley VanSumeren	Exercise Science	Steven Elmer	Muscular Contributions and Coordination During Upper-body Tasks	Portage Health Foundation
Cal Riutta	Biomedical Engineering	Jingfeng Jiang	Investigation of the Effects of Breast Tissue Heterogeneity on Shear Wave Speed Estimation	Portage Health Foundation
Christopher Hafeman	Biomedical Engineering	Jingfeng Jiang	Vortex Cores and Their Link to Aneurysm Development	Portage Health Foundation
Claire Eischer	Exercise Science	Tejin Yoon	Neuromuscular Fatigue and Recovery Following Eccentric Contractions in Lean and Obese Middle-aged Women	Portage Health Foundation
Hannah Marti	Biomedical Engineering	John Durocher	Fitness vs. Fatness and the Cardiovascular Responses to Acute Stress	Portage Health Foundation
Jill Poliskey	Materials Science & Engineering	Joshua Pearce	3D Printing Prosthetic Hands for Children in the Developing World	Portage Health Foundation
Mitchell Tahtinen	Biomedical Engineering	Feng Zhao	Prevascularization of a Natural Highly Aligned Nanofibrous Extracellular Matrix Scaffold	Portage Health Foundation
Olivia Ingram	Biological Sciences	Kevin Trewartha	The role of Implicit Memory Processes in Age-related Declines in Motor Learning	Portage Health Foundation
Ross Michaels	Biomedical Engineering	Jingfeng Jiang	Effects of Hyperthermic Denaturation of Collagen Fibers on Tissue's Mechanical Characteristics Resulting from Abalation	Portage Health Foundation
Tessa Sprague	Exercise Science	Kevin Trewartha	Assessing the Effects of Manipulating Spatial Working Memory Load on Motor Learning in Healthy Older Adults	Portage Health Foundation