Curriculum Vitae

John J. Durocher, Ph.D., ACSM-EP, CSCS

Nils K. Nelson Professor

Director of Integrative Physiology and Health Sciences Center Coordinator of Integrative Human Health B.S. Degree Program

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Education:	
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2008	Doctor of Philosophy Exercise Physiology	Department of Biological Sciences Michigan Technological University
2006	Master of Science • Exercise Science	Department of Health, P.E., and Recreation Northern Michigan University
2004	Bachelor of Science General Biology (Cum Laude)	Department of Biological Sciences Michigan Technological University
1996	Associate in Applied Science • Forest Technology	School of Technology Michigan Technological University

Professional Experience:

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2023-Pres.	Professor (Tenured)	Biological Sciences (Integrative Human Health) Purdue University Northwest
2020-2023	Associate Professor (Tenured)	Biological Sciences (Integrative Human Health) Purdue University Northwest
2020-2023	Adjunct Associate Professor	Biological Sciences Michigan Technological University
2019-2020	Associate Professor (Tenured)	Biological Sciences Michigan Technological University
2019-2020	Affiliated Associate Professor	Kinesiology and Integrative Physiology Michigan Technological University
2012-2019	Assistant Professor	Biological Sciences Michigan Technological University
2012-2019	Affiliated Assistant Professor	Kinesiology and Integrative Physiology Michigan Technological University
2011-2012	Research Assistant Professor	Kinesiology and Integrative Physiology Michigan Technological University

2011-2012	Adjunct Assistant Professor	Biological Sciences Michigan Technological University
2010-2011	Postdoctoral Fellow	Integrative Physiology Laboratory Michigan Technological University
2009-2010	Assistant Professor	Physical Therapy (Exercise Physiology) Saint Francis University
2008-2009	Assistant Professor	Health, Exercise Science & Sport Mgmt. University of Wisconsin – Parkside
2007-2008	Graduate Research Assistant & Instructor	Exercise Science, Health and P.E. Michigan Technological University
2007-2008	Clinical Exercise Physiologist	Cardiopulmonary Services Portage Health
2006-2007	Graduate Teaching Assistant	Exercise Science; Biological Sciences Michigan Technological University
2004-2005	Graduate Teaching Assistant & Instructor	Health, P.E. and Recreation Northern Michigan University
2003	Teaching Assistant	Biological Sciences Michigan Technological University

Research Interests:

Integrative Physiology	 Autonomic Regulation of Blood Pressure
 Exercise Physiology & Health Promotion 	 Physiological Responses to Stress & Exercise
Mindfulness and Cardiovascular Health	Specificity of Exercise Testing and Prescription

Teaching Experience:

Purdue University Northwest:

- HST 10800: First Year Experience in Health Studies
- HST 11000: Orientation to Sports Health
- HST 22200: Introduction to Holistic Health
- HST 25000: Prevention and Care of Athletic Injuries (starting in spring 2024)
- HST 30400: Integrative Human Health Practicum
- HST 30500: Occupational Safety & Health
- HST 35800: Cultural Diversity in Health and Illness
- HST 36000: Exercise Physiology (developed the course)
- HST 44700: Integrative Human Health Capstone
- HST 44800: Stress Management
- HST 49500 / BIOL 59500: Advanced Human Physiology
- HST 49500 / BIOL 59500: Cardiovascular & Sleep Technology (developed the course)

Michigan Technological University:

- BL1590: Intro to Health Professions
- BL1800: Biochemistry Orientation (Guest Lecturer)
- BL 2010: Anatomy and Physiology I (and BL 2011 A&P I Lab)
- BL 2020: Anatomy and Physiology II (and BL 2021 A&P II Lab)
- BL 2940: Human Nutrition (Guest Lecturer)
- BL 3000: Job Shadow Health Professions
- BL 3044: Advanced Human Physiology (developed the course)
- BL 3990: Bio Science Teaching Experience
- BL 4000: Research in Biology
- BL 4044 / 5044: Human Pathophysiology (developed the course)
- BL 4470: Analysis of Biological Data (Co-Instructor)
- BL 5350: Special Topics in Physiology (ex. Work Physiology; Exercise Metabolism)
- BL/EH 4211: Exercise Physiology Laboratory (developed the initial lab & manual)
- EH 3100: Exercise Assessment and Prescription (Guest Lecturer)
- EH 3100: Exercise Assessment and Prescription Laboratory (developed initial lab & manual)
- EH 3700: Lifetime Fitness (Guest Lecturer)
- EH 4200: Sports Nutrition Seminar
- EH 4210: Exercise Physiology (Guest Lecturer)
- EH 4990: EKG Interpretation (Guest Lecturer and Laboratory Demonstrations)
- EH 5920 & KIP 6100: Grad Seminar in Kinesiology & Integrative Physiology (Guest Lecturer)
- PE 0156: Beginning Mountain Biking

Saint Francis University:

- EXPH 102: Introduction to Strength Training
- EXPH 103: Introduction to Physical Conditioning
- EXPH 250: Functional Anatomy
- EXPH 310: Exercise Physiology II: Nutrition, Bioenergetics, Performance & Body Comp.
- EXPH 330: Neuromuscular Principles of Strength and Conditioning (developed the course)
- EXPH 398/399: Internship / Practicum (developed internship manual and evaluation criteria)
- EXPH 400: Advanced Laboratory and Field Methods in Exercise Physiology
- EXPH 410: Environmental Exercise Physiology (developed the course)
- PHTH 300: Exercise Physiology

University of Wisconsin – Parkside:

- AHS 101: Introduction to Applied Health Sciences (Guest Lecturer)
- HESM 196: Weight Training
- HESM 280: Sport and Fitness Nutrition
- HESM 353: Biomechanics
- HESM 354: Physiology of Exercise
- HESM 410: Fitness Assessment and Prescription

Northern Michigan University:

- GETFIT: Adult Fitness Program
- HP 200: Physical Well-Being
- HP 216: Beginning Skating
- HP 233: Snowshoeing
- HP 245: Weight Training and Conditioning
- PE 315: Physiology of Exercise Laboratory
- PE 317: Anatomical Kinesiology Laboratory

Grants:

Awarded (Total: \$3,318,698; External Total: \$3,071,027 – approx. 93% external):

Project Title	Award Organization	Dates	Amount
Lifestyle Changes and Life's Simple 7 in Northwest Indiana – ELC Ext. Role: PI	Indiana Department of Health	07/23 to 06/24	\$50,000 (total)
Curriculum Development: Medical Laboratory Sciences Role: Co-PI with V. Quinn & H. Naji	American University of the Middle East	05/23 to 06/24	\$102,083 (total)
ACUE-Inspired 1 st Generation Project Role: Co-PI with Bauman & Mutai	Purdue University Northwest Microgrant	05/23 to 06/24	\$3,000 (total)
Integrating Mindfulness into Eating among College Students at PNW Role: Co-PI with Mutai & Bauman	Barilla America Inc.	12/22 to 06/24	\$10,000 (total)
Evaluation and Implementation of Lifestyle Changes and Life's Simple 7 in Northwest Indiana Role: PI	Indiana Department of Health	07/22 to 12/23	\$133,000 (total)
Alcohol and Neurovascular Control in Humans Role: Co-PI with JR Carter	National Institutes of Health R-01	09/17 to 08/23	\$1,871,688 (tot.) \$1,377,030 (dir.)
Mindfulness, Sleep, and Neurovascular Control in Young and Mid-Life Adults Role: PI	Purdue Northwest Proposal Submission Grant	01/22 to 06/23	\$4,500 (total)
Cardiometabolic Effects of Hibiscus sabdariffa in Overweight and Obese Adults Role: Co-PI with E. Mutai	Purdue Northwest Catalyst Grant	01/22 to 06/23	\$12,000 (total)
Mindfulness and Neural Cardiovascular Control in Humans Role: PI (PI transferred to Robert Larson for no-cost extension) Updated 11/7/2023	National Institutes of Health R-15	02/18 to 01/23	\$465,854 (tot.) \$304,480 (dir.)

Awarded Grants Continued:

Project Title	Award Organization	Dates	Amount
The Effects of Pharmaceuticals and Lifestyle Changes on Polycystic Ovary Syndrome Role: Mentor for Jewel McKeithen	McNair Scholars Program	6/22 to 8/22	\$6,100 (total) \$1,600 (direct)
The Effect of Acute Meditation on MSNA and Arterial Stiffness in Young and Mid-Life Adults Role: Research Mentor	Purdue Northwest Undergraduate Research Award To: Becky Wein	11/21 to 08/22	\$300 (total)
Designing a Lower-Body Negative Pressure Chamber Role: Mentor for Colleen Toorongian	Indiana Space Grant Consortium	07/21 to 03/22	\$6,000 (total)
Flexible Learning Dev. Grant Role: Committee Member	PNW Center for Faculty Excellence	05/21 to 09/21	\$1,000 (direct)
Impact of COVID-19 on Lifestyle Behaviors in a Multicultural Campus Community Role: Mentor for Sydnie Roberson	McNair Scholars Program	06/21 to 08/21	\$6,100 (total) \$1,600 (direct)
Muscle Soreness and Pressure Pain Caused by Eccentric Aerobic Exercise: Responses in Men and Women Role: Research Mentor	Purdue Northwest Undergraduate Research Award To: Jack Strimel	10/20 to 08/21	\$300 (total)
Thermal Mattress, Sleep Quality, and Blood Pressure in Humans Role: PI	Industry Sponsor	06/19 to 12/20	\$395,064 (tot.)
The Effects of Morning vs. Pre- Sleep Mindfulness Meditation on Sleep Health, Meditation, and Anxiety Role: Mentor with Brigitte Morin	Michigan Tech – Summer Undergraduate Research Fellowship (SURF) To: Thomas Basala	03/20 to 08/20	\$4,000 (total)
Effect of Blue Light on Autonomic Function and Sleep Quality Role: Graduate Mentor for Jeremy Bigalke	Michigan Space Grant Consortium (Graduate Fellowship)	05/19 to 04/20	\$5,000 (direct)
Wearable Technology for Clinical Exercise and Applied Sport Science Testing Role: Collaborator with Steve Elmer	Portage Health Foundation – Infrastructure Enhancement (IE)	07/19 to 06/20	\$51,409 (total) \$36,409 (direct)

Awarded Grants Continued:

Awarded Grants Continued.			
Project Title	Award Organization	Dates	Amount
The Effects of Upper and Lower Body Resistance Exercise on Pulse Wave Velocity and Tilt Table Test Performance	Michigan Tech – Summer Undergraduate Research Fellowship (SURF)	03/19 to 08/19	\$4,000 (total)
Role: Undergraduate Mentor	To: Grant Thivierge		
Ambulatory Blood Pressure Monitors for Michigan Tech Role: Pl	Michigan Tech Century II Campaign Endowed Equipment Fund (C ² E ²)	11/18 to 12/19	\$7,437 (total) \$3,600 (direct)
Ambulatory Blood Pressure Patterns and Arterial Stiffness Role: Undergraduate Mentor (For Thomas Basala)	Portage Health Foundation through the Pavlis Honors College Undergraduate Research Internship	10/18 to 04/19	\$800 (total) \$800 (direct)
Decentering, Acute Meditation, and Arterial Stiffness Role: Undergraduate Mentor (For Sarah LewAllen)	Portage Health Foundation through the Pavlis Honors College Undergraduate Research Internship	09/18 to 04/19	\$1,600 (total) \$800 (direct)
Arterial Stiffness Responses to Eccentric-Induced Muscle Damage: Sex Differences Role: Undergraduate Mentor (For Colleen Toorongian)	Portage Health Foundation through the Pavlis Honors College Undergraduate Research Internship	09/18 to 04/19	\$1,600 (total) \$800 (direct)
Sleep Disorders Laboratory Role: Co-PI with Jason Carter and William Cooke	Portage Health Foundation (PHF) Infrastructure Enhancement (IE)	04/18	\$50,000 (direct)
Fighting Aging with Exercise: Improvements in Cognitive and Physical Function through Resistance Training in Older Adults Role: Co-PI with Trewartha & Elmer	Portage Health Foundation and MTU Research Excellence Fund (Seed Grant)	05/17 to 12/18	\$40,000 (direct)
Psychophysiological Benefits of Acute Mindfulness Meditation Practice Role: Undergraduate Mentor (For Hannah Marti)	Portage Health Foundation through the Pavlis Honors College Undergraduate Research Internship	10/16 to 3/17	\$1,600 (total) \$800 (direct)
Fitness vs. Fatness and the Cardiovascular Responses to Acute Stress Role: Undergraduate Mentor (For Hannah Marti)	Portage Health Foundation through the Pavlis Honors College Undergraduate Research Internship	10/15 to 3/16	\$1,600 (total) \$800 (direct)

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Awarded Grants Continued:

Project Title	Award Organization	Dates	Amount
The Effect of Diet or Exercise on Visceral Obesity, Neural Cardiovascular Reactivity and Arterial Stiffness in Obese Humans Role: PI	Michigan Tech Research Excellence Fund – Seed Grant	07/13 to 06/15	\$26,000 (total)
Blended and Active Learning for Health Sciences at Michigan Tech Role: Co-PI with BE Morin	The William G. Jackson Center for Teaching and Learning	02/15 to 12/15	\$9,700 (total) \$5,000 (direct)
Promoting Wellness at Michigan Tech through Physical Activity Monitored with Wireless Accelerometers; Role: PI	Michigan Tech Century II Campaign Endowed Equipment Fund (C ² E ²)	11/12 to 06/15	\$8,825 (total) \$4,000 (direct)
The Influence of Aerobic and Anaerobic Fitness on Cross- Country Mountain Biking Performance	Michigan Tech – Summer Undergraduate Research Fellowship (SURF)	05/13 to 09/13	\$3,300 (total)
Role: Undergraduate Mentor	To: Marie Mets		
Research Career Enhancement Award - Evaluation of Vascular Function in Humans Role: PI	The American Physiological Society	11/12 to 5/13	\$2,000 (direct)
The effect of cognitive stress on orthostatic tolerance during lower body negative pressure Role: PI	Michigan Space Grant Consortium (Seed Grant)	05/11 to 04/12	\$10,000 (total) \$5,000 (direct)
Human gross anatomy experience Role: PI Mini Teaching Grant	Michigan Tech Center for Teaching, Learning, and Faculty Development	11/10 to 06/11	\$500 (direct)
Training to improve the hockey snap and wrist shot with resistance training and the SuperShooter2© Role: Co-PI with J Erickson	Miken MV 3 Pro Hockey Sticks (Gift in Kind Equipment Grant)	06/10	\$3,910 (estimated value)
Sport-specific research at Saint Francis University Role: PI	Portage Health (Gift in Kind Equipment Grant)	10/09	\$14,928 (estimated value)
Mental stress during acute loading of the baroreceptors Role: PI	Michigan Space Grant Consortium (Fellowship)	05/08 to 04/09	\$5,000 (direct)
Optimizing lactate clearance in collegiate athletes Role: Co-PI with JR Carter	Portage Sports Medicine Institute	08/07 to 07/08	\$2,500 (total) \$2,273 (direct)

Updated 11/7/2023

Peer-Reviewed Publications: (32 total)

Wedig IJ, Lenox IM, McDaniel J, **Durocher JJ**, Petushek EJ, and Elmer SJ. Development of a Prediction Equation to Estimate Lower-Limb Arterial Occlusion Pressure with a Thigh Sphygmomanometer. *European Journal of Applied Physiology,* In Press (EJAP-D-23-00478R1), October 30, 2023.

Wedig IJ, **Durocher JJ**, McDaniel J, and Elmer SJ. Blood Flow Restriction as a Potential Therapy to Restore Physical Function Following COVID-19 Infection. *Frontiers in Physiology* 14:1235172 (13 pages), published in Frontiers e-book titled "Exercise intervention for Prevention, Management of and Rehabilitation from COVID-19."

Durocher JJ, Phelan HL, Toorongian CA, Vyas AP, and Morin BE. Effect of Single-Session Meditation on Aortic Pulsatility and Anxiety in Moderately Anxious Adults. *Advances in Mind-Body Medicine* 37(2): 32-36, 2023.

Elmer SJ, Gohn CR, **Durocher JJ**, and Sharma N. Promoting Outreach Through Physiology Chapter Collaboration. *Advances in Physiology Education* 47: 373-375, 2023.

Bigalke JA, **Durocher JJ**, Greenlund IM, Keller-Ross A, and Carter JR. Blood Pressure and Muscle Sympathetic Nerve Activity Are Associated with Trait Anxiety in Humans. *American Journal of Physiology: Heart and Circulatory Physiology*, 324(4): H494-H503, 2023.

Durocher JJ, Toorongian CA, and Thivierge GS. An Experiential Learning Course for Cardiovascular and Sleep Technology. *Advances in Physiology Education* 46: 544-548, 2022.

Wakeham TR, Anderson DJ, Elmer SJ, and **Durocher JJ**. Post-Exercise Arterial Stiffness Responses Are Similar after Acute Eccentric and Concentric Arm Cycling. *International Journal of Exercise Science* 15(2): 884-895, 2022.

Elmer SJ, Vranish JR, Harfmann BD, Sharma N, **Durocher JJ**, Zimmer MB, and Bell, HJ. 8th Annual Michigan Physiological Society Meeting, June 24-25, 2021. *Advances in Physiology Education* 46: 41-43, 2022.

Greenlund IM, Bigalke JA, Tikkanen AL, **Durocher JJ**, Smoot CA, and Carter JR. Evening Binge Alcohol Disrupts Cardiovagal Tone and Baroreflex Function During Polysomnographic Sleep. *Sleep* 44(11): 1-9, 2021.

Greenlund IM, Cunningham HA, Tikkanen AL, Bigalke JA, Smoot CA, **Durocher JJ**, and Carter JR. Morning Sympathetic Activity after Evening Binge Alcohol Consumption. *American Journal of Physiology: Heart and Circulatory Physiology*, 320(1): H305-H315, 2021.

Elmer SJ and **Durocher JJ**. Moving student research forward during the COVID-19 pandemic. *Advances in Physiology Education* 44(4): 741-743, 2020.

Greenlund IM, Suriano PE, Elmer SJ, Carter JR, and **Durocher JJ**. Chronic Standing Desk Use and Arterial Stiffness. *Journal of Physical Activity and Health* 16(11): 1022-1028, 2019.

Pereira T, **Durocher J**, and Burr J. The Physiological Assessment and Analysis of the Physical Demand of Riding a Snowmobile. *Journal of Physical Activity and Health* 16(10): 857-864, 2019.

Burr JF, Beck JL, and **Durocher JJ**. The Relationship of High-Intensity Cross-Training and Arterial Stiffness. *Journal of Sport and Health Science* 8: 370-375, 2019.

Parikh GL, Webster CR, Vucetich JA, **Durocher JJ**, and Bump JK. Does persistent snowpack inhibit degradation of fecal stress indicators? *Conservation Physiology* 6(1), coy071, 2018.

Elmer SJ, Anderson DJ, Wakeham TR, Kilgas MA, **Durocher JJ,** Lindstedt SL, and LaStayo, PC. Chronic eccentric arm cycling improves maximum upper-body strength and power. *European Journal of Applied Physiology* 117(7): 1473-1483, 2017.

Durocher JJ, Carter JR, Cooke WH, Young AH, and Harwood MH. Cerebral blood flow velocity during combined lower body negative pressure and cognitive stress. *Aerospace Medicine and Human Performance* 86(8): 688-692, 2015.

Petushek EJ, Cokely ET, Ward P, **Durocher JJ**, Wallace S, and Myer GD. Injury Risk Prediction Expertise: Assessing ACL-IQ. *The American Journal of Sports Medicine* 43(7): 1640-7, 2015.

Yang H, **Durocher JJ**, Larson RA, and Carter JR. Role of the ovarian cycle on neural cardiovascular control in sleep deprived women. *Journal of Applied Physiology*, 118: 419-426, 2015.

Gorsuch J, Long, J, Miller K, Primeau K, Rutledge S, Sossong A, and **Durocher JJ**. The Effect of Squat Depth on Multiarticular Muscle Activation in Collegiate Cross-Country Runners. *Journal of Strength and Conditioning Research*, 27(9): 2619-25, 2013.

Yang H, **Durocher JJ**, Larson RA, DellaValla JP, and Carter JR. Total Sleep Deprivation Alters Cardiovascular Reactivity to Acute Stressors in Humans. *Journal of Applied Physiology*, 113(6): 903-8, 2012.

Carter JR, **Durocher JJ**, Larson RA, DellaValla JP, and Yang H. Sympathetic Neural Responses to 24-hour Sleep Deprivation in Humans: Sex Differences. *American Journal of Physiology: Heart and Circulatory Physiology*, 302: H1991-1997, 2012.

Durocher JJ, Lufkin KJ, King ME and Carter JR. Social technology restriction alters state-anxiety but not autonomic activity in humans. *American Journal of Physiology: Regulatory, Integrative and Comparative Physiology*, 301(6): R1773-1778, 2011.

Ebben WP, Wurm B, VanderZanden TL, Spadavecchia M, **Durocher JJ**, Bickham C, and Petushek EJ. Kinetic Analysis of Several Variations of Push-Ups. *Journal of Strength and Conditioning Research*, *25*(10): 2891-2894, 2011.

Durocher JJ, Klein JC and Carter JR. Attenuation of sympathetic baroreflex sensitivity during the onset of acute mental stress in humans. *American Journal of Physiology: Heart and Circulatory Physiology*, 300(5): H1788-93, 2011.

Carter JR, Stream SF, **Durocher JJ**, and Larson RA. Influence of acute alcohol ingestion on sympathetic neural responses to orthostatic stress in humans. *American Journal of Physiology - Endocrinology and Metabolism*, 300: E771-E778, 2011.

Schwartz CE, **Durocher JJ**, and Carter JR. Neurovascular responses to mental stress in prehypertensive humans. *Journal of Applied Physiology*, 110: 76-82, 2011.

Durocher JJ, Guisfredi AJ, Leetun DT, and Carter JR. Comparison of on-ice and off-ice graded exercise testing in collegiate hockey players. *Applied Physiology, Nutrition, and Metabolism*, 35(1): 35-39, 2010.

Durocher JJ, Schwartz CE, and Carter JR. Sympathetic neural responses to mental stress during acute simulated microgravity. *Journal of Applied Physiology*, 107: 518-522, 2009.

Durocher JJ, Leetun DT, and Carter JR. Sport-specific assessment of lactate threshold and aerobic capacity throughout a collegiate hockey season. *Applied Physiology, Nutrition, and Metabolism*, 33(6):1165-1171, 2008.

Carter JR, **Durocher JJ**, and Kern RP. Neural and cardiovascular responses to emotional stress in humans. *American Journal of Physiology: Regulatory, Integrative and Comparative Physiology*, 295(6): R1898-1903, 2008.

Durocher JJ, Jensen D, Arredondo AG, Leetun DT, and Carter JR. Gender differences in hockey players during on-ice graded exercise. *Journal of Strength and Conditioning Research*, 22(4): 1327-1331, 2008.

Other Publications:

Reply to Surapaneni. Letter to the Editor. Elmer SJ, Gohn CR, **Durocher JJ**, and Sharma N. *Journal of Applied Physiology* 47: 752, 2023.

Commentaries on Viewpoint: Hoping for the best, prepared for the worst: can we perform remote data collection in sport sciences? Let's move forward by being prepared. Elmer SJ and **Durocher JJ**. *Journal of Applied Physiology* 133(6): 1439-1440, 2022.

Featured in "Think Like a Physiologist" by Heather Boerner in *The Physiologist Magazine* May 2022, p. 33-38.

Liu S and **Durocher J**. Barbara A. Horwitz and John M. Horowitz Outstanding Undergraduate Abstract Awards and Excellence in Undergraduate Research Awards. *The Physiologist* 61(5): 223-225, 2018.

Papers Submitted or Close to Submission:

Parikh GL, Webster CR, Vucetich JA, **Durocher JJ**, and Bump JK. Evidence for an adaptive stress response by white-tailed deer to winter severity. Resubmitted to *Canadian Journal of Zoology* on January 30, 2023.

Cunningham HA, **Durocher JJ**, Rho Y, Lempka S, and Carter JR. Sympathetic Neural Responses to Acute Thermal Sensation. To be submitted to *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology*.

LewAllen SE, Thivierge GS, Morin BE, Trewartha KM, and **Durocher JJ**. The Ability to Decenter is Associated with Lower Arterial Stiffness in Humans. To be submitted to *American Journal of Hypertension*.

Vyas AP, Petushek EJ, Morin BE, Meneguzzo R, and **Durocher JJ**. Mindfulness-Based Stress Reduction and Stress Management Education Improved Psychological Health during COVID-19 Restrictions. To be submitted to *American Journal of Lifestyle Medicine*.

Abstracts and Conference Proceedings: (85 total)

Thivierge GS, Greenlund IM, Bigalke JA, Carter JR, and **Durocher JJ.** Evening and Morning-After Aortic Wave Reflection Responses to Binge Alcohol Consumption. Submitted to the American Physiology Summit. To be presented in April 2024 in Long Beach, CA.

Mutai EK, Bauman MJ, and **Durocher JJ.** Integrating Mindfulness into Eating among College Students at Purdue University Northwest. Accepted for CHRIE Conference, October 2023.

Thivierge GS, Ladwig MA, Mutai E, Bishop RE, and **Durocher JJ.** Evaluation and Implementation of Lifestyle Habits and Life's Simple 7[™] in Northwest Indiana. *Physiology* May 2023 38(S1): Late-breaking Health Disparities.

Thivierge GS, Vyas AP, Morin BE, Larson RA, and **Durocher JJ**. The Effects of Mindfulness-Based Stress Reduction and Stress Management Education on Arterial Stiffness, Trait Anxiety, and Sympathetic Regulation. *Physiology* May 2023 38(S1): Late-breaking Neural Control of Autonomic Physiology.

Bishop RE, Thivierge GS, Larson RA, and **Durocher JJ.** Decentering and baroreflex sensitivity in adults with elevated blood pressure. *Physiology* May 2023 38(S1): Blood Pressure Regulation.

Toorongian CA, Bauman MJ, Thivierge GS, Stanic RS, and **Durocher JJ.** The disidentification component of decentering is a predictor of nighttime systolic and diastolic blood pressure dipping. *Physiology* May 2023 38(S1): Blood Pressure Regulation.

Bigalke JA, **Durocher JJ**, Greenlund IM, Keller-Ross M, and Carter JR. Trait Anxiety is Associated with Blood Pressure and Muscle Sympathetic Nerve Activity. *Physiology* May 2023 38(S1): Neural Control of Autonomic Physiology and Disease.

Wedig IJ, Lennox IM, McDaniel J, **Durocher JJ**, Petushek EJ, and Elmer SJ. Predictors of Blood Flow Restriction in the Lower-Body Across Commonly Used Cuff Widths. *Physiology* May 2023 38(S1): Environmental and Exercise Physiology: Other.

Wedig IJ, Lennox IM, Scarfone CJ, McDaniel J, **Durocher JJ**, and Elmer SJ. A Prediction Equation for Blood Flow Restriction Exercise That Accounts for Cuff Width. *Med. Sci. Sports Exerc.* 54(9S), 2022. *American College of Sports Medicine Annual Meeting*.

Basala TR, Morin B, and **Durocher JJ.** The Effects of Morning vs. Evening Mindfulness Meditation on Sleep, Anxiety, and Decentering: A Pilot Analysis. *FASEB J* May 2022 36(S1). *Federation of American Societies for Experimental Biology.*

Greenlund IM, Bigalke JA, Tikkanen AL, Nicevski JR, Smoot CA, **Durocher JJ**, and Carter JR. Morning Cardiovascular and Sympathetic Reactivity to Cold Pressor Test After Evening Binge Drinking: Sex Differences. *FASEB J* May 2022 36(S1). *Federation of American Societies for Experimental Biology*.

Vyas AP, Thivierge GS, Toorongian CA, Larson RA, and **Durocher JJ**. Mental Stress Pressor Response and Post-Stress Aortic Wave Reflection. *FASEB J* May 2022 36(S1). *Federation of American Societies for Experimental Biology*.

Greenlund IM, Bigalke JA, Tikkanen AL, Nicevski JR, Smoot CA, **Durocher JJ**, and Carter JR. Morning Cardiovascular Reactivity After Evening Binge Alcohol Consumption: Sex Differences. *American Autonomic Society*.

Toorongian CA, Basala TR, and Durocher JJ. Chassell Fitness Trails Project: Removing Barriers to Exercise. *The Michigan Physiological Society Annual Meeting*, Virtual Meeting, June 2021.

Thivierge GS, Menzel-Smith IG, Greenlund IM, Carter JR, and **Durocher JJ.** Dose-Dependent Arterial Stiffness Responses to Binge Alcohol Consumption. *FASEB J* May 2021 35(S1). *Federation of American Societies for Experimental Biology*.

Vyas AP, Petushek EJ, Morin BE, and **Durocher JJ**. Effects of 8-week active mindfulness and stress management on decentering and anxiety during the COVID-19 pandemic. *FASEB J* May 2021 35(S1). *Federation of American Societies for Experimental Biology*.

Basala TR, Toorongian CA, and **Durocher JJ.** Decentering and Nocturnal Blood Pressure Dipping in Young Adults. *FASEB J* May 2021 35(S1). *Federation of American Societies for Experimental Biology*.

Greenlund IM, Bigalke JA, Tikkanen AL, Smoot CA, **Durocher JJ**, and Carter JR. Evening Binge Alcohol Disrupts Cardiovagal Tone and Baroreflex Function During Polysomnographic Sleep Stages. *FASEB J* May 2021 35(S1). *Federation of American Societies for Experimental Biology*.

Basala TR, Dix SM, Durocher BE, Toorongian CA, Meyers DK, and **Durocher JJ.** Applied Human Physiology Fitness Trail Project: Benefits for Local Residents and Undergraduate Students. *The Michigan Physiological Society Annual Meeting*, Virtual Meeting, June 2020.

Vyas A, Greenlund IM, and **Durocher JJ.** Effects of 8-Week Active Mindfulness and Stress Management on Anxiety and Mental Health During the Covid-19 Pandemic. *The Michigan Physiological Society Annual Meeting*, Virtual Meeting, June 2020.

Basala TR, Dix SM, Durocher BE, Toorongian CA, Meyers DK, and **Durocher JJ.** Applied Human Physiology Fitness Trail Project: Benefits for Local Residents and Undergraduate Students. *Federation of American Societies for Experimental Biology,* San Diego, CA, April 2020.

LewAllen SE, Vyas A, Thivierge GS, Morin BE, and **Durocher JJ.** Decentering, Aortic Wave Reflection, and Arterial Stiffness. *FASEB J* April 2020 34(S1). *Federation of American Societies for Experimental Biology*.

Greenlund IM, Cunningham HA, Tikkanen AL, **Durocher JJ**, Smoot CA, and Carter JR. Morning Sympathetic Nerve Activity After a Night of Binge Alcohol Consumption. *FASEB J* April 2020 34(S1). *Federation of American Societies for Experimental Biology*.

LewAllen SE, Morin BE, and **Durocher JJ.** Decentering and Arterial Stiffness in Young Adults. *The Michigan Physiological Society Annual Meeting*, Mt. Pleasant, MI, June 2019.

Poliskey JE, LewAllen SE, Maanika CB, Elmer SJ, Rajeshkumar L, Trewartha KM, and **Durocher JJ**. Effect of Dynamic Eccentric Leg Exercise Training on Strength, Mobility, and Arterial Stiffness in Older Adults. *The Michigan Physiological Society Annual Meeting*, Mt. Pleasant, MI, June 2019.

Greenlund IM, Cunningham HA, Tikkanen AL, **Durocher JJ**, Smoot CA, and Carter JR. Spectral Analyses of Slow Wave Sleep and Rapid Eye Movement Sleep are Associated with Changes in Continuous Nocturnal Blood Pressure. *SLEEP 2019, Associated Professional Sleep Societies, LLC*, San Antonio, TX, June 2019.

Durocher JJ, LewAllen SE, Maanika CB, Elmer SJ, Rajeshkumar L, and Trewartha KM. Effect of Dynamic Eccentric Leg Exercise Training on Functional Fitness and Arterial Stiffness in Older Adults. *FASEB J* April 2019 33: 695.15, *Federation of American Societies for Experimental Biology*, Orlando, FL.

Cunningham HA, Greenlund IM, Tikkanen AL, **Durocher JJ**, Smoot CA, and Carter JR. Spectral Power of Slow Wave Sleep is Associated with Reductions of Nocturnal Blood Pressure in Humans. *FASEB J* April 2019 33: 558.7, *Federation of American Societies for Experimental Biology*, Orlando, FL.

Greenlund IM, Cunningham HA, Tikkanen AL, **Durocher JJ,** Smoot CA, and Carter JR. Alpha Intrusion during Rapid Eye Movement (REM) Sleep Increases Blood Pressure. *FASEB J* April 2019 33: 558.6, *Federation of American Societies for Experimental Biology,* Orlando, FL.

Greenlund IM, Kimmes PE, Wang M, and **Durocher JJ.** Workplace Standing Desks and Arterial Stiffness. *The Michigan Physiological Society Annual Meeting,* Houghton, MI, June 2018.

Kimmes PE, Greenlund IM, and **Durocher JJ.** The Godin-Shephard Leisure-Time Physical Activity Questionnaire and Arterial Stiffness. *The Michigan Physiological Society Annual Meeting,* Houghton, MI, June 2018.

Maanika CB, Kumar LR, Elmer SJ, **Durocher JJ**, and Trewartha KM. Associations between Physical Fitness, Cognitive Functioning, and Motor Learning in Older Adults: A Preliminary Study. *The Michigan Physiological Society Annual Meeting*, Houghton, MI, June 2018.

McKenzie EE, Wakeham TR, and **Durocher JJ.** Bringing PhUn with Hands-On STEM to Stanton Township Schools. *The Michigan Physiological Society Annual Meeting,* Houghton, MI, June 2018.

Pereira TJ, **Durocher JJ**, and Burr JF. The Physiological Assessment and Analysis of the Physical Demand of Riding a Snowmobile. ACSM 2018, *American College of Sports Medicine*, Minneapolis, MN, May 2018.

Greenlund IM, Kimmes PE, Wang M, and **Durocher JJ.** Workplace Standing Desks and Arterial Stiffness. *FASEB J* April 2018 32: 722.8. *Federation of American Societies for Experimental Biology,* San Diego, CA.

Durocher JJ, Marti H, Morin B, and Wakeham TR. Single Session Mindfulness Meditation Reduces Aortic Pulsatile Load and Anxiety in Mild to Moderately Anxious Adults. *FASEB J* April 2018 32: 714.19. *Federation of American Societies for Experimental Biology*, San Diego, CA.

Wakeham TR, Fonkoue IT, **Durocher JJ**, Cooke WH, and Carter JR. Reliability of Heart Rate Variability as an Assessment of Cardiac Sympathetic Activity in Humans. *The Michigan Physiological Society Annual Meeting*, Alma, MI, June 2017.

Greenlund IM, Wakeham TR, Nelson EV, Revoyr MM, and **Durocher JJ.** The effect of Hibiscus sabdariffa tea on cardiovascular risk factors in prehypertensive adults. *The Michigan Physiological Society Annual Meeting*, Alma, MI, June 2017.

Marti HL, Wakeham TR, and **Durocher JJ.** Psychophysiological Effects of Acute Mindfulness Meditation. *The Michigan Physiological Society Annual Meeting,* Alma, MI, June 2017.

Wakeham TR, Fonkoue IT, **Durocher JJ**, Cooke WH, and Carter JR. Reliability of Heart Rate Variability as an Assessment of Cardiac Sympathetic Activity in Humans. *FASEB J* April 2017 31:1071.6. *Federation of American Societies for Experimental Biology*, Chicago, IL.

Wakeham TR, Greenlund IM, and **Durocher JJ.** Aortic Pulsatility and Arterial Stiffness After Acute Combined Resistance and Endurance Exercise. *FASEB J* April 2017 31:707.16. *Federation of American Societies for Experimental Biology,* Chicago, IL.

Wakeham TR, Fonkoue IT, **Durocher JJ**, and Carter JR. Reliability of Heart Rate Variability as an Assessment of Sympathetic Activity in Humans. *Upper Peninsula Medical Conference*, Copper Harbor, MI, August 2016.

Wakeham TR, Carter JR, Wang M, and **Durocher JJ**. Predicting muscle sympathetic nerve activity and mean arterial blood pressure responses to mental stress. *The Michigan Physiological Society Annual Meeting*, Detroit, MI, May 2016.

Marti HL, Wakeham TR, Revoyr MM, and **Durocher JJ**. The Effect of Changes in Fitness and Fatness on Aortic Pulsatile Load. *The Michigan Physiological Society Annual Meeting,* Detroit, MI, May 2016.

Wakeham TR, Elmer SJ, and **Durocher JJ**. Concentric vs. Eccentric Arm Cycling: Acute Cardiovascular and Arterial Stiffness Responses. ACSM 2016, *American College of Sports Medicine*, Boston, MA, May 2016.

Wakeham TR, Carter JR, Wang M, and **Durocher JJ**. Predicting muscle sympathetic nerve activity and mean arterial blood pressure responses to mental stress. *Federation of American Societies for Experimental Biology,* San Diego, CA, April 2016.

Wakeham TR, Morin B, and **Durocher JJ**. A blended learning approach for human skeletal anatomy with undergraduate students. *Federation of American Societies for Experimental Biology*, San Diego, CA, April 2016.

Wakeham TR, Morin B, and **Durocher JJ**. The Influence of a Role-Play Membrane Transport Laboratory on Lecture Performance and Student Satisfaction. *Human Anatomy and Physiology Society Regional Meeting*, Milwaukee, WI, November 2015.

Petushek EJ, Cokely ET, Ward P, **Durocher J**, Wallace S, and Myer GD. Visual Estimation of ACL Injury Risk: Efficient Assessment Method, Group Differences, and Expertise Mechanisms. *Upper Peninsula Medical Conference*, Copper Harbor, MI, August 2015.

Durocher JJ, Wakeham TR, Dixon RA, and Harwood MH. The Influence of Acute Resistance and Aerobic Exercise Order on Arterial Stiffness. ACSM 2015, *American College of Sports Medicine*, San Diego, CA, May 2015.

Wakeham TR, Harwood MH, Carter JR, and **Durocher JJ**. Obesity and neural cardiovascular responses to mental stress in humans. *The Michigan Physiological Society Annual Meeting,* Boyne, MI, April 2015.

Wakeham TR, Harwood MH, Carter JR, and **Durocher JJ**. Obesity and neural cardiovascular responses to mental stress in humans. *Federation of American Societies for Experimental Biology*, Boston, MA, March 2015.

Harwood MH, Wakeham TR, and **Durocher JJ**. Mean arterial pressure and wave reflection during the cold pressor test: the influence of trunk fat. *Federation of American Societies for Experimental Biology*, Boston, MA, March 2015.

Stream SF, **Durocher JJ**, Chen QH, and Carter JR. Acute Alcohol Consumption Elicits Augmented Symphathoexcitation in Prehypertensive Humans. Research Society on Alcoholism Scientific Meeting, Bellevue, WA, June 2014.

Durocher BE, Harwood MH, Drum SN, Watts PB, Moore MT, and **Durocher JJ**. The Acute Cardiovascular and Inflammatory Responses to Ultramarathon and Marathon. ACSM 2014, American College of Sports Medicine, Orlando, FL, May 2014.

Harwood MH, Mets MR, Hamlin BH, and **Durocher JJ**. Relationships of Maximal Oxygen Consumption, LT and Anaerobic Power to Performance in Adolescent Mountain Bikers. ACSM 2014, American College of Sports Medicine, Orlando, FL, May 2014.

Harwood MH, Durocher BE, Drum SN, Watts PB, Moore MT, and **Durocher JJ**. The Acute Cardiovascular Responses to Marathon and Ultramarathon Competition. *The Michigan Physiological Society Annual Meeting*, East Lansing, MI, May 2014.

Fonkoue IT, King ME, **Durocher JJ**, and Carter JR. Mental stress and cardiovascular reactivity in humans: A time-dependent response. *The Michigan Physiological Society Annual Meeting*, East Lansing, MI, May 2014 (oral presentation by Ida Fonkoue).

Durocher BE, Harwood MH, Edwards JC, Drum SN, and **Durocher JJ**. Influence of intensity on acute aortic pulse pressure and central arterial stiffness in long-distance runners. *Federation of American Societies for Experimental Biology*, San Diego, CA, April 2014.

Harwood MH, Strong CR, De Cramer CK, Carter JR, and **Durocher JJ**. Reliability of finger blood pressures with simultaneous ipsilateral radial applanation tonometry. *Federation of American Societies for Experimental Biology*, San Diego, CA, April 2014.

Larson RA, Yang H, **Durocher JJ**, and Carter JR. Total sleep deprivation and pain perception during cold noxious stimuli in humans: Role of sex. *Federation of American Societies for Experimental Biology,* San Diego, CA, April 2014.

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Fonkoue IT, King ME, **Durocher JJ**, and Carter JR. Mental stress and cardiovascular reactivity in humans: A time-dependent response. *Federation of American Societies for Experimental Biology*, San Diego, CA, April 2014.

Yang H, **Durocher JJ**, Larson RA, King ME and Carter JR. Ovarian Cycle, Total Sleep Deprivation, and Cardiovascular Reactivity in Humans. *SLEEP 2013, Associated Professional Sleep Societies, LLC*, Baltimore, MD, June 2013.

Carter JR, **Durocher JJ**, Yang H and Larson RA. Effects of the Ovarian Cycle on Sympathetic Neural and Cardiovascular Control during Total Sleep Deprivation in Humans. *SLEEP 2013, Associated Professional Sleep Societies, LLC, Baltimore, MD, June 2013.*

Young AH, Strong CR, Cooke WH, Carter JR, and **Durocher JJ**. The influence of combined lower body negative pressure and mental stress on cerebral blood flow in men and women. *Federation of American Societies for Experimental Biology,* Boston, MA, April 2013.

Carter JR, **Durocher JJ**, Larson RA, DellaValla JP, and Yang H. Sleep Deprivation and Neural Cardiovascular Reactivity in Humans. *SLEEP 2012, Associated Professional Sleep Societies, LLC*, Boston, MA, June 2012.

Durocher JJ, Witting JL, Drummer TD, and Carter JR. Influence of Night Shift Work on Sleep-Wake Cycle, 24-hour Blood Pressure and State Anxiety. *SLEEP 2012, Associated Professional Sleep Societies*, *LLC*, Boston, MA, June 2012.

Yang H, **Durocher JJ**, Larson RA, DellaValla JP and Carter JR. Influence of 24-Hour Sleep Deprivation on Sympathetic and Cardiovagal Baroreflex Function in Humans. *SLEEP 2012, Associated Professional Sleep Societies, LLC*, Boston, MA, June 2012.

Larson RA, **Durocher JJ**, DellaValla JP, Yang H, and Carter JR. Influence of Sleep Deprivation on Cardiovascular Reactivity and Pain Perception to Cold Pressor Test. *SLEEP 2012, Associated Professional Sleep Societies, LLC, Boston, MA, June 2012.*

Durocher JJ and Carter JR. Influence of body mass index on neural cardiovascular reactivity to mental stress in humans. *Federation of American Societies for Experimental Biology,* San Diego, CA, April 2012.

Yang H, **Durocher JJ**, Larson RA, DellaValla JP, and Carter JR. Sex differences in sympathetic neural responses to 24-hour sleep deprivation in humans. *Federation of American Societies for Experimental Biology,* San Diego, CA, April 2012.

Larson RA, **Durocher JJ**, Yang H, DellaValla JP, and Carter JR. Influence of 24-hour sleep deprivation on anxiety and cardiovascular reactivity in humans. *Federation of American Societies for Experimental Biology,* San Diego, CA, April 2012.

Durocher JJ, Larson RA, DellaValla JP, and Carter JR. Influence of Sleep Deprivation on State-Anxiety and Arterial Blood Pressure in Humans. *SLEEP 2011, 25th Anniversary Meeting of the Associated Professional Sleep Societies, LLC,* Minneapolis, MN, June 2011.

Gorsuch J, Long, J, Miller K, Primeau K, Rutledge S, Sossong A, and **Durocher JJ**. The Effect of Squat Depth on Multi Articular Muscle Activity in Collegiate Cross-Country Runners. *Saint Francis University Annual Research Day*, May 2011.

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Durocher JJ, Larson RA, and Carter JR. Acute alcohol ingestion lengthens sympathetic burst latency in humans. *Federation of American Societies for Experimental Biology*, Washington, DC, April 2011.

Schwartz CE, Joyner MJ, **Durocher JJ**, and Carter JR. Influence of omega-3 fatty acids on neurovascular responses to mental stress in normotensive humans. *Federation of American Societies for Experimental Biology*, Washington, DC, April 2011.

Carter JR, **Durocher JJ**, Schwartz CE, and Klein JC. Mental Stress Attenuates Sympathetic Baroreflex Sensitivity in Humans. *American Autonomic Society*, 2010.

Gorsuch J, Long, J, Miller K, Primeau K, Rutledge S, Sossong A, and **Durocher JJ**. The Effect of Squat Depth on Muscle Activation in Male and Female Cross-Country Runners. *International Society of Biomechanics in Sport*, 2010.

VanderZanden TL, Wurm B, **Durocher JJ**, Bickham C, Petushek EJ, and Ebben WP. The Effect of Reaching to an Overhead Goal While Performing the Countermovement Jump. *International Society of Biomechanics in Sport*, 2010.

Wurm B, VanderZanden TL, Spadavecchia M, **Durocher JJ**, Bickham C, Petushek EJ, and Ebben WP. Kinetic Analysis of Several Variations of Push-Ups. *International Society of Biomechanics in Sport*, 2010.

Schwartz CE, **Durocher JJ**, and Carter JR. Prehypertension alters arterial pressure and forearm vascular responses to mental stress in humans. *Federation of American Societies for Experimental Biology*, Anaheim, CA, April 2010.

Durocher JJ, Guisfredi AJ, Leetun DT, and Carter JR. Comparison of On-Ice and Off-Ice Graded Exercise Testing in Collegiate Hockey Players. *Mid-Atlantic Regional Conference of the American College of Sports Medicine*. Abstract P-7, November 2009.

Durocher JJ, Schwartz CE, and Carter JR. Mental Stress During Acute Loading of the Baroreceptors. *Federation of American Societies for Experimental Biology* 23:786.9, 2009.

Durocher JJ, Bustos DJ, Schwartz CE, and Carter JR. Post-game cycling does not enhance blood lactate removal in collegiate hockey players. *The Physiologist* 51(6):22.13, 2008.

Durocher JJ, Kern RP, and Carter JR. Effects of emotional and mental stress on muscle sympathetic nerve activity in humans. *Federation of American Societies for Experimental Biology* 22:740.6, 2008.

Peer-Reviewer:

Advances in Physiology Education
American Journal of Hypertension
American Journal of Physiology: Heart and Circulatory Physiology
American Journal of Physiology: Regulatory, Integrative and Comparative Physiology
BMC Complementary & Alternative Medicine
Clinical Autonomic Research
Ergonomics

Experimental Physiology

International Journal of Environmental Research & Public Health

International Journal of Sports Medicine

International Journal of Sports Physiology and Performance

Journal of Applied Physiology

Journal of Human Hypertension

Journal of Sports Sciences

Medicine & Science in Sports & Exercise

Neuroscience Bulletin

Pain Medicine

Physiology & Behavior

Physiological Reports

Safety

Sports Health

Women in Sport and Physical Activity Journal

Society, Fellowship, and Grant Review

- American Physiological Society (Horwitz & Horowitz Awards, ADInstruments Macknight Innovative Educator Award, and Undergraduate Summer Research Fellowships)
- Michigan Physiological Society (coordinator of abstract review, oral presentation judge, and poster judge)
- Michigan Technological University Summer Undergraduate Research Fellowship
- National Strength and Conditioning Association Wisconsin State Clinic
- Purdue University Northwest Undergraduate Research Awards and Indiana Space Grant Undergraduate Research Program
- Purdue University Northwest Catalyst Grants and International Travel Grants
- Purdue University Northwest Undergraduate Research Summer Fellowships
- Reviewer for the National Institutes of Health Biobehavioral Mechanisms of Emotion, Stress, and Health (MESH) Study Section in February 2021

Graduate Research Publications:

Durocher JJ. Aerobic Fitness and Lactate Metabolism in Collegiate Hockey Players. UMI Publishers (Microform 3339426), Doctoral Dissertation, Michigan Technological University, 2008.

Durocher JJ. Effects of Clipless Pedals on Ventilatory Threshold, EMG, and Economy during Cycle Ergometry. Master's Thesis, Northern Michigan University, 2006.

University Publications:

Harwood MH, Wakeham TR, Gratz RK, and **Durocher JJ.** Principles of Anatomy and Physiology Laboratory I, revised laboratory manual for BL 2011 Anatomy and Physiology Laboratory, Michigan Technological University, 2011-2014.

Wakeham TR, Harwood MH, Gratz RK, Harris MA, and **Durocher JJ.** Principles of Anatomy and Physiology Laboratory II, revised laboratory manual for BL 2021 Anatomy and Physiology Laboratory, Michigan Technological University, 2012-2015.

Durocher JJ. Exercise Physiology Internship Manual, developed guidelines and evaluation tools for EXPH 398/399 internship/practicum, Saint Francis University, 2010.

Durocher JJ. Exercise Assessment and Prescription Laboratory Manual, developed entire laboratory course and manual for EH 3100 exercise assessment and prescription, Michigan Technological University, 2007.

Durocher JJ and Carter JR. Exercise Physiology Laboratory Manual, developed entire laboratory course and manual for EH 4211 exercise physiology lab, Michigan Technological University, 2006.

Invited Presentations:

"First-Gen Microgrant Recipient Panel." With seven other grant awardees we shared our motivations, progress, and the impact of our projects. Hammond, IN, November 6, 2023.

"Career Development Session: Preparing Abstract and Award Applications." Co-Presented with Marisol Lopez for the American Physiological Society Center for Physiology Education (and 2024 Physiology Summit), October 30, 2023.

"How did they do that? Seeking and Securing External Funding." Faculty Research Board Sponsored Panel Presentation with M. Chandramouli, D. Feikes, J. Ivy, M. Tu, A. Zelechoski, and C. Zhou. Hammond, IN, September 26, 2023.

"Taking the Syllabus Day of Class by Storm." Lightning Presentation at the Celebrating Excellence: Taking PRIDE in Our Teaching Event, Hammond, IN, September 22, 2023.

"PNW Integrative Human Health and the Integrative Physiology and Health Sciences Center." PNW First-Year Experiences in Biology Course, Hammond, IN, September 22, 2023.

"Reducing Cardiovascular Risk Factors Through Lifestyle Medicine." PNW Alternative Therapies in Nursing Course, Westville, IN, September 11, 2023.

"Undergraduate and Graduate Research in Integrative Physiology: Success Stories." PNW Graduate Seminar in Biological Sciences, March 10, 2023.

"Forestry." Science Olympiad at Purdue University Northwest. Led with assistance from Grant Thivierge on February 11, 2023.

"Perspectives on Health-Related Research Funding at PNW." Presented to the campus community through the faculty research board at a coffee chat on January 26, 2023.

"Introduction to Exercise Physiology." Presented to four sections of Biomedical Sciences at Crown Point High School with Grant Thivierge and Reagan Bishop on December 12, 2022.

"A Multidisciplinary Approach to The Address Book." Presented in a townhall format with Dr. Heather Augustyn and Dr. Amanda Zelechoski on November 9, 2022.

"VO2 Kinetics and Chronotropic Responses After Severe COVID-19." AJP - Heart and Circulatory Physiology Podcast, provided perspectives as an expert on October 27, 2022. https://aipheart.podbean.com/e/vo2-kinetics-and-chronotropic-responses-after-severe-covid-19/

"Careers Related to Integrative Human Health." TRIO Upward Bound at Purdue University Northwest. Led with Dr. Matthew Ladwig and Dr. Hassan Naji on July 17, 2022. Also reviewed the Integrative Human Health Curriculum on July 18 and provided laboratory demonstrations in the Integrative Physiology and Health Sciences Center on July 20, 2022.

"Tips for Stress Management and Better Sleep." Purdue University Northwest Exercise is Medicine® Month, April 27, 2022.

"The Benefits of Being Involved in Research." Purdue University Northwest Biology and Psychology Clubs, April 25, 2022.

"Bio Process Lab on the Musculoskeletal System and Bioenergetics." Science Olympiad at Purdue University Northwest. Led with Dr. Michelle Spaulding on February 26, 2022.

"Integrative Physiology and Health Sciences Research Center." Purdue University Northwest Research Board, January 14, 2022.

"Benefits of Acute and Chronic Mindfulness Training." Purdue University Northwest Graduate Seminar in Biological Sciences, September 20, 2021.

"The Physiological and Psychological Benefits of Meditation." Power Onward Conference at Purdue University Northwest, August 17,2021.

"Research and Teaching During COVID-19: Challenges, Opportunities, and Lessons Learned." Co-hosted symposium with Steven Elmer for annual Michigan Physiological Society Meeting, June 24, 2021.

"Research Design and Methods McNair Scholars Presentation." In collaboration with Lindsay Gielda, June 14, 2021.

"Athletes for Charity: Human & Exercise Physiology." Presentation to more than 100 elementary school students in MI and IN, May 18, 2021.

"Purdue University Northwest Health Studies Program." Presentation with Colleen Toorongian to high-school students from Hobart, IN on May 17, 2021.

"Lifestyle Strategies to Power Onward." Keynote for the Days of Discovery at Purdue University Northwest, April 1, 2021.

"Sympathetic Activation, Stress, and Stress Reduction." University of Illinois at Chicago, Integrative Physiology Laboratory, March 16, 2021.

"Assessing Arterial Stiffness in Humans: Cross-Sectional and Clinical Trial Studies." Northern Michigan University Graduate Seminar in Exercise Science, February 1, 2021.

"Human Research in Exercise, Autonomic, and Integrative Physiology." Purdue University Northwest Graduate Seminar in Biological Sciences, September 2020.

"The Merits of Mindfulness." Featured on the Super Awesome Science Show Podcast on Aug. 12, 2019. https://omny.fm/shows/super-awesome-science-show/the-merits-of-mindfulness Updated 11/7/2023

"Meditation and Arterial Stiffness Studies at Michigan Tech." Michigan Tech Bioathlon Teacher Workshop (including hands-on laboratory demonstrations), May 2019.

"Applied Skeletal Muscle Anatomy and Physiology." Houghton Portage Township High School Anatomy and Physiology Class, December 2018.

"From E.B. Holman Student to Michigan Tech Professor." Stanton Township Schools Commencement Speaker, June 2018.

"Tips for Endurance Athletes." Part of Anish Hikes: Stories from the Trail. Michigan Technological University, April 2017.

"Assessing Arterial Stiffness in Humans: How Effective Are Lifestyle Interventions?" Michigan Community College Biologists Conference, Roscommon, MI, May 2016.

"Careers and Research in Clinical and Applied Human Physiology." Introduction to Health Professions course at Michigan Tech, October 2015.

"Professional Sports Combines: How athleticism is measured." Keweenaw Science and Engineering Festival, August 2015.

"Human Power Production: Concentric and Eccentric Cycling." Women in Engineering at Michigan Tech, July 2015.

"Friday Night Fitness at Cross Country Sports." Western UP Health Dept. and Swedetown Trails Club, June & July 2015 (weekly presentations on topics including: VO₂max, Lactate Threshold, Running Economy, Strength Training for Runners, Sports Nutrition, and Interval Training).

"Exercise and Nutritional Strategies to Reduce Arterial Stiffness." UP Health – Portage, Lunch and Learn, April 2015.

"Strength and Conditioning Strategies for Reducing Arterial Stiffness in Humans." Michigan Tech Kinesiology and Integrative Physiology Seminar Series, January 2015.

"Ethics Workshop – Human Participants." Michigan Tech Responsible Conduct for Research Course, May 2014.

"Careers in Clinical and Applied Human Physiology." Michigan Tech Biochemistry Orientation, October 2013 and 2014.

"An Introduction to MTU Anatomy & Physiology I & II." Finlandia University TRIO Upward Bound Students, July 2013.

"Assessment of Anaerobic Power for Mountain Bikers." Michigan Tech Mountain Bike Camp, June 2013.

"F.I.T.T.ness Recommendations for Phase III and IV Cardiopulmonary Rehabilitation." Portage Health Cardiopulmonary Services, March 2013.

"Health Care Careers Related to Human Physiology and Kinesiology." Michigan Tech Summer Youth Program for Careers in Health Care, July 2012.

"Scientific Assessment and Training for Cross-Country Mountain Bike Racing." Michigan Tech Mountain Bike Camp, June 2012.

"Autonomic Regulation of Blood Pressure: non-pharmacological solutions for hypertension and orthostatic hypotension." Michigan Tech Department of Biological Sciences, March 2012.

"Nutritional Recommendations for Military Training." Michigan Tech Air Force Reserve Officers' Training Corps, February 2012.

"Sleep and Cardiovascular Control in Humans." Michigan Tech Department of Biological Sciences Seminar Series, December 2011.

"Concurrent Training for Endurance Sports: Maximize Performance and Prevent Injury." Michigan Tech Mountain Bike Camp, June 2011.

"Endurance Physiology for Cross-Country Mountain Bikers." Michigan Tech Mountain Bike Camp, June 2010.

"The Fundamentals of Resistance and Endurance Training." Razor Sharp Fitness - Transitions Weight Management Group, Racine, WI, April 2009.

"The Basics of Biomechanics and Exercise Physiology." Introduction to Applied Health Science Course, University of Wisconsin – Parkside, February 2009.

"Training Safely and Effectively to Minimize Injury and Disease." Razor Sharp Fitness – Transitions Weight Management Group, Racine, WI, January 2009.

"Aerobic Fitness and Lactate Metabolism in College Hockey Players." National Strength and Conditioning Association – Wisconsin State Clinic, Oshkosh, WI, April 2008.

"Sport Specific Fitness Assessment, Autonomic Regulation of Arterial Blood Pressure, and Pursuing a Graduate Degree at Michigan Tech." Advanced Seminar in Exercise Science, Northern Michigan University, February 2008.

"Physiological Responses and Measurements during Aerobic Exercise." Michigan Technological University Bio-Athlon, May 2007.

"Gender Differences in Hockey Players during On-Ice Graded Exercise." Sigma Xi Multi-Disciplinary Student Research Colloquium, April 2007.

"Physiological Characteristics and Nutritional Guidelines for Cross-Country Mountain Bikers." Sports Nutrition Seminar Course, Michigan Technological University, March 2007.

Workshops and Continuing Education Completed:

ACUE (Association of College and University Educators) Course for Promoting Active Learning. Currently enrolled and will complete the micro-credential on November 12, 2023.

Indiana Department of Health - Health Equity Training Workshop. Led by Joseph Pinnell, Deputy Chief & Executive Director of Workforce Management. Completed on December 8, 2022.

Purdue University Title IX Mandatory Reporter Training. Completed course through Purdue SuccessFactors on November 30, 2022.

Heartsaver® CPR AED program. Led by Vincent Penna through Rush University Medical Center on September 9, 2022.

Discipline Specific Training for Responsible Conduct of Research. Purdue University Research Integrity Officer James Mohler, October 25, 2021.

Faculty Mediation Training. Purdue University Professor of Organizational Leadership and Supervision – Joy Colwell, September 10, 2021.

The Physiology of Fat Loss: New Exciting Findings Course. IDEA Health & Fitness Association, December 26, 2020. 0.2 CEUs for NSCA CSCS recertification.

Advanced Corrective Exercise Course. IDEA Health & Fitness Association, December 24, 2020. 0.4 CEUs for NSCA CSCS recertification.

An Introduction to Holistic Nutrition Course. IDEA Health & Fitness Association, December 23, 2020. 0.4 CEUs for NSCA CSCS recertification.

Adult First Aid / CPR / AED Certification Course. American Red Cross, December 23, 2020.

SafeSport Training. U.S. Center for SafeSport™, November 25, 2020.

Collaborative Institutional Training Initiative (CITI) Program for Responsible Conduct of Research. Purdue University, October 13, 2020.

Collaborative Institutional Training Initiative (CITI) Program for Biomedical Research Investigators and Key Personnel. Purdue University, October 13, 2020.

Planning Instruction for Varied Offering Types (PIVOT) Program. Purdue University Northwest Center for Faculty Excellence, August 13, 2020.

Diversity Literacy and Legal Aspects Certification. Michigan Tech ADVANCE Diversity Literacy Program, Houghton, MI, November 2012 and fall of 2017.

The Basics of Sleep. Sleep Research Society. SLEEP 2011, 25th Anniversary Meeting of the Associated Professional Sleep Societies, LLC, Minneapolis, MN, June 2011.

Visualizing the Future of Teaching Anatomy and Physiology. Wiley Faculty Network, Las Vegas, NV, March 2011.

Running on Empty: a conference on eating disorders that addresses issues regarding causes, effects, and the search for solutions. UW-Parkside Center for Community Partnerships, Kenosha, WI, March 2009.

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Service:	2. Surcence
2023-Pres	Search Committee Chair for Tenure-Track Assistant Professor of Integrative Human Health and Kinesiology
2023-Pres	Faculty Scholarship Award Committee Chair, Founders Day at Purdue Northwest
2023-Pres	University Promotion and Tenure Committee, Purdue University Northwest
2023-Pres	Vice-Chair of the Purdue University Northwest Faculty Research Board
2023	Advisory Board Liaison and Contributor to the Graduate Curriculum Working Group of the Center for Physiology Education of the APS
2023-Pres	AJP-Heart and Circulatory Physiology Editorial Board Member
2023	Search Committee Chair, Asst. Professor of Practice in Integrative Human Health
2022-2023	Served as an External Reviewer for Promotion and Tenure based on Research for a College in the Mid-Atlantic Region
2022-Pres	College of Engineering and Science College Council Representative from the Department of Biological Sciences at Purdue University Northwest
2022-2023	One Book, One University Committee at Purdue University Northwest
2022-Pres	Search Committee Member for the Dean of the College of Nursing, Purdue University Northwest
2022-Pres	Faculty Co-Advisor for the Purdue University Northwest Cycling Club
2022-2023	Promotion and Tenure Committee Member for Hospitality and Tourism Management and for Managerial Studies at Purdue University Northwest
2022-Pres	At-Large Tenured Faculty Representative on the Faculty Research Board, Purdue University Northwest (term to 2025)
2022-Pres	Center for Physiology Education Advisory Board (Inaugural Member), The American Physiological Society (term to 2024)
2022-2023	Committee on Committees Representative for the Neural Control and Autonomic Regulation Section, The American Physiological Society
2022-Pres	Department of Biological Sciences Safety Committee, Purdue Northwest
2022	Served as an External Reviewer for Promotion and Tenure based on Scholarship for a University near the East Coast
2022	Mentor for the Preparing Effective Physiology Educators (PrEP-E) Fellowship Program, The American Physiological Society

2022	25 - Durocher
2022	Purdue University Northwest Engineering Senior Design Poster Judge
2022	Science Olympiad at Purdue University Northwest (Bio Process Lab Organizer with Michelle Spaulding)
2021-Pres	Founding Director of the Integrative Physiology and Health Sciences Research Center at Purdue University Northwest
2021-Pres	Founding Advisor, Exercise is Medicine® – On Campus, Purdue Northwest
2021-2022	Faculty Mentor for Pilot Program through the Center for Faculty Excellence at Purdue University Northwest
2021-2022	Search Committee Chair for Health Studies Tenure-Track Assistant Professor, Purdue University Northwest
2021-Pres	Curriculum Committee Chair for Biology and College of Engineering and Sciences Representative, Purdue University Northwest
2021-Pres	Member of the Faculty Mediation Committee, Purdue University Northwest
2021	Search Committee Member for an Assistant Professor in the White Lodging School of Hospitality & Tourism Management, Purdue University Northwest
2021	Session Chair for the Medical Physiology Refresher Course on Sleep Physiology and Sleep Disorders, event preceding Experimental Biology 2021
2020-2022	Health Studies / Integrative Human Health Advisory Committee, Purdue Northwest
2020-Pres	Health Studies / Integrative Human Health Degree Coordinator, Purdue Northwest
2020-Pres	Strategic Planning Committee – Biological Sciences, Purdue University Northwest
2020-Pres	Intercollegiate Athletics Advisory Committee, Purdue University Northwest
2020-2021	Mentor, Teaching Experiences for Bioscience Educators (TEBioED) Fellows Program, The American Physiological Society
2020	Search Committee Chair for Health Studies Lecturer, Purdue University Northwest
2019-2021	Past-President, Michigan Physiological Society
2019-2020	Executive Committee Member, Health Research Institute (HRI) at Michigan Tech
2019-2020	H-STEM Planning Group, Michigan Tech Vice President of Research Office
2019-2020	Tenure, Promotion, and Reappointment Committee, MTU Biological Sciences
2019-2020	Early Career Management Committee, External Advocate and Committee Chair, Michigan Tech Cognitive and Learning Sciences
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2019-2020	26 - Durocher Houghton Lions Club Member (and Lions Club International Member)
2018-2021	Education (Physiology Educators) Committee of the American Physiological Society
2018-2019	Comparative Animal Physiologist Search Committee, Michigan Tech
2018-2019	JED Campus Committee Member, Michigan Technological University
2018-2019	President, Michigan Physiological Society
2018	Chair of Biological Sciences Seminar Series (spring)
2017-2020	Curriculum Committee, Michigan Tech Biological Sciences
2017-2018	President Elect, Michigan Physiological Society Co-Organizer, Michigan Physiological Society Annual Meeting (at MTU)
2016-2017	Director of Pre-Health Programs at Michigan Tech
2016-Pres	Graduate Faculty Member, Department of Human Health & Nutritional Sciences, University of Guelph (Ontario, Canada)
2016-2017	Awards Chair, Michigan Physiological Society Annual Meeting
2015-2016	Co-Chair of Health Science Faculty Search Committee, Michigan Tech Biological Sciences
2015	Chair of Oral Presentation Judging, Michigan Physiological Society Annual Meeting
2014	Review Committee, Michigan Tech applicants to the Central Michigan Doctor of Physical Therapy Program
2014	Internal Reviewer, Summer Undergraduate Research Fellowships, Michigan Tech
2013-2018	Graduate Faculty Council, Alternate Representative for Biological Sciences
2013	Search Committee, Michigan Tech Biological Sciences (MLS Lecturer)
2013	Search Committee, Michigan Tech Kinesiology & Integrative Physiology (Biomechanics)
2012-2015	Graduate Committee, Michigan Tech Biological Sciences
2012-2017	Communications and Outreach Committee, Michigan Tech Biological Sciences
2012-2013	Safety Committee, Michigan Tech Biological Sciences
2012-2013 Updated 11/7	Search Committee, Michigan Tech Kinesiology & Integrative Physiology /2023

2012	Bioathlon Dissection Designer, Michigan Tech Biological Sciences
2011-2014	Graduate Curriculum Committee, Michigan Tech Department of Kinesiology and Integrative Physiology
2011	Internal Reviewer, Summer Undergraduate Research Fellowships, Michigan Tech
2010-2011	Curriculum Committee, Chair, Michigan Tech Department of Exercise Science, Health & Physical Education
2010	Internal Reviewer, Strategic Faculty Hiring Initiative in Health, Michigan Tech
2009-2010	Sport Management Committee, Saint Francis University
2009	Human Subjects Committee, University of Wisconsin – Parkside
2008-2009	Applied Health Science Steering Committee, Department of Biology and
	Department of Health, Exercise Science and Sport Management, UW - Parkside
2008-2009	Department of Health, Exercise Science and Sport Management, UW - Parkside Curriculum Committee, Department of Health, Exercise Science and Sport Management, UW - Parkside
2008-2009	Curriculum Committee, Department of Health, Exercise Science and Sport Management, UW - Parkside MTU Graduate Student Council, Biological Sciences Representative and
	Curriculum Committee, Department of Health, Exercise Science and Sport Management, UW - Parkside

Professional Affiliations:

2023-present: The International Society for Microneurography 2018-present: Midwest Regional Chapter of the American College of Sports Medicine 2014-2021: Michigan Physiological Society, Member and Past-President 2008-present: The American Physiological Society, Professional Member 2007-2014; 2018-present: National Strength & Conditioning Association, Professional Member 2004-2016; 2018-present: American College of Sports Medicine, Professional Member 2013-2014; 2023-present: The American Heart Association, Professional Member 2012-2014: The Human Anatomy and Physiology Society 2008-2009: Canadian Society for Exercise Physiology

Professional Certifications:

- ➤ Certified Exercise Physiologist, American College of Sports Medicine
- > Certified Strength & Conditioning Specialist, National Strength & Conditioning Assoc.
- > Heartsaver® CPR/AED, American Heart Association

Awards and Accomplishments:

2023: Recognized as a 2022 Star Reviewer for AJP – Heart and Circulatory Physiology

2023: Chosen as an American Kinesiology Association Leadership Institute Fellow

2023: Excellence in Research Award in the College of Engineering and Sciences at PNW

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- 2023: Outstanding Faculty Scholarship Award (campus-wide) at Purdue University Northwest
- 2022: Selected as a member of the Center for Physiology Education Advisory Board (APS)
- 2022: Served as a Preparing Effective Physiology Educators (PrEP-E) Fellowship Mentor for the American Physiological Society
- 2021: ADInstruments Macknight Innovative Educator Award
- 2020: Nils K. Nelson Endowed Associate Professor of Health Studies
- 2020: Served as a Teaching Experiences for Bioscience Educators (TEBioED) Fellowship Mentor for the American Physiological Society
- 2020: Finalist for the Distinguished Teaching Award at Michigan Tech in the Associate Professor / Professor Category
- 2020: Inducted into the Michigan Technological University Academy of Teaching Excellence
- 2019: Top three PI for research expenditures in the College of Sciences and Arts at MTU
- 2019: Top 10% Instructor, Michigan Tech
- 2019: Finisher of the Marji Gesick 50+ mile mountain bike race
- 2018: Top 10% Instructor, Michigan Tech
- 2018: Finisher of the Marji Gesick 50+ mile mountain bike race
- 2017: Top 10% Instructor, Michigan Tech
- 2016: Top 10% Instructor, Michigan Tech
- 2016: Props for Profs Award, Michigan Tech
- 2015: Top 10% Instructor, Michigan Tech
- 2014: Certificate of Appreciation, Outstanding Contributions as a Faculty Member, Greek Life
- 2014: Props for Profs Award, Michigan Tech
- 2012: Research Career Enhancement Award, The American Physiological Society (APS)
- 2011: Caroline tum Suden / Frances Hellebrandt Professional Opportunity Award, The APS
- 2008: Biotechnology Research Center Travel Grant, Michigan Tech
- 2007: Proposal Incentive Award, Michigan Tech Graduate School
- 2007: 2nd Place Presentation, Sigma Xi Multi-Disciplinary Student Research Colloquium
- 2004: Graduated Cum Laude, Michigan Tech
- 2003: Certificate of Merit in Calculus for Life Sciences, Michigan Tech
- 2003: Nominated for Dean's Award for Service, Michigan Tech
- 2003: Departmental Scholar, Biological Sciences, Michigan Tech
- 2001: Firefighter I Certificate, Firefighter's Training Council, Michigan State Police
- 1996: Upper Peninsula of Michigan Bench Press Championship (more than 2x bodyweight)
- 1995: Upper Peninsula of Michigan Bench Press Champion, 149-165 lb. class

Graduate Student Advising:

Current:

Exit Exam Committee Chair: Brinley Hefty, MS in Biological Sciences

Purdue University Northwest Report Due in April 2024

Completed:

Co-Advisor: Reagan Bishop, MS in Biological Sciences

Purdue University Northwest

Thesis: Cardiovagal and Sympathetic Baroreflex Sensitivity and the

Ability to Decenter

MS awarded in August 2023

Committee Member: Isaac Wedig, PhD in Integrative Physiology

Michigan Technological University

Dissertation: Physical Activity as Medicine During the COVID-19

Pandemic

PhD awarded in April 2023

Co-Advisor: Aditi Vyas, PhD in Biological Sciences

Michigan Technological University

Dissertation: Effects of Mindfulness and Stress Management on

Neurocardiovascular and Psychological Outcomes

PhD awarded in December 2022

Advisor: Colleen Toorongian, MS in Biological Sciences

Purdue University Northwest

Thesis: Decentering Abilities and Nocturnal Blood Pressure Dipping

in Young Adults

MS awarded in August 2022

Co-Advisor: Grant Thivierge, MS in Biological Sciences

Michigan Technological University

Thesis: Evening and Overnight Cardiovascular and Arterial Stiffness

Responses to Simulated Binge Drinking

MS awarded in August 2021

Committee Member: Joshua Gonzalez, PhD in Integrative Physiology

Michigan Technological University

Dissertation: Short-Term Fasting and Autonomic Control

PhD awarded in August 2021

Co-Advisor: Dana Anderson, MS in Biological Sciences

Michigan Technological University

Thesis: Anterior Cruciate Ligament Injury Incidence Across Sex, Sport, and Level: A Systematic Review and Meta-Analysis

MS awarded in August 2021

Committee Member: Aprille Hibbard, MS Peace Corps

Michigan Technological University

Report: Empowering Women Through Physical Education and

Sports in Moldova

MS awarded in December 2020

Advisor: Basirat Tolulope Shittu, MS in Biological Sciences

Michigan Technological University

Thesis: The Effect of Hibiscus Sabdariffa L on Blood Pressure and

Arterial Stiffness in Humans MS awarded in August 2020

Advisor: Sarah LewAllen, MS in Biological Sciences

Michigan Technological University

Thesis: Mindfulness, Aortic Wave Reflection, and Arterial Stiffness

MS awarded in August 2020

Co-Advisor: Hannah Cunningham, MS in Kinesiology

Michigan Technological University

Thesis: Sympathetic Neural Responses to Acute Thermal

Sensations

MS awarded in August 2020

Committee Member: Zainab Ibrahin Alshong, PhD in Chemical Engineering

Michigan Technological University

Dissertation: Lipemia Levels Analysis from Human Blood Samples

PhD awarded in August 2020

Co-Advisor Claire Danielson, MS in Laboratory Management

Michigan Technological University

Report: Cost Analysis and Job Description for Implementation of a Night Shift Medical Technologist at Baraga County Memorial

Hospital

MS awarded in December 2019

Committee Member: Grace Parikh, PhD in Forest Resources &

Environmental Sciences

Michigan Technological University

Dissertation: Spatiotemporal Variability in Winter Severity: Consequences for White-Tailed Deer Populations and Habitat

Sustainability

PhD awarded in August 2019

Committee Member: Tania Pereira, MS in Nutrition, Exercise and Metabolism

University of Guelph (Ontario, Canada)

Thesis: The Physiological Assessment and Analysis of the Physical

Demand of Riding a Snowmobile MS awarded in December 2018

Advisor: Ian Greenlund, MS in Biological Sciences

Michigan Technological University

Thesis: Workplace Standing Desks and Arterial Stiffness

MS awarded in April 2018

Advisor: Travis Wakeham, MS in Biological Sciences

Michigan Technological University

Thesis: Acute Cardiovascular Responses to Novel Combinations of

Resistance and Aerobic Exercise

MS awarded in April 2018

Committee Member: John Henderson, PhD Student in Forest Resources &

Environmental Sciences

Michigan Technological University

Dissertation: The Dynamic Nature of Forage Preference and

Microhistological Atlas
PhD awarded in April 2018

Committee Member: Matthew Gage, MS in Kinesiology

Michigan Technological University

Thesis: The Effect of Myosync™ Supplementation on Physical

Performance in Division II College Football Players

MS awarded in April 2017

Committee Member: Alex Van Der Merwe, MS in Human Factors

Michigan Technological University

Thesis: The Mental Game: Superstitions, Rituals, and Mental Control

in Competitive Athletes
MS awarded in April 2016

Committee Member: Grace Parikh, MS in Forest Resources & Environmental Sciences

Michigan Technological University

Thesis: The Influence of Diet Composition, Plant Defensive Chemicals, and Winter Severity on the Nutritional Condition of a

Freeranging, Generalist Herbivore

MS awarded in April 2015

Committee Member: Erich Petushek, PhD in Human Factors

Michigan Technological University

Dissertation: Development and Validation of the Anterior Cruciate

Ligament Injury-Risk-Estimation Quiz (ACL-IQ)

PhD awarded in August 2014

Committee Member: Kara Peltier, MS in Medical Informatics

Michigan Technological University

Thesis: A Wearable Sensor Suite and Mobile Application for

Parkinson's Disease Tremor Analysis in Rural Areas

MS awarded in August 2014

Committee Member: Huan Yang, PhD in Biological Sciences

Michigan Technological University

Dissertation: Influence of 24-Hour Sleep Deprivation on

Cardiovascular and Neural Control at Rest and During Acute Stress

in Humans

PhD awarded in August 2013

Committee Member: Robert Larson, MS in Biological Sciences

Michigan Technological University

Thesis: Sleep Deprivation and Pain Intensity

MS awarded in December 2012

Co-Advisor: Jennifer Witting, MS in Biological Sciences

Michigan Technological University

Thesis: Effects of fixed night shift work on 24-hour blood pressure

regulation, state anxiety levels and total sleep time

MS awarded in December 2011

Non-thesis students:

Exit Exam Committee Chair: Christabel Mozea, MS in Biological Sciences

Purdue University Northwest

Summer 2021

Exit Exam Committee Chair: Pooja Singh Jurrel, MS in Biological Sciences

Purdue University Northwest

Fall 2021

Completed Mentoring Experience:

Jewel McKeithen, McNair Scholar at Purdue University Northwest, "Effects of Pharmaceutical and Lifestyle Interventions on Polycystic Ovary Syndrome (PCOS)," August 2022.

Sydnie Roberson, McNair Scholar at Purdue University Northwest, "The Impact of COVID-19 on Lifestyle Related Behaviors in a Multicultural Campus Community," August 2021.

Joshua Gonzalez, PhD, Teaching Experiences for Bioscience Educators (TEBioED) Fellowship Mentee (APS), obtained a postdoctoral scholar position at Oregon Institute of Occupational Health Sciences, Summer 2021.

Thomas Basala, undergraduate student at Michigan Technological University, "The Effects of Morning vs. Pre-Sleep Mindfulness Meditation on Sleep Health, Meditation, and Anxiety" and "Chassell Fitness Trail Project," 2020-21.

2021 Provost's Award for Scholarship at Michigan Tech

Nicholas J. Alessandroni and Emily C. Fisk, DPT students at Central Michigan University, "Does Blood Flow Restriction Training Cause Increased Hypertrophy and Strength in Atrophied Muscles Post-Injury? A Case Study," April 2020.

Sarah LewAllen, undergraduate student at Michigan Technological University, "Decentering and Arterial Stiffness in Young Adults," 2019.

- ▶ 6th Annual Michigan Physiological Society Conference at Central Michigan University, Poster Presentation Award Winner
- ➤ Medical Laboratory Sciences and Molecular Genetics Symposium at Northern Michigan University, Oral Presentation

Lindsey Hoper, undergraduate student at Wayne County Community College, "The Six-Minute Walk Test and Arterial Stiffness in Older Adults," summer 2018.

Keynote speaker for MiCUP banquet at Michigan Technological University.

Hannah Marti, undergraduate student at Michigan Technological University, "Psychophysiological Benefits of Acute Mindfulness Meditation Practice," 2016-2017.

- Portage Health Foundation Research Scholarship.
- > 2016 Michigan Tech Undergraduate Research Symposium honorable mention.
- ➤ This study was featured in several news outlets including Newsweek, US News, Men's Journal, Chicago Tribune, Forbes, Science Daily, Healthline, and many others.
- ➤ Hannah received an Aspirus Medical Provider Scholarship (up to \$150,000) in Jan. 2019 to the Medical College of Wisconsin Central Wisconsin.

Hannah Marti, undergraduate student at Michigan Technological University, "The Effect of Changes in Fitness and Fatness on Aortic Pulsatile Load," 2015-2016.

- Portage Health Foundation Research Scholarship.
- ➤ 2016 Michigan Tech Undergraduate Research EXPO 2nd place poster award.
- 2016 Michigan Physiological Society poster presentation award.

Travis Wakeham, graduate student at Michigan Technological University, "Arterial Stiffness Following Acute and Chronic Upper-Body Eccentric Exercise," spring 2016. **co-mentored with Dr. Steven Elmer from MTU Kinesiology & Integrative Physiology**

- 2016 Graduate Student Colloquium Best Oral Presentation.
- 2016 Graduate Student Colloquium Best Attended Oral Presentation.

Travis Wakeham, undergraduate student at Michigan Technological University, "Obesity and neural cardiovascular responses to mental stress in humans," spring 2015.

- David S. Bruce Outstanding Undergraduate Abstract Award.
- David S. Bruce Excellence in Undergraduate Research Award.

Ryan Dixon, undergraduate student at Michigan Technological University, "The Influence of Acute Resistance and Aerobic Exercise Order on Arterial Stiffness," spring 2015.

➤ Full Scholarship (WSU Board of Governors Merit Scholarship) to Wayne State University School of Medicine.

Marie Mets, undergraduate student at Michigan Technological University, "Relationships of VO2max, LT and Anaerobic Power to Performance in Adolescent Mountain Bikers," MTU SURF award (\$3,300) and presented a poster at the Undergraduate Research Expo, spring 2014.

Bridget Durocher, graduate student at Northern Michigan University, "Influence of Intensity on Acute Aortic Pulse Pressure and Central Arterial Stiffness in Long-Distance Runners," Northern Michigan University Spooner Grant (\$500), spring 2014.

Bridget Durocher, graduate student at Northern Michigan University, "Acute Effects of the Marquette 50 and Marquette Marathon on Cardiovascular Health," Northern Michigan University Excellence in Education Grant (\$1,500), spring 2013.

Angelea Young and Chelsea Strong, undergraduate students at Michigan Technological University, "The influence of combined lower body negative pressure and mental stress on cerebral blood flow in men and women," fall 2012.

Jennifer Witting, Master of Science Student at Michigan Technological University, "The Effects of Fixed Night Shift Work on 24 Hour Blood Pressure Regulation, State Anxiety Levels and Total Sleep Time." summer/fall 2011.

David Sproule, undergraduate student in Exercise Science at Michigan Technological University, "Training to Improve the Hockey Snap and Wrist Shot with Resistance Training and the SuperShooter2©," summer 2010.

Joshua Gorsuch, Janey Long, Katie Miller, Kyle Primeau, Sarah Rutledge, and Andrew Sossong, Doctor of Physical Therapy students at Saint Francis University, research assistants for "The Effect of Squat Depth on Multiarticular Muscle Activation in Collegiate Cross-Country Runners," 2009-2011.

➤ Joshua Gorsuch, DPT, 2011 Department of Physical Therapy Research Award

Angela Guisfredi, undergraduate student in Exercise Science at Michigan Technological University, Summer Undergraduate Research Fellowship award winner, research assistant for "Comparison of Sport-Specific and Laboratory Graded Exercise Testing in Collegiate Hockey Players," summer 2009.

➤ 2010 Michigan Tech Undergraduate Research EXPO, 3rd place award.

Derek J. Bustos, undergraduate student in Exercise Science and Biological Sciences at Michigan Technological University, completed an internship in research for "Active Recovery and Blood Lactate Removal in Collegiate Hockey Players," spring 2008.

Aaron G. Arredondo, undergraduate student in Biological Sciences at Michigan Technological University, completed senior essay course as a research assistant for "Gender Differences in Hockey Players during On-Ice Graded Exercise," fall/spring 2006-2007.

Additional Work and Volunteer Experience:

2022-2023: Oakadoke Trail Run volunteer, Creekside Trails, Valparaiso, IN. Helped to setup the course start and finish lines and to clean up course markings from the 18-mile trail run.

2023: LaPorte County Fair, LaPorte, IN. Helped to serve meals at the fair with College of Nursing faculty and students.

2022-2023: False Spring 10k and 20k Run volunteer, Soldiers Memorial Park, La Porte, IN. Cleaned up all course markings for Trailblazer Running group.

2021-Present: Creekside Trails (Valparaiso, IN) trail maintenance volunteer.

2020-2021: Imagination Glen (Portage, IN) trail maintenance volunteer.

2020-2022: Valparaiso Parks 14U hockey, assistant coach for the 20-21 & 21-22 seasons. Completed USA Hockey registration and SafeSport training on November 24, 2020.

2019-2022: Chassell Trails Club. Advised the club on a grant to secure ten pieces of bodyweight exercise equipment to install on their 4-km trail loop. Helped to assemble and install equipment and led students to make videos for exercise technique (posted on Chassell.net). Completed exercise technique trail signs in July 2022.

2017-2018: Volunteer Announcer at Canal Run.

2018: Co-Organizer of the Sizzling through Stanton 5-mile run.

2017: Physiology is Understanding (PhUn) Week. Stanton Township 4th grade class (3 visits: Careers in Physiology and Assessing Vital Signs, Exercise Physiology, and Cardiovascular Anatomy & Physiology).

2017: Little Brothers Friends of the Elderly. Donated and delivered cut / split firewood.

2016-2017: Copper Country Junior Hockey Assistant Coach (8U).

2015-2016: Co-Organizer of the Swedetown Trail Run (5k, 10k, 25k, and 50k).

2015-2017: Owner and Operator, John Durocher Forestry (timber sale marking and firewood sales), Atlantic Mine, MI.

2015-2016: Volunteer for "Give Drugs the Boot" boot hockey tournament held at the Calumet-Laurium-Keweenaw School.

2014-2017: Co-Organizer of the Mount Bohemia Trail Running Festival (5k, 10k, half-marathon, and 50k).

2011-2016: Coach and Instructor, Michigan Tech Mountain Bike Camp.

2011: Presenter, The Science of Hockey, in conjunction with Michigan Tech Mind Trekkers, Joe Louis Arena, Detroit, MI.

2010: Instructor, Sports Science, Summer Youth Program, Michigan Tech.

2007: Instructor, The Physics & Physiology of Sports, Summer Youth Program, Michigan Tech.

2007: Teaching Assistant, American Indian Workshop, Michigan Tech.

2002-2004, 2006: Certified Personal Trainer, Keweenaw Memorial Rehabilitation and Fitness, Houghton and Laurium, MI.

2005: Cardiopulmonary Intern, Marquette General Hospital, Marquette, MI.

2004: College Tutor, Exercise Physiology, Northern Michigan University, Marquette, MI.

2003-2004: Forest Research Technician and Site Supervisor, USDA Forest Service North Central Research Station, Houghton, MI.

2003-2004: Learning Center Coach, Department of Biological Sciences, Michigan Tech.

2003-2004: Security Clerk, Public Safety, Michigan Tech.

2003-2004: Physical Therapy Volunteer, Keweenaw Memorial Rehabilitation & Fitness Center and Portage Health, Houghton & Hancock, MI.

2002-2004: Undergraduate Teaching Assistant, Dept. of Biological Sciences, Michigan Tech.

2003: Undergraduate Research Assistant, Dept. of Biomedical Engineering, Michigan Tech.

2002-2008: Volunteer Firefighter, Stanton Township Fire Department, Houghton, MI.

1999-2001: Owner and Operator, John Durocher Logging, Atlantic Mine, MI.

1996-1998, 2001-2002, 2005-2006: Sawyer and Equipment Operator, John Porkka Logging Incorporated, Atlantic Mine, MI.

1995: Forestry Aid, USDA Forest Service, Ontonagon Ranger District, Ontonagon, MI.

1990-1994: Manager and Personal Trainer, The Gym Incorporated, Hancock, MI Updated 11/7/2023

Summary of Research Laboratory and Research Center Alumni:

- Undergraduate Research Assistants:
- Michelle King Michigan State University College of Human Medicine (has been a practicing MD Pediatrician in WI for more than 6 years)
- Angelea Young Michigan State University College of Human Medicine (has been a practicing DO in Pediatrics and Internal Medicine in MI for more than 5 years)
- Marie Mets Central Michigan University Department of Physical Therapy (has been a practicing DPT in MI for more than 5 years)
- Jenna Edwards University of Missouri PhD Program in Biomedical Sciences
- Ryan Dixon Wayne State University School of Medicine (has been a practicing MD in Emergency Medicine for more than 2 years in North Carolina)
- Courtney De Cramer Central Michigan University College of Medicine (Completed MD in 2020 and in residency in MI)
- Derek Pierce Central Michigan University College of Medicine (MD in residency as an Internal Medicine Hospitalist in FL)
- Elizabeth Champagne (-Edmondson) Wayne State University School of Medicine
- Mikayla Revoyr (Barea) Michigan State University College of Human Medicine (MD in residency as a Family Medicine specialist in MI)
- Hannah Marti (Phelan) Medical College of Wisconsin Central Wisconsin (MD in residency in General Surgery in MI)
- Jill Poliskey University of Michigan Medical School
- Dane Wuori University of Michigan Medical School
- Piersan Suriano (Williams) DPT program at Mayo Clinic College of Medicine and Science (practicing as a DPT in Pediatrics and General Orthopedics in MI)
- Colleen Toorongian MS in Biological Sciences at Purdue University Northwest

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Thomas Basala – University of Michigan Medical School

Bella Menzel-Smith – Physician Assistant Studies Program at Marquette University

Jenna Disser – MS in Biological Sciences Program at Michigan Technological University

Jack Strimel – Accepted into the MS Program in Athletic Training at the University of Iowa

Jewel McKeithen – University of Maryland Doctor of Pharmacy Program

Graduate Research Assistants:

- Travis Wakeham Michigan Tech Biological Sciences Assistant Teaching Professor and Academic Advisor
- Nikko Sirdenis Central Michigan University College of Medicine (practicing MD in Internal Medicine in MI)
- Ian Greenlund Montana State University PhD Program in Psychological Science; Postdoctoral Research Fellow at the Mayo Clinic
- Claire Danielson Medical Laboratory Science Program Director and MLS Academic Advisor at Michigan Technological University
- Sarah LewAllen Medical Laboratory Science Program Coordinator at Michigan Technological University
- Hannah Cunningham Research Study Coordinator at Stanford University (PCORI grant); interviewing for multiple PhD programs in Biomedical Sciences
- Basirat Tolulope Shittu Clinical Laboratory Scientist at Kaleida Health Center for Laboratory Medicine in Buffalo, NY
- Grant Thivierge Currently accepted to several medical schools and was recently the Coordinator of the Integrative Physiology and Health Sciences Center at Purdue University Northwest
- Colleen Toorongian MS Program in Cardiovascular Sciences and Perfusion Medicine at Hofstra University

Reagan Bishop – Currently Interviewing for medical school Updated 11/7/2023

Summary of Key Experiences

Teaching:

- Primary instructor for nearly 50 health-related courses.
- In 2022 published "An Experiential Learning Course for Cardiovascular and Sleep Technology" in *Advances in Physiology Education* (downloaded 1535 times to date).
- Nominated for the Outstanding Teacher Award at Purdue Northwest in 2022.
- Winner of the 2021 Macknight Innovative Educator Award through ADInstruments and the American Physiological Society.
- Inducted into the Michigan Tech Academy of Teaching Excellence in 2020.

Research:

- PI, Co-PI, or primary faculty mentor on more than \$3.3 million in funding from federal, state, industry, foundation, and university sponsors.
- Winner of the 2023 University-Wide Scholarship Award at Purdue Northwest and the Excellence in Research Award in the College of Engineering and Sciences.
- Helped to mentor several professors to successful awards through the NIH, American Physiological Society, and the American College of Sports Medicine.
- Published more than 30 peer-reviewed manuscripts and more than 80 abstracts to date.
- Mentored 16 female and 10 male graduate students from culturally diverse backgrounds.
- Mentored students to Medical School, Physician Assistant, Physical Therapy, Doctor of Pharmacy, Athletic Training, Perfusion Medicine, and other graduate programs.

Professional Service:

- Elected in 2023 to the AJP Heart and Circulatory Physiology Editorial Board and was recognized internationally as one of three Star Reviewers from 2022.
- In 2022 was chosen as an inaugural member of the Center for Physiology Education Advisory Board with the American Physiological Society.
- In 2021 served as a reviewer from the National Institutes of Health Biobehavioral Mechanisms of Emotion, Stress, and Health (MESH) Study Section.
- Served as a promotion and tenure reviewer both internally (MTU and PNW) and externally (east coast and mid-Atlantic regions).

Leadership Positions:

- Start in Dec. 2023 as an American Kinesiology Association Leadership Institute Fellow.
- Founding Director of the multidisciplinary Integrative Physiology and Health Sciences Center at Purdue University Northwest since 2021.
- Founding Advisor, Exercise is Medicine® On Campus, Purdue University Northwest
- Integrative Human Health Coordinator at Purdue Northwest since 2020 (responsible for program course scheduling, course substitutions, curriculum, and faculty mentoring).
- Mentor for the American Physiological Society TEBioED and PrEP-E Fellowship programs from 2020-2022.
- Member of the H-STEM Planning Group and Executive Committee Member of the Health Research Institute at Michigan Tech in 2019-2020.
- President of the Michigan Physiological Society in 2018-2019.
- Director of Pre-Health Programs at Michigan Tech in 2016-2017.