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EDUCATIONAL BACKGROUND

- August 2014- 2018 North Dakota State University
Ph.D. – Exercise Science
Dissertation: *Relating Physical Activity and Cardiorespiratory Fitness to Job-Specific Skills in Firefighters*
- August 2014 University of North Dakota
M.S. – Kinesiology
Thesis: *Effect of Sedentary and Physical Activity on Children's Food Choice*
- May 2012 University of Montana
B.S. – Exercise Science

PROFESSIONAL EXPERIENCE

- 2018 – Present Pittsburg State University
Assistant Professor

COURSES TAUGHT**Pittsburg State University**

- HHP 446: Exercise Physiology
- EXSCI 200: Introduction to Exercise Science
- EXSCI 290: Introduction to Research Methods
- EXSCI 520: Exercise Testing and Prescription
- EXSCI 550: Research Projects
- EXSCI 599: Pre-Internship
- EXSCI 600: Internship

North Dakota State University

- HNES 111: Wellness (online)
- HNES 371: Worksite Health Promotion
- HNES 375: Research Methods

University of North Dakota

- KIN 402L: Exercise Physiology Lab

Undergraduate Student Advising

Spring 2021	48 Students
Fall 2020	46 Students
Spring 2020	46 Students
Fall 2019	56 Students
Spring 2019	18 Students

Graduate Students**School and Graduation Date**

Halle Brin- Masters*

Pittsburg State University, Spring 2022

Tia Klein- Masters

University of North Dakota, Spring 2020

*Denotes Committee Chair

PUBLICATIONS – Refereed

1. **Barry AM**, Lyman, LK, Dicks ND, McGeorge CR, Carper MJ, Walch TJ. (2020) Firefighters are More Physically Activity On-Duty Compared to Off-Duty. *International Journal of Environmental Research and Public Health*. 17(24), 9380.
2. Dicks ND, Kotarsky CJ, Trautman KA, **Barry AM**, Keith JF, Mitchell S, Byun W, Stastny SN, Hackney KJ. (2020) Full Contribution of Protein Intake and Concurrent Exercise to Skeletal Muscle Quality with Aging. *The Journal of Frailty & Aging*. 9(1):51-56.
3. **Barry AM**, Lyman KJ, Dicks ND, Landin KD, McGeorge CR, Hackney KJ, Walch TJ. (2019) Firefighters' Physical Activity and Waist Circumference as Predictors of VO2max. *Journal of Occupational and Environmental Medicine*, 61(10):849-853.
4. Dicks ND, Lyman KJ, Hackney KJ, Walch TJ, **Barry AM**. (2019) An Occupational Specific VO2max Protocol for Structural Firefighters. *Journal of Occupational and Environmental Medicine*, 61(5):405-409.
5. Terbizan D, **Barry AM**, Stone K, Talaski J, Bennett T, Hackney K. (2018) Use of Compression Garments for Recovery from Plyometric Exercise. *Missouri Journal for Health, Physical Education, Recreation and Dance*.
6. **Barry AM**, Rhoades JL, Caine DJ, Fitzgerald SJ, Dalin DL, Walch TJ. (2017) Effect of Sedentary and Physical Activity on Children's Food Choice. *International Journal of Exercise Science*, 10(10), 702-712.
7. Byun W, **Barry A**, Jungmin L. (2016) Energy Expenditure of Free-living Activity in 3- to 6-year-old Children. *Journal of Physical Activity and Health*, 13 (Suppl 1), S3-S6.

Manuscripts in Review

1. Dicks ND, Mahoney SJ, **Barry AM**, Lyman KJ, Hackney KJ. Comparable Metabolic Responses from Blood Flow Restriction Walking and Walking with Load: Implications for Reconditioning. *European Journal of Applied Physiology*. (under review)

Manuscripts in Preparation

1. Strang M, **Barry AM**, Larson M, Byun W, Gould A. *Effects of teacher behavior on children's PA at childcare.*
2. Walch TJ, Strand B, DeShaw KJ, **Barry AM**. Effect of adult leader participation on physical activity, peer-victimization, enjoyment, and self-efficacy in children. *Journal of Teaching in Physical Education*
3. Walch TJ, Klein T, DeShaw KJ, **Barry AM**. Parent and Child Likeness for Behavioral Choice. *Journal of Physical Activity and Health*

Refereed Conference Presentations*International Presentations*

1. Walch TJ, **Barry AM**, DeShaw KJ. Effect of adult leader participation on physical activity, peer-victimization, enjoyment, and self-efficacy in children. International Society for Behavioral Nutrition & Physical Activity. June 2019. Prague, Czech Republic.

National Presentations

1. Perumal MD, Kopp SR, Hutcheson EL, Carper MJ, Walch TJ, Dicks ND, **Barry AM**. Relationship Among Physical Activity Intensities, Obesity, and Cardiorespiratory Fitness in Career Firefighters. National Strength and Conditioning Conference. July 8th-11th, 2020. Las Vegas, NV. *Poster Presentation.*
2. Dicks ND, Perumal MD, Kopp SR, Hutcheson EL, Walch TJ, Carper MJ, **Barry AM**. Customized Occupational Specific VO₂MAX Testing for Structural Firefighters. National Strength and Conditioning Conference. July 8th-11th, 2020. Las Vegas, NV. *Podium Presentation.*
3. **Barry AM**, Perumal MD, Kopp SR, Hutcheson EL, Carper MJ, Walch TJ, Dicks ND. Comparison of Physical Activity and Cardiorespiratory Fitness in Midwest Firefighters. American College of Sports Medicine. May 26th - 30th, 2020. San Francisco, CA. *Poster Presentation.*
4. Doree RE, Rhoades JL, **Barry AM**, Walch TJ. The Relationship Between Cell Phone Use and Motivation to Exercise in College Students. American College of Sports Medicine Conference. May 26th- 30th, 2020. San Francisco, CA. *Poster Presentation.*
5. Conard S, Lyman KJ, McGeorge CR, Landin KD, Dicks ND, **Barry AM**. The Relationship of Injury and Cardiorespiratory Fitness and Effective Cardiopulmonary Resuscitation (CPR) in Firefighters. National Athletic Training Association Conference. June 24th -27th, 2019. Las Vegas, NV. *Poster Presentation.*
6. **Barry AM**, Perumal MD, Carper MJ, Walch TJ, Dicks ND. *A Comparison of Physical Activity and Cardiorespiratory Fitness in Midwest Fire Department.* International Association of Fire Chiefs Conference. August 5th-8th, 2019. Atlanta, Georgia. *Poster Presentation.*
7. **Barry AM**, Lyman KJ, Dicks ND, Landin KD, McGeorge CR, Walch TJ. *A Comparison of On- and Off-Duty Physical Activity in Career Firefighters.* American College of Sports Medicine Conference. May 28th – June 1st, 2019. Orlando, Florida. *Poster Presentation.*

8. Stone KA, Kotarsky CJ, Dicks ND, Streeter DM, **Barry AM**, Keith J, Iverson R, Stastny SN, David S, Byun W, Mitchell S, and Hackney KJ. *Dietary Protein Intake and Muscular Health with Aging: Counter Measures for Sarcopenia*. American College of Sports Medicine Conference. May 29th – June 2nd, 2018. Minneapolis, Minnesota. *Poster Presentation*.
9. **Barry AM**, Dicks ND, Landin KD, Walch TJ, Hackney KJ, and Lyman KJ. *The Relationship Between Firefighters' Physical Activity Levels and Cardiorespiratory Fitness*. American College of Sports Medicine Conference. May 29th – June 2nd, 2018. Minneapolis Minnesota. *Thematic Poster Session*.
10. Hackney KJ, Dicks ND, Stone KA, Kotarsky CJ, **Barry AM**, Mitchell S, Byun W, and Stastny SN. *Contribution of Resistance Training and Protein intake to Functional Muscle Cross-sectional Area and Intramuscular Adipose Tissue*. American College of Sports Medicine Conference. May 29th – June 2nd, 2018. Minneapolis, Minnesota. *Poster Presentation*.
11. **Barry AM**, Jung-Min L, Byun W. *Accuracy of Accelerometer-based Activity Energy Expenditure Prediction Equations for Children age 3 to 6 years*. American College of Sports Medicine Conference. May 30th – June 3rd, 2017. Denver, Colorado. *Poster Presentation*.
12. Bennett T, Talaski J, Stone K, **Barry AM**, Hackney K, Terbizan D. *Use of Compression Garments for Recovery from Plyometric Exercise*. American College of Sports Medicine Conference. May 30th – June 3rd, 2017. Denver, Colorado. *Poster Presentation*.
13. Byun W, **Barry A**, Jungmin L. *Accuracy of the Fitbit for Measuring Preschoolers' Physical Activity*. American College of Sports Medicine Conference. May 31st- June 4th, 2016. Boston, Massachusetts. *Poster Presentation*
14. **Barry A**, Terbizan D, Christensen B, Byun W. *Comparison in Non-wear Time Validation Criteria Between Choi and Troiano for the GT3X+ Activity Monitor*. American College of Sports Medicine Conference. May 31st- June 4th, 2016. Boston, Massachusetts. *Poster Presentation*.
15. Byun W, **Barry A**, Jungmin L. *Fitbit Provides Valid Measures of Sedentary and Physical Activity in Preschool Children*. EPI/LifeStyle 2016. March 1-4. Phoenix, AZ. *Poster Presentation*.
16. Redenius N, **Barry A**, Terbizan D, Byun W. *Comparison Between the Fitbit Flex and GT3X+ Activity Monitor Under Free-Living Settings*. American College of Sports Medicine Conference. May 26th-30th, 2015. San Diego, California. *Slide Presentation*.
17. **Barry AM**, Rhoades JL, Caine DJ, Fitzgerald SJ, Dalin DL, Walch TJ. *Effect of Sedentary and Physical Activity on Children's Food Choice*. American College of Sports Medicine Conference. May 26th-30th, 2015. San Diego, California. *Poster Presentation*.
18. **Barry AM**, Dalin DL, Peterson BJ, Fitzgerald JS. *Association Between Body Fatness and Skating Performance in Competitive Ice Hockey Players*. American College of Sports Medicine Conference. May 28-31, 2014. Orlando, Florida. *Poster Presentation*.
19. Hastmann TJ, Reich S, **Barry A**, Schenkelberg MA, Rosenkranz RR, Dzewaltowski DA. *Parental practices and home environment influences on screen time in preschool children*. American College of Sports Medicine Conference. May 28th – June 1st, 2013. Indianapolis, Indiana. *Poster Presentation*.

Regional

1. Hutcheson EL, Perumal MD, Kopp SR, Carper MJ, Walch TJ, Dicks ND, **Barry AM**. *Comparison of Physical Activity and Cardiorespiratory Fitness in Midwest Firefighters*. Central States American College of Sports Medicine. October 24th and 25th, 2019. Broken Arrow, OK.
2. Brin HN, Kopp SR, Hutcheson EL, Perumal MD, **Barry AM**, Carper MJ. *Percent Body Fat Predicts Estimated VO_{2MAX} in College-aged Individuals*. Central States American College of Sports Medicine. October 24th and 25th, 2019. Broken Arrow, OK.
3. **Barry AM**, Lyman KJ, Dicks ND, Landin KD, McGeorge CR, Walch TJ. *A Comparison of On- and Off-Duty Physical Activity in Career Firefighters*. Central States American College of Sports Medicine Conference. October, 2018. Kansas City, MO. Poster Presentation.
4. Cornell C, Crawford DA, Carper MJ, **Barry AM**. *Changes in Fat Mass, Fat Free Mass, Cardiorespiratory Fitness and Grip Strength Across College Students*. Central States American College of Sports Medicine Conference. October, 2018. Kansas City, MO. Poster Presentation.

Local

1. Kopp S, Crawford DA, Carper MJ, **Barry AM**. *Changes in Fat Mass, Fat Free Mass, Cardiorespiratory Fitness and Grip Strength Across College Students*. Pitt State Research Colloquium. April, 2019. Pittsburg State University. Poster Presentation.
2. Perumal MD, **Barry AM**, Carper MJ, Crawford DA. *An Agreement Study Between the Parvo TrueOne 2400 and Vacu-Med Vist Mini-CPX Metabolic Cart*. Pitt State Research Colloquium. April, 2019. Pittsburg State University. Poster Presentation.

Oral Presentations

1. Dicks ND, **Barry AM**. *Occupational Specific VO_{2MAX} Protocol and Objectively Measured Physical Activity to Assess CRF in Structural Firefighters*. Tactical Strength and Conditioning Conference. August 3rd-6th, 2020. Norfolk, VI. (Accepted.)
2. **Barry AM**, Perumal MD, Carper MJ, Walch TJ, Dicks ND. *A Comparison of Physical Activity and Cardiorespiratory Fitness in Midwest Fire Department*. International Association of Fire Chiefs Conference: 2nd Annual Research Symposium. August 6th, 2019. Atlanta, Georgia. (Accepted)

Invited Presentations*International*

1. **Barry AM**. *Health and Wellness in the Fire Service Webinar*. Darley International and Smart Firefighting. August 7th, 2020. Panel chat

Local

1. Byun W, **Barry A**, Jungmin L. *Fitbit Provides Valid Measures of Sedentary and Physical Activity in Preschool Children*. NDSU College of Human Development and Education Research Show Case 2016.
2. **Barry A**, Reich S, Hastmann TJ. *Parental practices and home environment influences on screen time in preschool children*. UND College of Education & Human Development 2013 Research Fair. April 19th, 2013. *Poster Presentation*

Grants and Fellowships

1. **Barry AM**. Fall 2021: \$2,000 (**Funded**) Kansas Idea Network of Biomedical Research Excellence (K-INBRE). *Cardiorespiratory Perturbances with BlastMaskTM*
Role: PI
2. **Barry AM**. Fall 2020: \$2,500 (**Funded**) Kansas Idea Network of Biomedical Research Excellence (K-INBRE). *Predictors of Firefighters Job outcomes*.
Role: PI
3. **Barry AM**. Spring 2020: \$63,000 (**Funded**) College of Education Technology Fund. Dual Energy X-ray Absorptiometry Unit for Use in the Applied Physiology Laboratory as a Research Tool for Exercise Science Students.
Role: PI
4. **Barry AM**. Spring 2020: \$4,555.8 (**Funded**) Kansas Idea Network of Biomedical Research Excellence (K-INBRE). *High Intensity Functional Training Initiative in Local Firefighters*.
Role: PI
5. **Barry AM**. Fall 2019: \$2,000 (**Funded**). Pittsburg State University Independent Research Grant. *The Effects of HIFT Training on the Tactical Outcomes of Firefighters*
Role: PI
6. **Barry AM**, Carper MJ. Fall 2019: \$1,650 (**Funded**) Community Foundation of Southeast Kansas. *Wellness Fitness Initiative in local Firefighters*.
Role: Co-PI
7. **Barry AM**, Carper MJ. Summer 2019: \$22,000 (**Not Funded**) Pritchett Trust. *Fitness Evaluation in Local Firefighters*.
Role: Co-PI
8. **Barry AM**. Spring 2019: \$2,000 (**Funded**). Pittsburg State University Independent Research Grant. *Fitness Evaluation in Local Firefighters*.
Role: PI
9. **Barry AM**. Summer 2017: \$29,028 (**Not Funded**). NDSU College of Graduate and Interdisciplinary Studies Doctoral Dissertation Fellowship. *Relating Physical Activity to Job-Specific Skills in Firefighters*
Role: PI
10. **Barry AM**, Lyman KJ. Spring 2017: \$1,000 (**Partially Funded: \$200**). Northland ACSM Innovative Student Research Grant. *Relating Physical Activity to Job-Specific Skills in Firemen*
Role: PI
11. Conard S, Landin KD, **Barry AM**, Lyman KJ. Spring 2017: \$1,000 (**Funded**). National Athletic Training Association Masters Student Grant. *Relating Current and Past Injury to Job-Specific Skills in Firefighters*
Role: Co-I

12. Lyman KJ, **Barry AM**. Spring 2017: \$14,783 (*Not Funded*). Center for Health, Work & Environment: A NIOSH Center for Excellence for Total Worker Health. *Relating Physical Activity and Injury to Fire Fighters' Ability to Perform High-Quality Cardiopulmonary Resuscitation (CPR)*
Role: Co-PI
13. **Barry AM**. February 2013: \$250 (*Funded*)
2013 EHD Student Travel Grant. University of North Dakota.
14. **Barry, AM**. May 2013: \$275 (*Funded*)
2013 Intercollegiate Academic Fund. University of North Dakota

Awards

- 2020 **Nominated**. Undergraduate Research Mentor of the Year. Pittsburg State University.
- 2017 **Recipient**, Lebedeff Never Stop Learning Graduate Student Scholarship (\$1,690) North Dakota State University.
- 2017 **Finalist**, Board of Visitor's Dean Virginia Clark Johnson Graduate Scholarship (\$5,000) North Dakota State University.
- 2017 **Recipient**, Instrumental in Helping Undergraduate Students Graduate (Nominated by graduating class of 2017 from the Health, Nutrition, and Exercise Sciences Department). North Dakota State University.

Service

- 2020 **Reviewer for Journal of Fire (Current)**
Reviewer for International Journal of Environmental Research and Public Health (Current)
- 2019 **Kansas Representative for Central States ACSM Exercise is Medicine Committee (Current)**
Reviewer for the Journal of Occupational and Environmental Medicine (Current)
- 2017 **Reviewer for the International Journal of Exercise Science**
- 2016 – 2018 **North Dakota State University**
Health, Nutrition, and Exercise Sciences Department Representative, Dean Tomany's Discussion with Student Leaders Committee
- 2016 **North Dakota State University**
Organized a workshop for NDSU's 37th Annual Expanding your Horizons Conference *Females in Fitness* for junior high students
- 2016 – 2018 **North Dakota State University**
Poster Reviewer for the NDSU HD&E student research showcase
- 2015 – 2018 **North Dakota State University**
Co-chair, HD&E Graduate Student Advisory Committee
- 2013 – 2014 **University of North Dakota**
President, Kinesiology Student Association
- 2013 – 2014 **University of North Dakota**
Volunteer swim coach for Special Olympics (Grand Forks)
- 2010 – 2012 **University of Montana**

- 2010 – 2011 Co-President, Peer Advisor Club
University of Montana
Volunteer at Camp Make-A-Dream for one week both summers
- 2010 **University of Montana**
Volunteer for Flagship after school program
- 2008 – 2011 **University of Montana**
Volunteer soccer coach for YMCA (K-2nd grade)

Memberships

- 2021 National Strength and Conditioning Association (Professional Member)
- 2018 – Present Central States American College of Sports Medicine (Professional Member)
- 2017 – 2019 Northland American College of Sports Medicine (student member)
- 2013 – 2014 Kinesiology Student Association, University of North Dakota
- 2012 – Present American College of Sports Medicine (Professional Member)
- 2011 – 2012 Peer Advisor Club