

Mary Tuttle Imboden

Curriculum Vitae

October 2020

Current Work, Community Outreach, and Service

Membership manager and Research Associate, Health Enhancement Research Organization, Waconia, MN. May 2018- present

- Develops goals and action plans for membership recruitment and retention
- Helps to manage research projects related to workplace health and well-being

Assistant Professor, George Fox University, Health and Human Performance, Newberg, OR, August 2018- present

- Teaches courses and Advises students in the Department of Health and Human Performance
- Director of Find Your Fit, Employee Health and Fitness program
- Director of Know Your Numbers, Health Assessment program for students and employees
- Supervisor of Bruin Running Program at George Fox University
- University Wellness Committee Chair

Adjunct Professor, University of Illinois- Chicago, Healthy Lifestyle Practitioner Certificate Program, Chicago, IL. August 2018- present

- Teaches online course in the Healthy Lifestyle Practitioner certificate program

Oregon Academy of Science – Health and Kinesiology Division Co-chair. January 2019-Present

- Recruitment of student and faculty members
- Planning the annual conference and reviewing abstracts for presentations

Interprofessional Primary Care Institute Advisor, May 2020 – present

- Helps to provide interprofessional experiences to inspire innovation in primary care

Physical Activity Policy, Research, and Evaluation Network (PAPREN) Advisor, May 2020-present

- Advances evidence base supporting physical activity policy
- Translates research to practice at local, state, and national level
- Connects researchers with practitioners to improve community physical activity

Education

Ball State University, Muncie, IN, May 2018

Ph.D. Human Bioenergetics, College of Health

Dissertation: “Influence of Directly Measured Cardiorespiratory Fitness on All-Cause and Disease-Specific Mortality”

Faculty Advisor: Dr. Leonard A. Kaminsky

Wake Forest University, Winston-Salem, NC, May 2013

M.S. Health and Exercise Science

Thesis: “Objectively Measured Physical Activity Levels and Their Relationship to Physical Function and Quality of Life in Acute Decompensated Heart Failure Patients”

Faculty Advisor: Dr. Peter H. Brubaker

Towson University, Towson, MD, May 2011
B.S. Exercise Science

Publications

Grossmeier J, Serxner SA, Montalvo T, Balfanz DR, Imboden MT, Goetzel RZ, Schweppe D. Guidance on Development of Employer Value Dashboards. *AJHP* 2020. 34(4) 447-465.

Grossmeier J, Manger DJ, Anderson DR, Gingerich SB, Mitchell RJ, Imboden MT, Kaplan GD, Gascon GM, Serxner SA, Bodak T. Influence of Incentive Design and Organizational Characteristics on Wellness Participation and Health Outcomes. *J Occup Environ Med*. September 2020. DOI : 10.1097/JOM.0000000000002005

Flanagan M, Imboden MT. Use of Social Strategies Linked to More Effective Health and Well-being Initiatives. Available at: <https://hero-health.org/blog/use-of-social-strategies-linked-to-more-effective-health-and-well-being-initiatives/>

Imboden MT, Castle PH, Johnson SS, Jenkins KR, Pitts JS, Grossmeier J, Manger DJ, Noeldner SP, Mason S. Development and validity of a workplace health promotion best practices assessment. *J Occup Environ Med*. 2020; 62(1): 18-24.

Imboden MT, Kaminsky LA, Peterman JE, Hutzler HL, Whaley MH, Fleenor BS, Harber MP. Cardiorespiratory Fitness Normalized to Fat-Free Mass and Mortality Risk. *Med Sci Sports Exerc*. 2020. DOI: 10.1249/MSS.0000000000002289.

Grossmeier J, Castle PH, **Imboden MT**, Johnson SS, Saringer C, Pitts JS, Manger DJ, Jenkins KR, Mason S, Noeldner SP. Use of Health and Well-being Best Practices influence employee participation, impact, and perceived support. *AJHP*. January 2020. 34(5):089011711989861

Rosenbaum E, Grossmeier J, **Imboden MT**, Noeldner S. Editor's Desk: Updated employer tools identify practices associated with population health outcomes: The HERO health and well-being best practices scorecard in collaboration with mercer (HERO Scorecard). *AJHP*. 2020: 6-8. DOI: 10.1177/0890117119898026.

Montoye AHK, Clevenger KA, Pfeiffer KA, Nelson MB, Bock JM, **Imboden MT**, Kaminsky LA. Cut-points for determining activity intensity from a wrist worn actigraph accelerometer in free living adults. *J Sports Sciences*. July 2020. DOI: [10.1080/02640414.2020.1794244](https://doi.org/10.1080/02640414.2020.1794244)

Lazar DM, Murshed MM, Nelson MB, Bock JM, **Imboden MT**, Kaminsky LA, Montoye AHK. Statistical learning methods to predict activity intensity from body worn accelerometers. *J Biomedical Analytics*. August 2020; 3(1): 27-50.

Peterman JE, Harber MH, **Imboden MT**, Whaley MH, Fleenor BS, Myers J, Arena R, Kaminsky LA. Accuracy of non-exercise prediction equations for assessing longitudinal changes to cardiorespiratory fitness in apparently healthy adults. The Ball State Adult Fitness Longitudinal Lifestyle Study. *JAHA*. 2020. DOI: [10.1161/JAHA.119.015117](https://doi.org/10.1161/JAHA.119.015117)

Ozemek C, Riggins K, Strath S, **Imboden MT**, Harber MP, Kaminsky LA. Pedometer feedback

interventions increase daily physical activity in phase III cardiac rehabilitation participants. *JCRP*. November 2019.

Peterman JE, Whaley MH, Harber MP, Fleenor BS, **Imboden MT**, Myers J, Arena R, Kaminsky LA. Comparison of non-exercise cardiorespiratory fitness prediction equations in apparently healthy adults. *Eur J Prev Cardiol*. October 2019; 0 (00): 1-8.

Imboden MT, Harber MP, Finch WH, Whaley MH, Bishop D, Kaminsky LA. The influence of short-term changes in cardiorespiratory fitness following an exercise training program on mortality risk. *Mayo Clin Pro*. 2019.

Imboden MT. The impact of perceived effectiveness of HWB initiatives on participation, health and medical cost improvement. Available at: <https://hero-health.org/blog/the-impact-of-perceived-effectiveness-of-hwb-initiatives-on-participation-health-and-medical-cost-improvement/>.

Whaley MH, Harber MP, **Imboden MT**, Finch WH, Fleenor BS, Peterman JE, Kaminsky LA. Abdominal obesity, cardiorespiratory fitness, and the metabolic syndrome. *EJAP*. December 2019.

Imboden MT, Witty LA, Whaley MH, Harber MP, Fleenor BS, Kaminsky LA. Clinical perspectives on incorporating cardiorespiratory fitness in clinical practice. *Medical Research Archives*. 2018;16(2).

Kaminsky LA, Harber MH, **Imboden MT**, Arena R, Myers J. Reference standards for maximal exercise ventilation: data from the FRIEND registry. *Plos One*. 2018; 50(12):2603-2608.

Imboden MT, Harber MP, Finch WH, Whaley MH, Bishop D, Kaminsky LA. Cardiorespiratory fitness measured from cardiopulmonary exercise testing for mortality risk prediction in apparently healthy men and women. *J Am Coll Cardiol*. 2018; 72(19):2283-2292.

Imboden MT, Harber MP, Finch WH, Whaley MH, Bishop D, Kaminsky LA. The association between the change in directly measured cardiorespiratory fitness across time and mortality risk. *Prog Cardiovasc Dis*. Dec 2018; 62(2):157-162

Kelley EP, Whaley MH, **Imboden MT**, Harber MP, Finch WH, Kaminsky LA. Cardiorespiratory fitness is inversely associated with clustering of metabolic syndrome risk factors: The Ball State Adult Fitness Program Longitudinal Lifestyle Study. *Mayo Clin Proc*. 2018; 2(2): 155-164.

Montoye AHK, Nelson MB, Bock JM, **Imboden MT**, Kaminsky LA, Mackintosh KA, McNarry MA, Pfeiffer KA. Comparability of raw and count-based data from the Actigraph GT9X link and GT3X+ accelerometers. *Med Sci Sports Exerc*. 2018; 50(5):1103-1112.

Montoye AHK, Conger SA, Connolly CP, **Imboden MT**, Nelson MB, Bock JM, Kaminsky LA. Validation of accelerometer-based energy expenditure prediction models in structured and simulated free-living settings. *Meas Phys Educ Exerc Sci*. 2017; 21(4):223-234.

Imboden MT, Swartz AM, Finch WH, Harber MP, Kaminsky LA. Reference standards for lean mass measures using GE dual energy x-ray absorptiometry in Caucasian adults. *Plos One*. 2017; 12(4):e0176161.

Imboden MT, Nelson MB, Kaminsky LA, Montoye AHK. Comparison of consumer-based physical activity monitors to a research-grade accelerometer. *Br J Sports Med*. 2017; 52(13):844-850.

Imboden MT, Welch WA, Swartz AM, Montoye AHK, Finch WH, Harber MP, Kaminsky LA. Reference standards for body fat measures using GE dual energy x-ray absorptiometry in Caucasian adults. *Plos One*. 2017; 12(4):e0175110.

Kaminsky LA, **Imboden MT**, Arena R, Myers J. Reference standards for cardiorespiratory fitness measured with cardiopulmonary exercise testing using cycle ergometry: data from the fitness registry and the importance of exercise national database (FRIEND) registry. *Mayo Clin Proc*. 2017; 92(2): 228-233.

Tuttle MS, Montoye AHK, Kaminsky LA. The benefits of body mass index and waist circumference in the assessment of health risk. *ACSM Health Fit J*. 2016.

Donaldson SC, Montoye AH, **Tuttle MS**, Kaminsky LA. Variability of objectively measured sedentary behavior. *Med Sci Sports Exerc*. 2016;48(4):755-61.

Kaminsky LA, **Tuttle MS**. Functional assessment of heart failure patients. *Heart Failure Clinics*. 2015;11(1):29-36.

Abstracts / Presentations

Imboden MT, Kaminsky LA, Peterman JE, Hutzler HL, Whaley MH, Fleenor BS, Harber MP. Normalizing Cardiorespiratory Fitness to fat-free mass improves mortality risk prediction in overweight adults from the BALL ST Cohort. American College of Sports Medicine, May 2020.

Peterman JE, Harber MP, **Imboden MT**, Fleenor BS, Kaminsky LA. Comparing Strategies for Assessing Cardiorespiratory Fitness in Clinical Settings. American College of Sports Medicine, May 2020.

Imboden MT, Houck J, Kang D. [Activating Physical Activity in the People Who Need it Most](#). Interprofessional Primary Care Institute: Interprofessional Solutions for Physical Inactivity in Primary Care. May 2020.

Peterman JE, Harber MP, **Imboden MT**, Whaley MH, Fleenor BS, Kaminsky LA. Non-exercise cardiorespiratory fitness prediction equations: Accuracy overtime in apparently healthy adults. American Heart Association Epi/Lifestyle Scientific Sessions. Phoenix, AZ. March 2020.

Fox R, **Imboden MT**. The relationship between concussions and mental health in student athletes. Oregon Academy of Science. February 2020.

Fast A, Dean L, Ballard J, **Imboden MT**. The relationship between cardiorespiratory and muscular fitness on workplace performance. Oregon Academy of Science. Portland, OR. February 2020.

Van Tassel B, Haugen K, **Imboden MT**. Does exercise counteract caffeine's impact on anxiety levels? Oregon Academy of Science. Portland, OR. February 2020.

Schwartz A, Krotzer M, **Imboden MT**. Comparative benefits of protein and creatine supplementation over 3 weeks among resistance-trained college-aged student. Oregon Academy of Science. February 2020.

Bravo BA, Spencer EA, Del Castillo AR, **Imboden MT**. The influence of cardiorespiratory fitness, muscular fitness, and flexibility on memory. Oregon Academy of Science. Portland, OR. February 2020.

Moresco R, Stilwell C, **Imboden MT**. The effects of intermittent fasting on attention and energy levels. Oregon Academy of Science. Portland, OR. February 2020.

Imboden MT, Grossmeier J. Development and Validity of a Workplace Health Promotion Best Practices Assessment. Society of Behavioral Medicine. December 2019.

Imboden MT, Harber MP, Whaley MH, Peterman JE, Fleenor BS, Kaminsky LA. The association between cardiorespiratory fitness normalized to fat free mass and mortality risk. American Heart Association Scientific Sessions. Philadelphia, PA. November, 2019.

Busch, H, Fast, A, Reynolds, S, **Imboden, MT**. The relationship between cardiorespiratory fitness and perceived interference of depression in daily activities. Oregon Academy of Science. McMinnville, OR. February, 2019.

Nielson K, Guhlke C, **Imboden MT**. The relationship between cardiorespiratory fitness and workplace performance. Oregon Academy of Science. McMinnville, OR. February, 2019.

Campbell M, Fox R, **Imboden MT**. Post-concussion history and mental health risk in collegiate athletes. Oregon Academy of Science. McMinnville, OR. February, 2019.

Imboden MT, Harber MP, Whaley MH, Finch WH, Bishop DA, Kaminsky L. The influence of change in cardiorespiratory fitness with short-term exercise training on mortality risk. American Heart Association Scientific Sessions. Chicago, IL. November, 2018.

Imboden MT, Harber MP, Whaley MH, Finch WH, Bishop DA, Kaminsky L. The association between the long-term change in directly measured cardiorespiratory fitness and mortality risk. American Heart Association Scientific Sessions. Chicago, IL. November, 2018.

Imboden MT, Harber MP, Whaley MH, Finch WH, Bishop DA, Kaminsky LA. Cardiorespiratory fitness measured from cardiopulmonary exercise testing for mortality risk prediction in apparently healthy men and women. American College of Sports Medicine. Minneapolis, MN. May, 2018.

Koontz N, Kelley E, **Imboden MT**, Harber MP, Finch WH, Kaminsky LA, Whaley MH. Cardiorespiratory fitness is inversely associated with metabolic syndrome and clustering of metabolic risk factors: The Ball State University adult physical fitness study. American College of Sports Medicine Minneapolis, MN. May, 2018.

Imboden MT, Kelley E, Harber MP, Finch WH, Kaminsky LA, Whaley MH. Cardiorespiratory fitness is inversely associated with metabolic syndrome and clustering of metabolic risk factors: The Ball State University adult physical fitness study. Mid-West American College of Sports Medicine, Grand Rapids, MI. November, 2017.

Dame L, Koontz N, Skalon T, **Imboden MT**. Pre- and post-assessments of Indiana National Guard Soldiers on cardiorespiratory endurance. Mid-West American College of Sports Medicine, Grand Rapids, MI. November, 2017.

Imboden MT, Swartz AM, Harber MP, Kaminsky LA. Reference values for lean mass measures obtained from dual energy x-ray absorptiometry in adults. American College of Sports Medicine, Denver, CO. May, 2017.

- Montoye AHK, Conger SA, Connolly CP, **Imboden MT**, Nelson MB, Bock JM, Kaminsky LA. Validation of accelerometer-based energy expenditure prediction models in structured and simulated free-living settings. American College of Sports Medicine, Denver, CO. May, 2017.
- Imboden MT**, Kaminsky LA. Assessing physical activity as a core component. Indiana Society of Cardiovascular and Pulmonary Rehabilitation, Greenwood, IN. April, 2017.
- Imboden MT**. Body composition reference values as measured by dual energy x-ray absorptiometry. University of Wisconsin-Milwaukee. March, 2017.
- Imboden MT**, Swartz AM, Harber MP, Kaminsky LA. Reference values for lean mass measures obtained from dual energy x-ray absorptiometry in adults. Mid-West American College of Sports Medicine, Fort Wayne, IN. November, 2016.
- Tuttle MS**, Welch WA, Swartz AM, Montoye AHK, Harber MP, Kaminsky LA. Reference values for body fat percentage obtained from dual energy x-ray absorptiometry in adults. American College of Sports Medicine, Boston, MA. May, 2016.
- Montoye AHK, **Tuttle MS**, Nelson BM, Steeves JA, Kaminsky LA. Consumer-based physical activity monitors and research grade accelerometers underestimate physical activity in a semi-structured setting. American Heart Association Epi Lifestyle Scientific Sessions, Phoenix AZ February, 2016.
- Tuttle MS**, Nelson BM, Steeves JA, Kaminsky LA, Montoye AHK. Comparison of consumer-based physical activity monitors for a research grade accelerometer. Mid-West American College of Sports Medicine, Fort Wayne, IN. November, 2015.
- Kelley EP, Nelson BM, Bock JM, **Tuttle MS**, Steeves JA, Kaminsky LA, Montoye AHK. Effect of hand dominance on accuracy of wrist-worn physical activity monitors. Mid-West American College of Sports Medicine, Fort Wayne, Fort Wayne, IN. November, 2015.
- Tuttle MS**, Donaldson SC, Kaminsky LA. Variability of sedentary behavior throughout a seven-day measurement period. American College of Sports Medicine, San Diego, CA. May, 2015.
- Tuttle MS**, Donaldson SC, Kaminsky LA. Variability of sedentary behavior throughout a seven-day measurement period. Mid-West American College of Sports Medicine, Merrillville, IN. November, 2014.
- Tecca KM, Griffith GJ, **Tuttle MS**, Whaley MH, Kaminsky LA. The prevalence of preclinical atherosclerosis in a healthy adult population using pulse wave velocity measure. Mid-West American College of Sports Medicine, Merrillville, IN. November, 2014.
- Tuttle MS**, Ozemek C, Finch H, Whaley MH, Kaminsky LA. Quadratic regression reveals an accelerated age-related decline of maximal heart rate in those with low and moderate cardiorespiratory fitness. American Heart Association Scientific Sessions, Chicago, IL. November, 2014.
- Tuttle MS**, Brubaker PH. Objectively measured physical activity levels and their relationship to physical function and quality of life in acute decompensated heart failure patients. American College of Sports Medicine, Indianapolis, IN. May, 2013

*Please note my name changed from Tuttle to Imboden in August, 2016.

Professional Memberships

- American College of Sports Medicine (Fall 2011-Present)
- American Heart Association (Fall 2014-Present)
- Health Enhancement Research Organization (Fall 2015 – Present)
- Oregon Academy of Science – Health and Kinesiology Division Co-Chair (Winter 2019 – Present)
- Interprofessional Primary Care Institute (May 2020-present)
- Physical Activity Policy, Research, and Evaluation Network (May 2020-present)

Certifications, Training, and Skills

- Advanced Cardiovascular Life Support (Spring 2015-present)
- Basic Life Support, American Heart Association (Fall 2011-present)
- Clinical Exercise Specialist, American College of Sports Medicine (Fall 2012-present)
- Phlebotomy Certification, American Society of Phlebotomy Technicians (Fall 2013- present)

Selected Honors, Awards, and Fellowships

- Outstanding Senior in Exercise Science, Towson University, (2011)
- Scholar Athlete, Towson University, (2009-2011)
- Towson University Dean's List (2007-2011)
- Wake Forest University Dean's List (2011-2013)
- Ball State University ASPIRE Travel Grant (2014)
- Ball State University Graduate School Certificate of Achievement (2015 & 2016)
- Ball State University ASPIRE Graduate Research Grant (2017)
- George Fox University 2019 FDC Summer Research Grant (2019)
- Distinguished Alumni Dissertation Award, Ball State University (2019)