# Teresa L. Hart, Ph.D.

# (nee Abraham)

# **Education**

Post-Doctoral Research Fellow Physical Activity and Health Research Laboratory University of Wisconsin-Milwaukee, Milwaukee, WI, August 2009 – December 2010 Advisors: Scott Strath, Ph.D., Ann Swartz, Ph.D.

Ph.D., Physical Activity, Nutrition, and Wellness
Arizona State University, Mesa, Arizona –2009
Advisors: Catrine Tudor-Locke, Ph.D., Barbara Ainsworth, Ph.D.
Dissertation: Comparison of Physical Activity and Sedentary Behavior as Assessed by Accelerometers and a Self-report Record

M.S., Exercise and Wellness

Arizona State University, Mesa, Arizona – 2002

Advisor: William Stone, Ed.D.

Thesis: An Intervention to Improve Physical Activity Adherence Among Worksite Health Promotion Program Drop-Outs

B.B.A., Business Economics, Spanish minor University of Iowa, Iowa City, Iowa – 1998

# **Academic Positions**

Associate Teaching Professor — Nutrition and Health Care Administration and Policy Programs, College of Health Solutions, Arizona State University, Phoenix, AZ, August 2020 – present

Lecturer — Nutrition and Health Sciences/Health Care Delivery Programs, College of Health Solutions, Arizona State University, Phoenix, AZ, June 2016 – August 2020

Lecturer, Evaluation/Training Leader—Nutrition and Health Sciences Program, School of Nutrition and Health Promotion, Arizona State University, Phoenix, AZ, January 2015 – May 2016

Lecturer, Program Coordinator—Health Sciences Program, School of Nutrition and Health Promotion, Arizona State University, Phoenix, AZ, August 2014 – December 2014

Instructor, Program Coordinator—Health Sciences, School of Nutrition and Health Promotion, Arizona State University, Phoenix, AZ, January 2014 – August 2014

Course Manager, Health Literacy, School of Nutrition and Health Promotion/Mary Lou Fulton Teachers College, Arizona State University, Phoenix, AZ, August 2012 – December 2013

Adjunct Faculty, PhD Program for Health Promotion, Rocky Mountain University, Provo, UT, August 2011 – August 2012

Faculty Associate, Health Sciences Program, Arizona State University, Phoenix, AZ, August 2010 – July 2012

Ad Hoc Faculty, Department of Human Movement Sciences, University of Wisconsin-Milwaukee, Milwaukee, WI, August 2011 – May 2012

Research Associate, Arizona State University, August 2008 – May 2009

Teaching Associate, Arizona State University, August 2006 – May 2009

Research Assistant, Arizona State University, August 2000 – December 2002

# **Teaching Experience**

# **Courses developed:**

Applied Project-Part 2 (NTR 593) — Arizona State University – Required course for the Masters of Dietetics and the Masters of Medical Nutrition online degree programs – Fall 2018

Statistics for Research (NTR 502) — Arizona State University – Required course for the Masters of Dietetics and the Masters of Medical Nutrition online degree programs – Spring 2018

Health Communication (HCD 310) — Arizona State University – Fall 2013

Health Literacy (HSC/PPE 310) — Arizona State University – Required Signature course for Mary Lou Fulton Teachers College undergraduate majors beginning Fall 2012

Supporting the Health of Older Adults (HSC 410, complete redesign) — Arizona State University – Fall 2014

## **Course Lead Faculty:**

NTR 502 Statistics for Research, 2018-present

NTR 593 Applied Project-Part 2, 2018-present

HCD 310 Health Communication, 2013-2020

HCD 410 Supporting the Health of Older Adults, 2014-2020

HSC/PPE 310 Health Literacy, 2012-2014

# **Online Delivery Courses Taught:**

Statistics for Research, NTR 502— Arizona State University

Applied Project-Part 2, NTR 593 — Arizona State University

Biostatistics, HCD 300 — Arizona State University

Leadership and Professionalism, MED 450 — Arizona State University

Global Health Care Systems, HCD 303 — Arizona State University

Human Nutrition, NTR 241— Arizona State University

Eating for the Lifelong Health, NTR 355— Arizona State University

Introductory Nutrition, NTR 100— Arizona State University

Nutrition Communication, NTR 251— Arizona State University

Introduction to Evidence-based Practice, NTR 290— Arizona State University

Supporting the Health of Older Adults, HCD 410— Arizona State University

Health Communication, HCD 310— Arizona State University

Applied Medical/Healthcare Ethics HSC 320 — Arizona State University

Cultural Aspects of Health, HCD 210 — Arizona State University

Complimentary Healthcare, HCD 340 — Arizona State University

Health Promotion and Health Program Evaluation, EXW 456— Arizona State University

Fitness for Life, EXW 325, Arizona State University

Ethics and Values in Health and Fitness Professions — University of Wisconsin-Milwaukee

PhD Public Health Epidemiology (hybrid) — Rocky Mountain University

## **Hybrid Courses Taught:**

Health Literacy (hybrid), HSC/PPE 310 — Arizona State University

## **Immersion (Classroom) Courses Taught:**

Computers and Technology in Exercise and Wellness, EXW 310, Teaching Associate/Lab Instructor — Arizona State University

Instructional Competencies Laboratory – Cardiovascular Fitness, EXW 214 — Arizona State University

Health Behavior Change, EXW 342 — Arizona State University

Instructional Competencies Laboratory – Flexibility, EXW 214 — Arizona State University

#### **Invited Guest Lectures:**

NTR 791 Graduate Seminar, Arizona State University, *The Post Doc* — Spring 2015

Graduate Student Research Seminar, University of Wisconsin-Milwaukee, *Physical Activity and Sedentary Behavior Assessment*, Spring 2010

Physical Activity Epidemiology, Arizona State University, *Introduction to SAS programming* — Spring 2009

## **Peer Reviewed Publications**

## **Chapters in textbooks:**

1. **Hart, T.L.** & Harlin, P. (2018) *Dr. Mom: The Courage to Stand Alone*. In duPre & Ray, *Real-Life Scenarios: A Case Study Perspective on Health Communication*. Oxford Publishing, Oxford, NY

# **Articles published in refereed journals:**

- 1. Taylor, B.R., Grant, S., McCoy, M., & **Hart, T.L.** (2022) Effect of Early Nutrition Support on Length of Stay, Mortality, and Extubation in COVID-19 Patients. Nutrition in Clinical Practice, 37(4), 852-860.
- 2. Swartz, A.M., Rote, A.E., Welch, W.A., Maeda., H., **Hart, T.L.,** Cho, Y. & Strath, S.J. (2014). Prompts to disrupt sitting time and increase physical activity at work. *Preventing Chronic Disease*. 11, 1-8.
- 3. Strath, S.J., Greenwald, M.J., Isaacs, R., **Hart, T.L.,** Grimm, E.K., Swartz, A.M., (2012). Measured and perceived environmental characteristics are related to accelerometer defined physical activity in older adults. *International Journal of Behavioral Nutrition and Physical Activity*, 9(40).
- 4. Grimm E.K., Swartz A.M., **Hart T.L.**, Miller, N.E., and Strath S.J. (2012). Comparison of the IPAQ-Short Form and Accelerometry Predictions of Physical Activity in Older Adults. *Journal of Physical Activity and Aging*. 20(1), 64-79.

- 5. Swartz A.M., Tarima S., Miller N.E., **Hart T.L**., Grimm E.K., Rote A.E., Strath S.J. (2012). Time Spent in Sedentary Behavior Predicts Body Fat in Older Adults. *Journal of Physical Activity and Aging*, 20(3), 332-44.
- 6. **Hart, T.L.,** Brusseau Jr., T.A., Hodges-Kulinna, P., Tudor-Locke, C. (2011). A comparison of low cost physical activity measurement devices in 10 and 11 year old children. *Research Ouarterly for Exercise and Sport*, 82(4), 600-9.
- 7. **Hart, T.L.,** Strath, S.J., Swartz, A.M., Cashin, S.E. (2011). How many days of monitoring predict physical activity and sedentary behavior in older adults? *International Journal of Behavioral Nutrition and Physical Activity*, (8)62
- 8. **Hart, T.L.,** Craig, C., Griffiths, J., Cameron, C., Anderson, R., Bauman, A., Tudor-Locke, C. (2011). Markers of sedentarism: The Joint Canada/U.S. Survey of Health. *Journal of Physical Activity and Health*, 8(3):361-71.
- 9. **Hart, T.L.,** McClain, J.J., Tudor-Locke, C. (2011). Controlled and free-living evaluation of objective measures of sedentary and active behavior. *Journal of Physical Activity and Health*, 8(6):848-57.
- 10. **Hart, T.L.,** Ainsworth, BE, Tudor-Locke, C. (2011). Objective and subjective measures of sedentary behavior and physical activity. *Medicine and Science in Sports and Exercise*, 43(3):449-56.
- 11. Herrmann, S.D, **Hart, T.L.,** Ainsworth, B.E. (2011). Evaluation of a new commercial accelerometer. *British Journal of Sports Medicine*, 45(2):109-13.
- 12. Serwe, K., Strath, S.J., Swartz, A.M., **Hart, T.L.** (2011). Effectiveness of long and short bout walking on increasing physical activity in women. *Journal of Women's Health*, 20(2), 247-53.
- 13. McClain, J.J., **Hart, T.L.,** Getz, R.S., Tudor-Locke, C. (2010). Convergent validity of three low cost motion sensors with the ActiGraph accelerometer. *Journal of Physical Activity and Health*, 7(5), 662-70.
- 14. Tudor-Locke, C., McClain, J.J., **Hart, T.L.,** Sisson, S., Washington, T.L. (2009). Response to "A step in the right direction: Commentary on expected values for pedometer-determined physical activity in youth" *Research Quarterly for Exercise and Sport*, 81(2), 123-6.
- 15. Tudor-Locke, C., **Hart, T.L.**, Washington, T.L. (2009). Expected values for pedometer-determined physical activity in older populations. *International Journal of Behavioral Nutrition and Physical Activity*, 6(59).
- 16. Tudor-Locke, C., McClain, J.J., **Hart, T.L.,** Sisson, S., Washington, T.L. (2009). Pedometry methods for assessing free-living youth. *Research Quarterly for Exercise and Sport*, 80(2), 175-84.

- 17. Tudor-Locke, C., McClain, J.J., **Hart, T.L.,** Sisson, S., Washington, T.L. (2009). Expected pedometer-determined physical activity values for youth. *Research Quarterly for Exercise and Sport*, 80(2), 164-74.
- 18. Tudor-Locke, C., Washington, T.L., **Hart, T.L.** (2009). Expected values for steps/day in special populations. *Preventive Medicine*, 49(1), 3-11.
- 19. McClain, J.J., **Abraham, T.L.,** Brusseau Jr., T.A., Tudor-Locke, C. (2008). Effects of Epoch Length on Actigraph Accelerometer Intensity Outputs in Children. *Medicine and Science in Sports and Exercise*, 40(12), 2080-87.

# Abstracts published in refereed publications:

- 1. Swartz, A.M., Rote, A., **Hart, T.L.,** Thielke, N.C., Strath, S.J. Evaluating Prompts To Disrupt Sitting Time At Work: A Pilot Study. *Medicine and Science in Sports and Exercise*, 42(5), 2013.
- 2. Miller, N.E., Swartz, A.M., **Hart, T.L.,** Strath, S.J. Validity of the Bouchard Activity Record in Free-Living Older Adults. *Medicine and Science in Sports and Exercise*, 44(5), 2012.
- 3. **Hart, T.L.,** Ainsworth, B.E. Tudor-Locke, C. Epoch-by-epoch comparison of objectively and subjectively assessed sedentary behavior and physical activity. *Medicine and Science in Sports and Exercise*, 42(5): S252, 2010.
- 4. **Hart, T.L.,** Ainsworth, B.E. Tudor-Locke, C. Objective and subjective measures of sedentary behavior and physical activity. *Medicine and Science in Sports and Exercise*, 42(5): S343, 2010.
- 5. Herrmann, S., **Abraham, T.,** Ainsworth, B., Gilman, M. Evaluating Accelerometer Cut-points To Classify Physical Activity Levels In Overweight/obese Middle-age-to-older Women. *Medicine and Science in Sports and Exercise.* 41(5):154, 2009.
- 6. Ainsworth, B.E., **Abraham, T.L.,** Parra-Medina, D., Fore, E., Wilcox, S. Effects Of Varied Accelerometer Wear Time Requirements On Physical Activity Data In African American Women Medicine & Science in Sports & Exercise: *Medicine and Science in Sports and Exercise*. 41(5):154-5, 2009.
- 7. **Abraham, T.L.,** McClain, J.J., Getz, R.S., Tudor-Locke, C. Comparison of low-cost objective physical activity assessment instruments versus the ActiGraph accelerometer. *Medicine and Science in Sports and Exercise*, 40(5): S63, 2008
- 8. **Abraham, T.L.,** McClain, J.J., Pettee, K.K., Tudor-Locke, C. Laboratory Validation of Two Activity Monitors for Measuring Time in Sitting, Standing, and Walking Behaviors. *Medicine and Science in Sports and Exercise*, 39(5): S184-185, 2007

# **Professional Presentations**

# **Invited presentations:**

- 1. **Abraham, T.L.** Convincing Yourself You Can Be Physically Active. Osher Lifelong Learning Institute, Arizona State University October 2008. Audience included adults in the community ages 55+.
- 2. **Abraham, T.L.,** McClain, J.J., Tudor-Locke, C. The sex-stratified relationship between sitting and walking (presentation) The Art and Science of Walking Symposium, American College of Sports Medicine Annual Conference, Indianapolis, IN, May 2008.

# **Conference presentations:**

- 1. Swartz, A.M., Rote, A., **Hart, T.L.,** Thielke, N.C., Strath, S.J. Evaluating Prompts To Disrupt Sitting Time At Work: A Pilot Study (poster). American College of Sports Medicine Annual Conference and World Congress on Exercise is Medicine, Indianapolis, IN, June 2013.
- 2. 3Miller, N.E., Swartz, A.M., **Hart, T.L.,** Strath, S.J. Validity of the Bouchard Activity Record in Free-Living Older Adults (poster). American College of Sports Medicine Annual Conference and World Congress on Exercise is Medicine, San Francisco, CA, June 2012.
- 3. Swartz, A.S., Grimm, E.K., **Hart, T.L.,** Miller, N.E., Strath, S.J. Energy cost of step frequencies across age 2nd International Conference on Ambulatory Monitoring of Physical Activity and Movement, Glasgow, UK, May 2011
- 4. Strath, S.J., Keenen, K., **Hart, T.L.,** Grimm, E.K., Miller, N.E., Swartz, A.S. Accelerometer derived movement pattern differences across age—2nd International Conference on Ambulatory Monitoring of Physical Activity and Movement, Glasgow, UK, May 2011
- 5. **Hart, T.L.,** Ainsworth, B.E., Tudor-Locke, C. Objective and Subjective Measures of Sedentary Behavior and Physical Activity (poster). American College of Sports Medicine Annual Conference and World Congress on Exercise is Medicine, Baltimore, MD, June 2010.
- 6. **Hart, T.L.,** Ainsworth, B.E., Tudor-Locke, C. Epoch-by-epoch Comparison of Objectively and Subjectively Assessed Sedentary Behavior and Physical Activity (poster). American College of Sports Medicine Annual Conference and World Congress on Exercise is Medicine, Baltimore, MD, June 2010.
- 7. **Hart, T.L.,** Strath, S.J., Swartz, A.M., Cashin, S.E. How Many days of monitoring predict physical activity and sedentary behavior in older adults? International Society for Behavioral Nutrition and Physical Activity, Minneapolis, MN, June 2010.
- 8. **Hart, T.L.,** Sourish, A., Peloquin, S., Herrmann, S., Walker, J., Der Ananian, C.D., Ainsworth, B.E., Yngve, A. Relationship between Social Support and Physical Activity during a

- Worksite Intervention in Two Countries: The ASUKI Step Study (poster). 3rd International Congress on Physical Activity and Public Health, Toronto, Ontario, Canada, May 2010.
- 9. Peloquin, S., **Hart, T.L.,** Herrmann, S., Walker, J., Ainsworth, B.E., Yngve, A. Relationship between Perceived Stress and Pedometer-Assessed Physical Activity: The ASUKI Step study (poster). 3rd International Congress on Physical Activity and Public Health, Toronto, Ontario, Canada, May 2010.
- 10. Swartz, A.M., Strath, S.J., **Hart, T.L.,** Rote, A.E., Grimm, Miller, N.E. Time Spent in Moderate Intensity Physical Activity, but Not Sedentary Behavior is Related to Body Fat in Older Adults (poster). 3rd International Congress on Physical Activity and Public Health, Toronto, Ontario, Canada, May 2010.
- 11. Squires, L.S., Swartz, A.M., Strath, S.J., **Hart, T.L.,** Grimm, E.K., Rote, A.E. Acute physiological responses to disruption of sedentary behavior: Preliminary results. College of Health Sciences Research Symposium, Milwaukee, WI, April 2010.
- 12. Ainsworth, B.E., **Abraham, T.L.,** Parra-Medina, D., Fore, E., Wilcox, S. Effects of Varied Accelerometer Wearing Time Requirements on PA Data in African American Women. (poster) American College of Sports Medicine Annual Conference, Seattle, WA, May 2009.
- 13. Herrmann, S., **Abraham, T.L.,** Gilman, M., Ainsworth, B.E. Rethinking Accelerometer Cut-Points to Classify Physical Activity Levels in Overweight/ Obese and Middle-Age-to-Older Women (poster) American College of Sports Medicine Annual Conference, Seattle, WA, May 2009.
- 14. **Abraham, T.L.,** Washington, T.L., Tudor-Locke, C. Validation of multiple activity monitors to assess step counts in preschool children (poster) SW District American College of Sports Medicine Annual Conference, San Diego, CA, November 2008.
- 15. **Abraham, T.L.,** Craig, C., Tudor-Locke, C., Griffiths, J., Cameron, C., Anderson, R., Bauman, A. Sedentary behavior and BMI: A secondary analysis of the Joint Canada/U.S. Survey of Health (poster) The Obesity Society's Annual Scientific Meeting, October 2008
- 16. McClain, J.J., **Abraham, T.L.,** Getz, R.S., Tudor-Locke, C. Utility of Lower Cost Technology to Objectively Assess Walking Intensity. American College of Sports Medicine Annual Conference, Indianapolis, IN, May 2008
- 17. **Abraham, T.L.,** McClain, J.J., Getz, R.S., Tudor-Locke, C. Comparison of low cost objective physical activity assessment instruments versus the ActiGraph accelerometer (presentation) American College of Sports Medicine Annual Conference, Indianapolis, IN, May 2008.
- 18. **Abraham, T.L.,** Brusseau, T.A., Hodges-Kulinna, P., Tudor-Locke, C. Comparison of low cost instruments with the ActiGraph accelerometer in 10-11 year old children (poster) 2<sup>nd</sup> International Congress on Physical Activity and Public Health, April, 2008.

- 19. Washington, T.L., Brusseau, T.A., Hodges-Kulinna, P., **Abraham, T.L.,** Tudor-Locke, C. Comparison of step count outputs detected during school hours on PE vs. non-PE days in 10-11 year old children (poster) Building Healthy Lifestyles Conference, Mesa, AZ, February 2008.
- 20. **Abraham, T.L.,** Brusseau Jr., T.A., Hodges-Kulinna, P., Tudor-Locke, C. Comparison of pedometers and accelerometers on step counts in 10-11 year old children (poster) Building Healthy Lifestyles Conference, Mesa, AZ, February 2008.
- 21. Getz, R.S., **Abraham, T.L.,** McClain, J.J., Tudor-Locke, C. Intensity Outputs of Low Cost Objective Physical Activity Assessment Instruments: Comparison with Actigraph Accelerometer (poster) SW District American College of Sports Medicine Annual Conference, San Diego, CA, November 2007.
- 22. **Abraham, T.L.;** McClain, J.J., Getz, R.S., Tudor-Locke, C. Validation of step count function of two accelerometers under controlled conditions (poster) SW District American College of Sports Medicine Annual Conference, San Diego, CA, November 2007.
- 23. **Abraham, T.L.;** McClain, J.J., Tudor-Locke, C. Convergent validity of three accelerometers to determine time spent in sedentary behaviors (poster) Diversity in Physical Activity and Health: Measurement and Research Issues and Challenges, Dallas, TX, October 2007.
- 24. **Abraham, T.L.,** McClain, J.J., Pettee, K.K., Tudor-Locke, C. Laboratory Validation of Two Activity Monitors for Measuring Time in Sitting, Standing, and Walking Behaviors, (poster) American College of Sports Medicine Annual Conference, New Orleans, LA, May 2007.
- 25. **Abraham, T.L.,** McClain, J.J., Pettee, K.K., Tudor-Locke, C. Description of sitting behavior in adults using the ActivPal Professional accelerometer (poster and oral presentation) Arizona State University, Polytechnic Annual Graduate Student Conference, April 2007.
- 26. **Abraham, T. L.,** McClain, J.J., Tudor-Locke, C. Comparison of IDEEA, Actigraph and ActivPal monitors during free-living for a single subject: A case study, (poster). Building Healthy Lifestyles Conference, Mesa, AZ, February 2007.
- 27. **Abraham TL**, Stone, WJ. An Intervention to Improve Physical Activity Adherence Among Worksite Dropouts, (poster). SW District American College of Sports Medicine Annual Conference, San Diego, CA 2006.
- 28. Stone, WJ, **Abraham TL**, Havenar, JM. Convincing Yourself You Can Be Physically Active, (oral). SW District American Alliance of Health, Physical Education, Recreation and Dance National Meeting, Salt Lake City, UT 2006.
- 29. Stone, WJ, **Abraham TL**, Burkett, LN. An Intervention to Improve Physical Activity Adherence Among Worksite Dropouts, (oral). *American Academy of Health Behavior*, Sedona, AZ 2004.

# **Grants and Awards:**

## **Grants Awarded:**

National Institutes of Health Loan Repayment Program, Grant for clinical research—Awarded (but not accepted) by National Institutes of Aging - 2010

Objective Physical Activity Assessment Consultant, Accelerometer Data Analyst. Parra-Medina, D. (PI) Wilcox, S. (Co-PI). (2003-2006). "The HHER Lifestyle Program for CVD Risk Reduction". A grant funded by the National Heart, Lung and Blood Institute \$1,732,413.00. – 2008

Objective Physical Activity Assessment Consultant. Kulinna, P.H. (PI), Tudor-Locke, C., Darst, P., & Orlowicz, C. (2006). Physical Education Pilot Grant. Funded by the Arizona Department of Education \$74,191.00. – 2008

Technogym Spa (\$5000), Co-Investigator. Evaluation of Technogym accelerometer. Contract to evaluate a new commercial accelerometer, 2008-2009.

Charles Corbin President's Council Scholarship, 2007.

Arizona State University, Department of Exercise and Wellness — Healthy Lifestyles Scholarship, October 2006.

## **Grants Submitted but Not Awarded:**

American College of Sports Medicine — Paffenbarger-Blair Fund for Epidemiological Research on Physical Activity Grant. Objectively assessed sitting time and metabolic risk factors in older adults.

American College of Sports Medicine — Doctoral Student Research Grant. The relationship between sitting time and markers of obesity.

American College of Sports Medicine — Doctoral Student Research Grant. Objectively assessed sitting time and the relationship to markers of obesity.

University of Wisconsin Inter-campus Grant for Health Research, Physical Activity, physical function and Health in older adults.

#### **Research Awards:**

Excellence in Research Award, First Place in Exercise and Wellness department—Arizona State University, Polytechnic Annual Graduate Student Conference, April 2007

# **Non-Academic Work Experience**

Wellness Intern — Motorola Wellness Center, May 2001 – August 2001

Exercise Physiologist, FitLife Health Systems, August 2003 - June 2006

Personal Trainer, Gainey Village Health Club and Spa, November 2002 - July 2006

Institutional Sales/Consultant Relations Associate and RFP Writer, Alliance Bernstein (formerly Sanford C. Bernstein Investment Research and Management), June 1998 – August 2000

# **Professional Affiliations**

International Society on Behavioral Nutrition and Physical Activity — May 2022 - present

American College of Sports Medicine — August 2006 - present

Southwest Regional Chapter, American College of Sports Medicine — August 2006 – August 2009

National Strength and Conditioning Association — November 2002 – November 2008

# **Professional Certifications:**

Quality Matters Peer Reviewer - present

Mini yogis – present

American Council on Exercise, Group Fitness Instructor - present

Certified Strength and Conditioning Specialist, National Strength and Conditioning Association – past