

Greg J Petrucci Jr.

Curriculum Vitae

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University:

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EDUCATION

2023 - present	Ph.D. - Kinesiology	University of Massachusetts, Amherst, MA
Advisor: John R. Sirard, Ph.D.		
2023	M.S. - Kinesiology	University of Massachusetts, Amherst, MA
Advisor: John R. Sirard, Ph.D.		
Thesis: Methods to Estimate Free-Living Moderate-to-Vigorous Physical Activity from an ActiGraph Accelerometer		
2017	B.S. - Kinesiology	University of Massachusetts, Amherst, MA
Summa Cum Laude & Honors with Greatest Distinction		

PUBLICATIONS

Refereed publications:

1. Remillard, N., Mulvey, M., **Petrucci Jr, G.J.** & Sirard, J.R. (2022). Validation of accelerometer-based estimations of energy expenditure during high-intensity interval training. *American Journal of Undergraduate Research*, 19(1), 31-39.
2. Potter, K., Marcotte, R.T., **Petrucci Jr, G.J.**, Rajala, C., Linder, D.E. & Balzer, L. (2021). Examining the contribution of dog walking to total daily physical activity among dogs and their owners. *Journal for the Measurement of Physical Behaviour*, 4(1), 97-101.
3. Marcotte, R.T., **Petrucci Jr, G.J.**, Cox, M.F., Freedson, P.S., Staudenmayer, J. & Sirard, J.R. (2019). Estimating sedentary time from a hip- and wrist-worn accelerometer. *Med Sci Sports Exerc.*, 52(1), 225-232.
4. Cox, M.F., **Petrucci Jr, G.J.**, Marcotte, R.T., Masteller, B.R., Staudenmayer, J., Freedson, P.S. & Sirard, J.R. (2020). A novel video-based direct system for assessing physical activity and sedentary behavior in children and young adults. *Journal for the Measurement of Physical Behaviour*, 3(1), 50-57.
5. **Petrucci Jr, G.J.**, Masteller, B.R., Cox, M.F., Staudenmayer, J., Freedson, P.S. & Sirard, J.R. (2018). Sensitivity of the misfit shineTM to detect changes in laboratory-based and free-living physical activity. *Journal for the Measurement of Physical Behaviour*, 1(1), 18-25.

Book chapters:

1. Sirard, J.R. & **Petrucci Jr, G.J.** (2019). Measurement of Physical Activity and Sedentary Behaviors In: *Physical Activity and Public Health Practice: A Guide for Effective Interventions*. Springer Publishing Company, New York, NY.

Publications in preparation:

1. **Petrucci Jr, G.J.**, Marcotte, R.T., Cox, M.F., Freedson, P.S., Staudenmayer, J. & Sirard, J.R. (2024). A free-living investigation of methods to estimate moderate-to-vigorous physical activity from an actigraph accelerometer. *Med Sci Sports Exerc.*

Conference proceedings with published abstracts:

1. Chase, J.D., **Petrucci Jr, G.J.** & Sirard, J.R. (2024). Does sleep restriction impact subsequent day free-living physical behavior patterns among healthy young adults? *American College of Sports Medicine Annual Meeting*. Jun 2024. Boston, MA.
2. **Petrucci Jr, G.J.**, Shook, R.P. & Sirard, J.R. (2023). Estimating energy expenditure in free-living adolescents: How many days are enough? *American College of Sports Medicine Annual Meeting*. Jun 2023. Denver, CO.
3. **Petrucci Jr, G.J.**, Marcotte R.T., Cox M.F., Freedson P.S., Staudenmayer J.W. & Sirard J.R. (2020). A novel method to estimate free-living physical behaviors from a wrist-worn actiGraph accelerometer. *American College of Sports Medicine Annual Meeting*. Jun 2020. Virtual Meeting.
4. Remillard, N., **Petrucci Jr, G.J.** & Sirard, J.R. (2020). Estimating energy expenditure during high intensity interval training. *American College of Sports Medicine Annual Meeting*. Jun 2020. Virtual Meeting.
5. **Petrucci Jr, G.J.**, Marcotte, R.T., Cox, M.F., Freedson, P.S., Staudenmayer, J. & Sirard, J.R. (2019). A free-living investigation of methods to estimate moderate-to-vigorous physical activity from an actigraph accelerometer. *International Conference on Ambulatory Monitoring of Physical Activity and Movement*. Jun 2019. Maastricht, the Netherlands.
6. **Petrucci Jr, G.J.**, Marcotte, R.T., Rajala, C., Saleeba, C. & Potter, K. (2019). Examining the relationship between objectively measured human and dog activity. *International Conference on Ambulatory Monitoring of Physical Activity and Movement*. Jun 2019. Maastricht, the Netherlands.
7. Marcotte, R.T., **Petrucci Jr, G.J.**, Cox, M.F., Freedson, P.S., Staudenmayer, J. & Sirard, J.R. (2019). End of an epoch? Free-living classification within sojourns using a wrist-worn accelerometer. *International Conference on Ambulatory Monitoring of Physical Activity and Movement*. Jun 2019. Maastricht, the Netherlands.
8. Marcotte, R.T., **Petrucci Jr, G.J.**, Cox, M.F., Freedson, P.S., Staudenmayer, J. & Sirard, J.R. (2019). Insights on free-living behavior from a novel direct observation coding system. *International Conference on Ambulatory Monitoring of Physical Activity and Movement*. Jun 2019. Maastricht, the Netherlands.
9. **Petrucci Jr, G.J.**, Marcotte, R.T., Cox, M.F., Staudenmayer, J., Freedson, P.S. & Sirard, J.R. (2019). Estimating free-living physical activity using a wrist-worn accelerometer: can it be done? *American College of Sports Medicine Annual Meeting*. Jun 2019. Orlando, FL.
10. Cox, M.F., **Petrucci Jr, G.J.**, Marcotte, R.T., Masteller, B.R., Staudenmayer, J., Freedson, P.S. & Sirard, J.R. (2019). Contributions to free-living accelerometer calibration: a novel direct observation system. *American College of Sports Medicine Annual Meeting*. Jun 2019. Orlando, FL.
11. Marcotte, R.T., **Petrucci Jr, G.J.**, Cox, M.F., Freedson, P.S., Staudenmayer, J. & Sirard, J.R. (2019). Insights on free-living sedentary behavior estimates using a hip- or wrist-worn accelerometer. *American College of Sports Medicine Annual Meeting*. Jun 2019. Orlando, FL.
12. Rajala, C., Marcotte, R.T., **Petrucci Jr, G.J.**, Saleeba, C. & Becofsky Potter, K. (2019). Dog walking as a percentage of owners' total physical activity and measures of moderate-to-vigorous

- activity levels. *American College of Sports Medicine Annual Meeting*. Jun 2019. Orlando, FL.
13. **Petrucci Jr, G.J.**, Freedson, P.S., Masteller, B.R., Cox, M.F., Staudenmayer, J. & Sirard, J.R. (2018). Sensitivity of a consumer activity tracker to detect changes in lab-based and free-living activity settings. *American College of Sports Medicine Annual Meeting*. Jun 2018. Minneapolis, MN.
 14. Cox, M.F., **Petrucci Jr, G.J.**, Masteller, B.R. & Sirard, J.R. (2018). The development and testing of a direct observation protocol for children's free-living activity. *American College of Sports Medicine Annual Meeting*. Jun 2018. Minneapolis, MN.
 15. Jai Kumar, J., **Petrucci Jr, G.J.**, Masteller, B.R., Cox, M.F., Staudenmayer, J., Sirard, J.R. & Freedson, P.S. (2017). Investigation of the relationship between user height and steps measured by a consumer activity tracker. *International Conference on Ambulatory Monitoring of Physical Activity and Movement*. Jun 2017. Bethesda, MD.
 16. **Petrucci Jr, G.J.**, Masteller, B.R., Cox, M.F., Staudenmayer, J., Sirard, J.R. & Freedson, P.S. (2017). A Consumer activity tracker is sensitive to changes in steps during simulated free-living. *American College of Sports Medicine Annual Meeting*. Jun 2017. Denver, CO.
 17. Masteller, B.R., Larson, J., Cox, M.F., **Petrucci Jr, G.J.**, Staudenmayer, J., Freedson, P.S. & Sirard, J.R. (2017). Comparison of step estimates between a consumer activity tracker and research accelerometer on the dominant and non-dominant wrist. *American College of Sports Medicine Annual Meeting*. Jun 2017. Denver, CO.
 18. Cox, M.F., Slate-Romano, J., Vercollone, H., Jacobson, D., **Petrucci Jr, G.J.**, Masteller, B.R. & Sirard, J.R. (2017). Testing a novel direct observation method for children's free play activity *American College of Sports Medicine Annual Meeting*. Jun 2017. Denver, CO.
 19. **Petrucci Jr, G.J.**, Hickey, A., Mendoza, A. & Freedson, P.S. (2016). Validation of the cybex arctrainerTM for prediction of energy expenditure. *American College of Sports Medicine Annual Meeting*. Jun 2016. Boston, MA.

Other conference presentations & publications:

1. Remillard, N.M., **Petrucci Jr, G.J.** & Sirard, J.R. (2019). Using accelerometers to estimate energy expenditure during high intensity interval training. *New England Chapter of the American College of Sports Medicine Annual Fall Meeting*. Nov 2019. Providence, RI.
2. **Petrucci Jr, G.J.**, Marcotte, R.T., Cox, M.F., Staudenmayer, J., Freedson, P.S. & Sirard, J.R. (2019). Estimating free-living physical activity using a wrist-worn accelerometer. *School of Public Health and Health Sciences Research Day*. Apr 2019. Amherst, MA.
3. Cox, M.F., **Petrucci Jr, G.J.**, Marcotte, R.T., Masteller, B.R., Staudenmayer, J., Freedson, P.S. & Sirard, J.R. (2019). Free-living accelerometer calibration: a novel direct observation system. *School of Public Health and Health Sciences Research Day*. Apr 2019. Amherst, MA.
4. **Petrucci Jr, G.J.**, Marcotte, R.T., Cox, M.F., Staudenmayer, J., Freedson, P.S. & Sirard, J.R. (2018). Estimating free-living physical activity using a wrist-worn accelerometer: can it be done? *New England Chapter of the American College of Sports Medicine Annual Fall Meeting*. Oct 2018. Providence, RI.
5. Cox, M.F., **Petrucci Jr, G.J.**, Marcotte, R.T., Masteller, B.R., Staudenmayer, J., Freedson, P.S. & Sirard, J.R. (2018). Contributions to free-living accelerometer calibration: a novel direct observation system. *New England Chapter of the American College of Sports Medicine Annual Fall Meeting*. Oct 2018. Providence, RI.
6. Marcotte, R.T., **Petrucci Jr, G.J.**, Cox, M.F., Freedson, P.S., Staudenmayer, J. & Sirard, J.R. (2018). An evaluation of actigraph hip and wrist methods to estimate sedentary behavior under

- free-living conditions. *New England Chapter of the American College of Sports Medicine Annual Fall Meeting*. Oct 2018. Providence, RI.
7. **Petrucci Jr, G.J.**, Freedson, P.S., Masteller, B.R., Cox, M.F., Staudenmayer, J. & Sirard, J.R. (2018). Sensitivity of misfit shineTM to detect changes in lab-based and free-living activity settings. *UConn mHealth and Social Media Conference*. May 2018. Storrs, CT.
 8. **Petrucci Jr, G.J.**, Freedson, P.S., Masteller, B.R., Cox, M.F., Staudenmayer, J. & Sirard, J.R. (2018). Sensitivity of misfit shineTM to detect changes in lab-based and free-living activity settings. *Industry Advisory Board Meeting for the Center for Personalized Health Monitoring*. May 2018. Amherst, MA.
 9. **Petrucci Jr, G.J.**, Marcotte, R.T., Cox, M.F., Freedson, P.S., Staudenmayer, J. & Sirard, J.R. (2018). Investigation of machine learning methods to estimate sedentary behavior in free-living environments from an accelerometer. *New England Statistics Symposium*. Apr. 2018. Amherst, MA.
 10. Marcotte, R.T., **Petrucci Jr, G.J.**, Staudenmayer, J. & Sirard, J.R. (2018). Non-exercise estimation of cardiorespiratory fitness using NHANES 2003-2004 accelerometer data. *New England Statistics Symposium*. Apr 2018. Amherst, MA.
 11. **Petrucci Jr, G.J.**, Marcotte, R.T., Cox, M.F., Freedson, P.S., Staudenmayer, J. & Sirard, J.R. (2018). Investigation of actigraph hip methods to estimate sedentary behavior in free-living environments. *School of Public Health and Health Sciences Research Day*. Apr 2018. Amherst, MA.
 12. Marcotte, R.T., **Petrucci Jr, G.J.**, Cox, M.F., Freedson, P.S., Staudenmayer, J. & Sirard, J.R. (2018). An evaluation of actigraph wrist methods to estimate sedentary behavior in the free-living environment. *School of Public Health and Health Sciences Research Day*. Apr 2018. Amherst, MA.
 13. Cox, M.F., **Petrucci Jr, G.J.**, Masteller, B.R. & Sirard, J.R. (2018). The development and testing of a direct observation protocol for children's free-living activity. *School of Public Health and Health Sciences Research Day*. Apr 2018. Amherst, MA.
 14. **Petrucci Jr, G.J.**, Freedson, P.S., Masteller, B.R., Cox, M.F., Staudenmayer, J. & Sirard, J.R. (2017). Sensitivity of misfit shineTM to detect changes in laboratory and free-living physical activity. *New England Chapter of the American College of Sports Medicine Annual Fall Meeting*. Oct 2017. Providence, RI.
 15. Cox, M.F., **Petrucci Jr, G.J.**, Masteller, B.R. & Sirard, J.R. (2017). The development and testing of a direct observation protocol for children's free-living activity. *New England Chapter of the American College of Sports Medicine Annual Fall Meeting*. Oct 2017. Providence, RI.
 16. **Petrucci Jr, G.J.**, Freedson, P.S., Masteller, B.R., Cox, M.F., Staudenmayer, J. & Sirard, J.R. (2017). Sensitivity of misfit shineTM to detect changes in physical activity. *UMass Medical mHealth and Social Media Conference*. May 2017. Worcester, MA.
 17. **Petrucci Jr, G.J.**, Hickey, A., Mendoza, A. & Freedson, P.S. (2016). Validation of the cybex arctrainerTM for prediction of energy expenditure. *New England Chapter of the American College of Sports Medicine Annual Fall Meeting*. Oct 2016. Providence, RI.

AWARDS AND HONORS

Oct 2018. Finalist for the Master's Student Investigator Award.
New England Chapter of the American College of Sports Medicine.

Feb 2018. Finalist for Distinguished Teaching Award.
University of Massachusetts.

Aug 2017. Mark Connolly Master's Student Scholarship.
New England Chapter of the American College of Sports Medicine. \$750.

Dec 2016. Nominated for 21st Century Leaders Award.
University of Massachusetts.

Oct 2016. Rising Researcher Award.
University of Massachusetts.

Jun 2016. Charles J. Hoff Honors Scholarship.
Commonwealth Honors College. \$4000.

Apr 2016. William F. Field Alumni Scholar.
University of Massachusetts Alumni Association. \$1000.

FELLOWSHIPS AND GRANTS

Funded fellowships:

Feb 2023. Department of Kinesiology Non-Working Fellowship.
Department of Kinesiology, University of Massachusetts. \$3,102.

Funded grants:

Spt 2019. Graduate Student Travel Grant.
Department of Kinesiology, University of Massachusetts. \$500.

Apr 2016. Submission title: Validation of Youth-Orientated Activity Trackers in Semi-Structured Free Play.
Commonwealth Honors College. \$1000.

Unfunded grants:

Mar 2019. Center for Research on Families Travel Grant.
University of Massachusetts. \$300.

Feb 2019. Michael L. Pollock Student Scholarship.
American College of Sports Medicine. \$200.

Spt 2017. Graduate Student Travel Grant.
Department of Kinesiology, University of Massachusetts. \$500.

Dec 2016. Priscilla Clarkson Travel Grant.
American College of Sports Medicine. \$1000.

Dec 2015. Priscilla Clarkson Travel Grant.
American College of Sports Medicine. \$1000.

TEACHING EXPERIENCE^α

^α Teaching experience at the *University of Massachusetts* unless noted otherwise.

Instructor of record:

Spt 2024-May 2025 2023. KIN 100*: Intro to Kinesiology.

**Residential Academic Program*, Health Sciences

May-Jly 2023. KIN 470: Exercise Physiology.

Graduate teaching assistant:

Spt 2023-May 2024. KIN 110: Human Performance and Nutrition.

Spt 2022-May 2024. KIN 394AI: Applying Kin Concepts to Real-World Health Challenges.

Spt-Dec 2020. KIN 272: Anatomy and Physiology II.

Spt 2018-May 2020. KIN 100: Introduction to Kinesiology.

Spt-Dec 2017. KIN 355: Writing Seminar in Kinesiology.

Advising and mentoring:

Spt 2022-May 2023. Loukas Pedone, Commonwealth Honors College Capstone Thesis.

Spt 2019-Dec 2020. Marisa Mulvey, Commonwealth Honors College Capstone Thesis.

Spt 2017-May 2019. Nicholas Remillard, Commonwealth Honors College Capstone Thesis.

Guest lectures:

Apr 2024. KIN 637: Energetics of Human Locomotion. Topic: Developing, Validating, and Implementing Data Processing Methods for Accelerometer-Based Physical Behavior Measurement

Apr 2020. KIN 297H: Research Methods, *Honors*. Topic: Statistics in Kinesiology Research

Spt 2019, Feb. 2018. KIN 440: Physical Activity and Public Health. Topic: Measurement of Physical Activity

Other teaching experience:

Aug 2018. Kinesiology R Programming Workshop.

University of Massachusetts.

PROFESSIONAL SERVICE

Manuscript reviewer:

Medicine & Science in Sports & Exercise

Journal for the Measurement of Physical Behaviour

Journal of Science and Medicine in Sport

Measurement in Physical Education and Exercise Science

Other service to profession:

Oct 2023-Oct 2025. Co-chair of Marketing and Communications Committee.

New England Chapter of the American College of Sports Medicine.

Feb-Oct 2023. Co-chair of Membership Committee.

New England Chapter of the American College of Sports Medicine.

Jan 2018-May 2020. Social Media Chairperson.

International Society for the Measurement of Physical Behaviour.

Aug-Dec 2017. Peer Mentor- Alec Shostek.
New England Chapter of the American College of Sports Medicine.

UNIVERSITY SERVICE

Spt 2019-Spt 2023. Department Steward- Graduate Employee Organization.
University of Massachusetts.

Apr 2019. VIP Consultant- Five College DataFest.
University of Massachusetts.

Spt 2018. Panelist- New Graduate Student Orientation Panel: Advice from Successful TAs in the Social and Behavioral Sciences, Management, and Public Health.
University of Massachusetts.

May 2018-May 2020. Committee Member- Kinesiology Graduate Student Organization.
University of Massachusetts.

PROFESSIONAL AFFILIATIONS

Mar 2019	<i>Society of Behavioral Medicine</i>
Spt 2018	<i>New England Statistics Society</i>
Spt 2018	<i>Boston Chapter of the American Statistical Association</i>
Spt 2018	<i>American Statistical Association</i>
Mar 2018	<i>American Association for the Advancement of Science</i>
Jun 2017	<i>International Society for the Measurement of Physical Behavior</i>
Spt 2013	<i>New England Chapter of the American College of Sports Medicine</i>
Spt 2013	<i>American College of Sports Medicine</i>