

# Greg J Petrucci Jr.

Curriculum Vitae

Mar 2024

## Home:

19 Bank Row St., Apt. 3  
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## University:

30 Eastman Ln., Rm. 162  
Amherst, MA, 01003  
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## EDUCATION

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2023 - present	<b>Ph.D.</b> - Kinesiology	University of Massachusetts, Amherst, MA
Advisor: John R. Sirard, Ph.D.		
2023	<b>M.S.</b> - 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>B.S.</b> - Kinesiology	University of Massachusetts, Amherst, MA
Summa Cum Laude & Honors with Greatest Distinction		

## PUBLICATIONS

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### 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 shine<sup>TM</sup> 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). Assessment 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 arctrainer™ 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 shine<sup>TM</sup> 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 shine<sup>TM</sup> 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 shine<sup>TM</sup> 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 shine<sup>TM</sup> 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 arctrainer<sup>TM</sup> 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

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- 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 21<sup>st</sup> 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

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### 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<sup>α</sup>

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<sup>α</sup> 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 6xx: Energetics xyz.

Eliza's honors research methods class? Apr or May 2020. Title: Statistics...

JRS class 1 or 2 times? MMM 20YY? Title:

KIN 440 2 times? -j Sept 2019? Title:

### Other teaching experience:

Aug 2018. Kinesiology R Programming Workshop.

*University of Massachusetts.*

## PROFESSIONAL SERVICE

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### 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

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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

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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>