## **Curriculum Vitae**

# Seungho Ryu, Ph.D

## I. EDUCATION AND EXPERIENCE

## A. Educational Background

2021-Present	University of Idaho – Moscow, ID Post-doctoral Fellow WWAMI Medical Program at University of Idaho
2017-2021 (Transfer)	University of Mississippi – Oxford, MS PhD: Health and Kinesiology Specialization: Health Behavior and Promotion Minor: Interdisciplinary Graduate Minor in Applied Statistics Advisor: Minsoo Kang, PhD, FACSM
2015-2016	Middle Tennessee State University – Murfreesboro, TN PhD: Human Performance Specialization: Kinesmetrics (Measurement and Evaluation) Advisor: Minsoo Kang, PhD, FACSM
2011-2013	Seoul National University – Seoul, South Korea MS: Physical Education Advisor: Yeonsoo Kim, MD, PhD
2003-2009	Kyungsung University – Busan, South Korea BA: Physical Education Advisor: Jongjin Park, PhD

## **B.** Academic Positions

2021-Present	Post-doctoral Fellow – WWAMI Medical Program, University of Idaho	
2019- 2021	Statistical Consultant ; Research & Analytics Lab, School of Applied Sciences, University of Mississippi	
2017-2021	Graduate Teaching Assistant – Department of Health, Exercise Science, and Recreation Management, University of Mississippi	
2016-2017	Measurement and Statistical Consultant ; Kinesmetrics Consulting Lab, Department of Health and Human Performance, Middle Tennessee State University	
	<ul> <li>Provided statistical consulting services for faculty, students, and staff.</li> <li>Provided tutoring services involving statistical measures for doctoral, masters, and undergraduate students.</li> </ul>	

2015-2017	Graduate Teaching Assistant – Department of Health and Human Performance,
	Middle Tennessee State University

#### C. Awards/Honors

D.

2020	Measurement & Evaluation Graduate Student of the Year Award, SHAPE America
2017	1 <sup>st</sup> Place in Scholar's Week Graduate Poster Competition, College of Behavioral and Health Sciences, Middle Tennessee State University : Cross-validation of the developed obesity cut-off points for Korean adults
Professional Memberships	

2016	Korean Alliance for Health, Physical Education, Recreation, and Dance
2015	Korean Society for Measurement and Evaluation in Physical Education and Sports
2015-2021	Society of Health and Physical Educators – SHAPE America (f. AAHPERD)
2011-2021	American College of Sports Medicine (ACSM)

## **II. RESEARCH: PUBLICATIONS**

#### A. Thesis/Dissertation Title

- **Ryu, S.** (2021). Psychometric Evaluation of Memory and Concentration Sections in the Standardized Assessment of Concussion. The University of Mississippi, Oxford, USA.
- **Ryu, S.** (2013). The effect of combined exercise on physical fitness and depression symptom in patients with schizophrenia, Seoul National University, Seoul, Korea.

#### B. Refereed Journal Articles Published (N=20)

- Jung, M., Kim, H., Loprinzi, P.D., Ryu, S., & Kang, M. (2022). Age-varying association between depression and cognitive function among a national sample of older U.S. immigrant adults: The potential moderating role of physical activity. *Aging & Mental Health*, 1-10. Doi: 10.1080/13607863.2022.2056139
- Jung, M., Ryu, S., Kang, M., Javadi, A-H., & Loprinzi, P.D. (2021). Evaluation of the Transient Hypofrontality Theory in the context of exercise: Systematic review with metaanalysis. *Quarterly Journal of Experimental Psychology*. Doi: 10.1177/17470218211048807.
- Jung, M., Kim, H., Ryu, S., & Kang, M. (2021). Secular Trends in Physical Activity among Immigrants in the United States, 2009 to 2018. *Journal of Physical Activity & Health*. Doi: 10.1123/jpah.2020-0812.
- 4. Moore, D.C., Ryu, S., Loprinzi, P.D. Experimental Effects of Acute Exercise on

Forgetting (2020). Physiology International. Doi: 10.1556/2060.2020.00033

- Ryu, S., Loprinzi, P.D., Kim, H., Kang, M. (2020). Sedentary Behavior and Obesity in Youth According to Meeting Physical Activity Guidelines: National Health and Nutrition Examination Survey, 2003-2006. *Childhood Obesity*. Doi: 10.1089/chi.2019.0213.
- Ryu, S., Loprinzi, P.D., Kim, H., Kang, M. (2020). Temporal Trends in the Association between Participation in Physical Education and Physical Activity among U.S. High School Students, 2011-2017. *International Journal of Environmental Research and Public Health*, 17(7), 2357. Doi: 10.3390/ijerph17072357
- Jung, M., Zou, L., Yu, J. J., Ryu, S., Kong, Z., Yang, L., ... & Loprinzi, P. D. (2020). Does Exercise Have a Protective Effect on Cognitive Function under Hypoxia? A Systematic Review with Meta-Analysis. *Journal of Sport and Health Science*. Doi: 10.1016/j.jshs.2020.04.004
- Papini, N.M., Kang, M., Ryu, S., Griese, E., Wingert, T., & Herrmann, S.D (2020). Rasch calibration of the 25-item Connor-Davidson Resilience Scale. *Journal of Health Psychology*. Doi: 10.1177/1359105320904769
- Loprinzi, P.D., Franklin, J., Farris, A., & Ryu, S. (2019). Handedness, grip strength, and memory function: considerations by biological sex. *Medicina*, 55(8), 444. Doi: 10.3390/medicina55080444
- Kim, K. M., Kim, J. S., Cruz-Díaz, D., Ryu, S., Kang, M., & Taube, W. (2019). Changes in spinal and corticospinal excitability in patients with chronic ankle instability: A systematic review with meta-analysis. *Journal of Clinical Medicine*, 8(7), 1037. Doi: 10.3390/jcm8071037
- Ryu, S., Kim, H., Kang, M., Pedisic, Z., & Loprinzi, P.D. (2019). Secular trends in sedentary behavior among high school students in the United States, 2003-2015. *American Journal of Health Promotion*, 1-8. Doi: 10.1177/0890117119854043
- Loprinzi, P.D., Blough, J., Crawford, L., Ryu, S., Zou, L., & Li, H. (2019). The temporal effects of acute exercise on episodic memory function: Systematic review with meta-analysis. *Brain Sciences*, 9(4), 87. Doi: 10.3390/brainsci9040087
- Frith, E., Ryu, S., Kang, M., & Loprinzi, P.D. (2019). Systematic review of the proposed associations between physical exercise and creative thinking. *Europe's Journal of Psychology*, 15(4). 858-877. Doi: 10.5964/ejop.v15i4.1773
- Ryu, S., Frith, E., Pedisic, Z., Kang, M., & Loprinzi, P.D. (2019). Secular trends in the association between obesity and hypertension among adults in the United States, 1999-2014. *European Journal of Internal Medicine*. Doi: 10.1016/j.ejim.2019.02.012
- Loprinzi, P.D., Blough, J., Ryu, S. & Kang, M. (2019). Experimental effects of exercise on memory function among mild cognitive impairment: Systematic review and meta-analysis. *The Physician and Sportsmedicine*, 47(1), 21-26. Doi: 10.1080/00913847.2018.1527647

- Ryu, S., Shivappa, N., Veronese, N., Kang, M., Mann, J.R., Hebert, J.R., Wirth, M.D., & Loprinzi, P.D. (2018). Secular trends in dietary inflammatory index among adults in the United States, 1999-2014. *European Journal of Clinical Nutrition*, 73, 1343-1351. Doi: 10.1038/s41430-018-0378-5
- 17. Williams, C., Stone, R., & **Ryu**, S. (2018). Source of Stress in sport: A Rasch Calibration. *Journal of Public Health Issues and Practices*, 2(121), 1-6.
- Kim, H, Mun, J., Ryu, S., & Kang, M. (2017). Validation of Korean of International Physical Activity Questionnaire: construct-related validity. *The Korean Journal of Physical Education*, 56(2), 605-616. Doi: 10.23949/kjpe.2017.03.56.2.44
- Mun, J., Kim, H., Ryu, S., & Kang, M. (2016). Development of a model to estimate body fat percentage using decision-tree analysis. *The Korean Journal of Physical Education*, 55(5), 675-685.
- Ryu, S., Song, B., Kim, Y., & Kwon, H. (2015). The Effect of combined exercise on physical fitness and depression symptom in patients with schizophrenia. *Korean Journal of Adapted Physical Activity*, 49(4), 39-48.

#### C. Manuscripts under Review in Refereed Journals

- 1. **Ryu, S.**, Casanova, M., Moore, J., Cady, A.C. & Baker, R.T. Many-Faceted Rasch Calibration of the Foot Function Index-Revised Short Form. (In review JSR)
- 2. Casanova, M.P., Reeves, A., Moore, J., **Ryu, S.**, Palmer, K., Smith, L.S., Seegmiller, J.G. & Baker, R.T. Evaluating the Impact of a Project ECHO Pediatric Behavioral Health Series in a Rural and Frontier State: An Exploratory Investigation. (In review)
- 3. **Ryu, S.**, Richarson, R., Cady, A.C., Reeves, A., Casanova, M.P. & Baker, R.T. Rasch Calibration for the International Knee Documentation Committee Subjective Knee Form (IKDC-SKF). (In review – JSR)
- 4. Moore, J.D., Casanova, M.P., **Ryu, S.**, Smith, L.H. & Baker, R.T. Examining ECHO Idaho's Perinatal Substance Use Disorder Pilot Program. (In review)
- 5. Richardson, R.D., Casanova, M.P., Reeves, A., **Ryu, S.**, Cady, A.C., & Baker, R.T. Evaluating the psychometric properties of the International Knee Documentation Committee Subjective Knee Form. (In review)

## III. RESEARCH: PRESENTATIONS (N= 17)

1. **Ryu, S.,** Jung, M., & Kang, M. (2021, May). Psychometric Evaluation of Memory Section in the Standardized Assessment of Concussion from the SCAT5. To be presented at the ACSM national conference.

- 2. Jung, M., Kim, H., **Ryu, S.**, & Kang, M. (2021, May). Secular Trends in Physical Activity among Immigrants in the United States, 2009 To 2018. To be presented at the ACSM national conference.
- 3. Kang, M., Kim, H., **Ryu, S.**, & Jung, M. (2021, April). Scale Adaption in Exercise and Sport Sciences. To be presented at the SHAPE America virtual national conference.
- 4. **Ryu, S.**, Kim, H., Loprinzi, P., & Kang, M. (2020, May). The Mediating effect of Physical Activity on Relationship between Sleep and Weight Status. Online presented at the ACSM national conference because of COVID-19.
- Kim, H., Ryu, S., & Kang, M. (2020, May). Identifying Threshold of Daily Sedentary Behavior Time For Prevention of Obesity. Online presented at the ACSM national conference because of COVID-19.
- Ryu, S., Kim, H., Loprinzi, P., & Kang, M. (2020, April). Temporal Trends in the Association between Participation in Physical Education and Physical Activity Among High School Students in the United States, 2011-2017. Online because of COVID-19 at the SHAPE America national conference
- 7. **Ryu, S.**, Kim, H., Loprinzi, P., & Kang, M. (2019, May). Temporal trends of physical activity in high school students in the United States, 2011-2017. Paper presented at the ACSM national conference, Orlando, FL.
- 8. **Ryu, S.**, Kim, H., Loprinzi, P., & Kang, M. (2019, April). Trends of sedentary behavior in high school students in the United States, 2003-2015. Paper presented at the SHAPE America national conference, Tampa, FL.
- 9. Papini, N, Kang, M, **Ryu**, **S**, Griese, E, Wingert, T, Herrmann, SD. (March, 2019). Rasch calibration of the 25-item Connor-Davidson Resilience Scale. Society of Behavioral Medicine Annual Meeting Abstracts. Washington, D.C. Annals of Behavioral Medicine, 53(S1):S277.
- Ryu, S., Kim, H., & Kang, M. (2018, May). Effect of Warm-up intervention on physical performance: a meta-analysis. Paper presented at the ACSM national conference, Minneapolis, MN.
- 11. Kim, H., Mun, J., **Ryu, S.**, & Kang, M. (2018, March). Sedentary behavior and metabolic syndrome in physically active adults. Paper presented at the SHAPE America national conference, Nashville, TN.
- 12. **Ryu**, S., Mun, J., Kim, H., & Kang, M. (2018, March). Trend analysis of measurement and evaluation in RQES using text mining. Paper presented at the SHAPE America national conference, Nashville, TN.
- 13. **Ryu, S.**, Kim, H., Mun, J., & Kang, M. (2018, March). Association between sedentary behavior and obesity in adolescent according to meeting of physical activity guideline. Paper presented at the SHAPE America national conference, Nashville, TN.
- 14. **Ryu**, S., Kim, H., Mun, J., & Kang, M. (2017, May). Validity of sedentary behavior guideline for youth. Paper presented at the ACSM national conference, Denver, CO.

- Kim, H., Ryu, S., Ragan, B. G., & Kang, M. (2016, June). Compositional data analysis of Sedentary Behavior Patterns in Overweight and Non-Overweight Adults. Paper presented at the ACSM national conference, Boston, MA.
- Ryu, S., Kim, H., Mun, J., Ragan, B. G., & Kang, M. (2016, June). Compositional data analysis
  of total activity patterns by sex and obesity status. Paper presented at the ACSM national
  conference, Boston, MA.
- Kim, H., Farnsworth, J. L., Ryu, S., & Kang, M. (2015, October). Convergent validity evidence for the Sedentary Behavior Record. Paper presented at the Sedentary Behavior & Health Conference. Urbana-Champaign, IL.

## **IV. TEACHING**

#### A. Years at Colleges/Universities

2021-Present Teaching Assistant – WWAMI Medical Program at University of Idaho

## <u>Teaching Assistant</u>

Research Methods

2017-2021 Teaching Assistant – Department of Health, Exercise, and Recreation Management, University of Mississippi

#### **Primary Instructor**

- ES 351 Measurement & statistics in Exercise Science (3 credits)
- HP 191 Personal and community Health (3 credits)
- EL 147 Tennis (1 credit)

#### **Guest Lectures**

ES 620	Selected Topics in Exercise Science (Meta-Analysis)
	(Lecture - Comprehensive Meta-Analysis Software); Grad level

2015-2016 Teaching Assistant – Department of Health and Human Performance, MTSU

#### **Teaching Assistant**

PHED 1080 Beginning Bowling (1 credit)

- PHED 1040 Beginning Tennis (1 credit)
- HHP 6700 Data Analysis and Organization for Human Performance; Grad level

#### **Guest Lectures**

Data Analysis and Organization for Human Performance
(Lecture – Analysis of Variance); Grad level
Current Measurement Issues in Health and Human Performance
(Lecture – Validity Generalization); Grad level
Meta-Analysis
(Lecture - Comprehensive Meta-Analysis Software); Grad level

## V. SERVICE

### A. Statistics consulting

2021-Present Statistical Consultant ; WWAMI Medical Program at University of Idaho
2019- 2021 Volunteer Statistical Consultant ; Research & Analytics Lab, School of Applied Sciences, University of Mississippi
Provided statistical consulting services for faculty, students, and staff.

• Provided tutoring services involving statistical measures for doctoral, masters, and undergraduate students.

## **B.** Journal Reviewer

2019-Present	Journal of Physical Activity & Health
2020-Present	PLOS ONE
2022-Present	BMC Sports Science, Medicine and Rehabilitation

### C. Annual Workshop Presentation

A professional lecture provided to the graduate student and faculty members at UM and MTSU.

- 1. **Ryu, S.** (2021, March). Nonparametric statistics: Spearman rho correlation. Presented at the *I*<sup>st</sup> Annual School of Applied Sciences Workshop. University, MS.
- Ryu, S. (2017, February). Nonparametric statistics: Wilcoxon Signed Rank test, Mann-Whitney U-test. To be presented at the 5<sup>th</sup> Annual Kinesmetrics Statistical Consulting Workshop. Murfreesboro, TN.
- 3. **Ryu, S.** (2016, March). Data mining techniques: Association Rule. Presented at the 4<sup>th</sup> Annual Kinesmetrics Statistical Consulting Workshop. Murfreesboro, TN.

## **D.** Kinesmetrics Lab Presentation

Analysis of Covariance (ANCOVA)

Compositional Data Analysis

How to Analyze Secondary Dataset: Data Management

Mediation & Moderation Analysis

Repeated Measures ANOVA & MANOVA

Research, Planning, and Evaluation

Secondary Data Analysis & Developing Research Idea