## Hyun Chul Jung Ph. D.

Department of Kinesiology, College of Health and Pharmaceutical Sciences
University of Louisiana at Monroe
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## **Education**

March 2010 Kyung Hee University, Yongin, South Korea -February 2014 Ph. D. Graduate School of Physical Education (Exercise Physiology) "Effects of sixteen weeks of taekwondo training on abdominal fat, adipocytokines, bone mineral density, bone turnover markers and health-related fitness in obese adolescents" March 2008 Kyung Hee University, Yongin, South Korea -February 2010 M.S. Graduate School of Physical Education (Sports Medicine) "Gender-related difference of body composition, aerobic, anaerobic capacity, and isokinetic muscle strength in collegiate taekwondo athletes" March 1999 Kyung Hee University, Yongin, South Korea -August 2005 B.S. College of Physical Education (Dual Major: Taekwondo and Sports Medicine)

## **Professional Training**

January 2015 Texas A&M University-San Antonio, Texas, USA
-August 2016 Post-doctoral Fellow, Department of Counseling, Health and Kinesiology

# **Work Experience**

-March 2006

August 2016	University of Louisiana Monroe, Louisiana, USA
-Present	Assistant Professor, Department of Kinesiology
September 2015 -August 2016	Texas A&M University-San Antonio, Texas, USA Adjunct Faculty, Department of Counseling, Health and Kinesiology
September 2012	Dan Kook University, Cheonan, South Korea
-December 2014	Adjunct Faculty, Department of Taekwondo, College of Physical Education
March 2012	<b>Kyung Hee University</b> , Yongin, South Korea
-June 2014	Adjunct Faculty, Department of physical education, College of Physical Education
March 2013 -December 2014	World Taekwondo Federation-Kyung Hee University Taekwondo Program Program Manager, International Taekwondo Academy
March 2009	Kyung Hee University, Yongin, South Korea
-February 2013	Research Assistant, International Taekwondo Academy
March 2010	Kyung Hee University, Yongin, South Korea
-February 2012	Program Manager, Kyung Hee Sports Talent Center
March 2008	Kyung Hee University, Yongin, South Korea
-February 2009	Assistant, Graduate School of Physical Education
September 2006	<b>National Taekwondo Federation</b> , Monaco
-December 2006	National Team Taekwondo coach
March 2004	Kukiwon, Seoul, South Korea

Kukkiwon Taekwondo Demonstration player

July 2001 Police College & Special Task Force, Kaludara, Sri Lanka

-March 2004 Taekwondo instructor

# **Teaching Experience**

Fall 2016 Undergraduate: KINS 3012 Exercise physiology

-Present KINS 3019 Motor learning & control

> Graduate: EXSC5005 Biomechanics

EXSC5004 Advanced physiology of exercise I EXSC5030 Advanced physiology of exercise II EXSC5038 Cardiovascular physiology EXSC5039 Cardiac rehabilitation EXSC5012 Exercise Electrocardiography University of Louisiana at Monroe, USA

Fall 2015 Undergraduate: EDKN 4342 Motor skills for special population

EDKN 4117 Advanced physiology of exercise

EDKN 3320 Motor development and learning

Graduate: EDKN 5333 Aging and physical activity

EDKN 5333 Fitness, nutrition, and weight control Texas A&M University-San Antonio, USA

Spring 2012 Undergraduate: Measurement & evaluation in physical education and exercise science

> Growth, maturation and development Kyung Hee University, Korea

Fall 2012 Undergraduate: Introduction to taekwondo - Fall 2014

Taekwondo creation poomsae

Taekwondo poomsae coaching method

Taekwondo practice Taekwondo demonstration

Managing of taekwondo poomsae competition Creation of taekwondo cultural performance Referee of taekwondo demonstration

Managing of taekwondo demonstration competition Taekwondo demonstration coaching method

Taekwondo demonstration program competition Graduate: Seminar in health

Dan Kook University, Korea

## **Awards and Honors**

February 2014 Best outstanding dissertation award from Kyung Hee University

March 2008

-Summer 2016

- Spring 2014

- February 2011 Research assistance scholarship from Kyung Hee University

May 2013 Best leadership award, 2013 Global Rhythmic Aerobics Competition, Korea

September 2012 Citation, Ministry of Culture, Sports and Tourism, Korea

September 2011 Citation, World Taekwondo Federation

November 2007 2<sub>nd</sub> place Jumping front kick, World Taekwondo Hanmadang, Kukkiwon, Korea

November 2005 1st place Jumping front kick, World Taekwondo Hanmadang, Kukkiwon, Korea

1st place Team competition, World Taekwondo Hanmadang, Kukkiwon, Korea November 2004

3<sup>rd</sup> place Taekwondo aerobic, World Taekwondo Hanmadang, Kukkiwon, Korea December 1999

# **Grant & Research Experience**

- Energy drink supplementation and endurance performance in collegiate athletes (funded by RELOAD, 2017, \$500). Principal Investigator
- Effects of vitamin D supplement on immune function, URTI, and exercise performance in collegiate taekwondo
  athletes (funded by National Research Foundation of Korea, Sep 1, 2015 Aug 31, 2016, \$11,000). Principal
  Investigator
- 3. The Asia-Fit Study: Cross-cultural Comparison on Physical Fitness, Physical Activity and Obesity of Youth among Major Cities in Southeast Asia (funded by National University of Singapore, March-July, 2013, \$13,000). Assistant Researcher
- 4. Influence on the level of abdominal fat on inflammation, bone mineral density and bone metabolism in obese adolescents (funded by Korea Institute of Sport Science, April 2013-December 2013, \$17,000). Assistant Researcher
- 5. Effects of 12 weeks Taekwondo Poomsae training on body composition, functional fitness, and bone health-related hormone in older women (funded by Kukkiwon, September 2012-December 2012, \$21,000). Assistant Researcher
- 6. Effects of 12 weeks Taekwondo training on bone mineral density and calemic hormones in male adolescents (funded by Kukkiwon, September 2012-December 2012, \$21,000). Assistant Researcher

### **Peer-reviewed Publications**

- 1. <u>Hyun Chul Jung</u>, Jong Kook Song (2017). Improved abdominal visceral fat and bone metabolism after Taekwondo training in obese adolescents. *Kinesiology, Under review*.
- 2. <u>Hyun Chul Jung</u>, Nan Hee Lee, Gina Ok, Soeun Jeon, Sukho Lee (2017). Acute effects of different stretching protocols combined with jumping exercise on flexibility and power. *Biology of Sports, Under review*
- 3. Kim Sung-Woo, <u>Hyun Chul Jung</u>, Hyo-Jung Kang, Sung Woo Jung, Myong-Won Seo, Jong Kook Song (2017). Effect of physiological variables on speed skating performance in speed skaters. *Korean Journal of Sports Science*, 26(1), 1-13.
- 4. Nan Hee Lee, <u>Hyun Chul Jung</u>, Gina Ok, Sukho Lee (2017). Acute effects of kinesio taping on muscle function and fatigue level in healthy adults. *European Journal of Sport Science*. DOI: 10.1080/17461391.2017.1294621
- Hyun Chul Jung, Sukho Lee, Myong-Won Seo, Jong Kook Song (2017). Isokinetic Assessment of Agonist and Antagonist Torque Ratios in Collegiate Taekwondo Athletes: A Preliminary study, Sport Sciences for Health, 13, 175.
- Lynne Monk, Myong-Won Seo, Hyun-Bae Kim, <u>Hyun Chul Jung</u>, Jong Kook Song (2017). High intensity interval training and athletic performance in taekwondo athletes. *Journal of Sports Medicine and Physical Fitness*, DOI: 10.23736/S0022-4707.17.06853-0.
- Jennifer Ann Clarke, <u>Hyun Chul Jung</u>, Hyo-Jung Kang, Myong-Won Seo, Jong Kook Song (2016). Bone mineral density and physical fitness in former Taekwondo players. *Journal of the International Association for Taekwondo Research*, 3(2), 8-16
- 8. Nan Hee Lee, <u>Hyun Chul Jung</u>, Sukho Lee (2016). Red ginseng as an ergogenic aid: A systematic review of clinical trials. *Journal of Exercise Nutrition & Biochemistry*, 20(4), 13-19.
- 9. <u>Hyun Chul Jung</u>, Sukho Lee, Hyo-Jung Kang, Myong-Won Seo, Hyun-Bae Kim, Jong Kook Song (2016). Taekwondo training improves CVD risk factors in obese male adolescents. *Archives of Budo*, 12(1), 85-92.
- 10. Sung-Ho Yoo, <u>Hvun Chul Jung</u>, Myong-Won Seo, Hyun-Bae Kim, Jong-Kook Song (2016). Comparison of skeletal maturation, bone mineral density, aerobic and anaerobic capacity by children sports events. *Korean Society of Growth and Development*, 24(1), 37-44.
- 11. Yong-Seok Shin, Hyon Park, Jae-Kyeun Ryu, <u>Hyun Chul Jung</u>, Hyo-Jung Kang, Sung-Woo Jung, Myong-Won Seo, Sung-Woo Kim, Yong-Seok Oh, Jong-Kook Song (2015). Comparisons of body composition, physical fitness and isokinetic strength between short-track and speed skaters. *Korea Journal of Sports Science*, 24(6), 1-11.
- 12. Jong-Kook Song, Duk-Jae Han, Hyun Chul Jung, Hyo-Jung Kang, Myung-Won Seo, Jennifer Ann Clarke, Hyun-Bae

- Kim (2015). Does pre-season training improve body composition, physical fitness, and isokinetic muscle strength in female taekwondo athletes? *Journal of the International Association for Taekwondo Research*, 2(1), 6-15.
- 13. Myong-Won Seo, <u>Hyun Chul Jung</u>, Jong-Kook Song, Hyun-Bae Kim (2015). Effect of 8 weeks of pre-season training on body composition, physical fitness, anaerobic capacity, and isokinetic muscle strength in male and female collegiate tackwondo athletes. *Journal of Exercise Rehabilitation*, 11(2), 101-107.
- 14. Hyun-Bae Kim, <u>Hyun Chul Jung</u>, Jong Kook Song, Joo-Hee Chai, Eun-Jae Lee (2015). A follow-up study on the physique, body composition, physical fitness, and isokinetic strength of female collegiate Taekwondo athletes. *Journal of Exercise Rehabilitation*, 11(1), 57-64.
- 15. Jong-Kook Song, Joo-Hee Chai, Hyo-Jung Kang, Hyun Chul Jung, Myong-Won Seo, Min-Hyung Kim, Hyn-Bae Kim (2014). Tracking of body composition and physical fitness in boys and girls from age 7 to age 12 years. *Korean Journal of Sport Science*, 25(4), 664-679.
- 16. <u>Hyun Chul Jung</u>, Jong-Kook Song (2014). Relationship of abdominal fat, adipocytokine, bone mineral density, and bone turnover markers in obese male adolescents. *Korean Journal of Sport Science*, 25(2), 238-248.
- 17. Sung-Woo Jung, Yong-Seok Shin, <u>Hyun Chul Jung</u>, Jong-Kook Song (2014). Effects of aerobic & anaerobic fatigue on postural stability and lactic acid accumulation, *Korean Journal of Sport and Leisure Studies*, 56, 837-846.
- 18. Sun-Young Jung, <u>Hyun Chul Jung</u>, Jong-Kook Song (2013). The effects of Vinyasa yoga exercise on health-related fitness and cardiovascular disease risk factors in healthy women aged 40-50 years. *Korean Journal of Physical Education*, 52(3), 441-452.
- Jong-Kook Song, Hyo-Jung Kang, Hyun-Bae Kim, <u>Hyun Chul Jung</u> (2013). Effects of 12 weeks Taekwondo poomsae training on body composition, health-related fitness and dietary intake in male adolescents. *Taekwondo Journal of Kukkiwon*, 4(1), 61-76.
- 20. Hyo-Jung Kang, <u>Hyun Chul Jung</u>, Hyun-Bae Kim, Jong-Kook Song, (2012). Effects of 12 weeks Taekwondo poomsae training on body composition, functional fitness, and bone health-related hormone in older women. *Taekwondo Journal of Kukkiwon*, 3(2), 75-89.
- 21. Min-Hyung Kim, <u>Hyun Chul Jung</u>, Hyo-Jung Kang, Hyun-Bae Kim, Jong-Kook Song (2012). Effects of 12 weeks Taekwondo training on bone mineral density and calcemic hormones in male adoelescents. *Korean Journal of Sports Science*, 23(4), 740-752.
- 22. **Hyun Chul Jung**, Hyo-Jung Kang, Hyun-Bae Kim, Jong-Kook Song (2012). Body composition, aerobic, anaerobic power and exercise intensity in Taekwondo poomsae athletes. *Korean Journal of Sports Science*, 21(4), 1161-1172.
- Jong-Kook Song, Hyo-Jung Kang, <u>Hyun Chul Jung</u>, Hyun-Bae Kim (2011). Changes of skeletal maturity, bone mineral density and physical fitness on obese female adolescents: 3-year longitudinal study. *Korean Journal of Physical Education*, 50(6), 475-485.
- Jong-Kook Song, Hyo-Jung Kang, <u>Hyun Chul Jung</u>, Hyun-Bae Kim, Won-II Son (2011). Tracking of skeletal maturity, body composition and health-related fitness during adolescence. *Korean Society of Growth and Development*, 19(4), 261-270.
- Sang-Kyum Kim, Hyun-Bae Kim, Hyo-Jung Kang, <u>Hyun Chul Jung</u>, Jong-Kook Song (2011). The effect of 15 weeks detraining on body composition, physical fitness and vascular compliance in obese male adolescents. *Korean Journal of Sport and Leisure Studies*, 45, 901-911.
- 26. Si-Jung Kim, Hyun-Bae Kim, Hyo-Jung Kang, <u>Hyun Chul Jung</u>, Jong-Kook Song (2011). Effects of branched-chain amino acid (BCAA) on aerobic capacity and isokinetic muscle strength in collegiate male Taekwondo athletes. *Korean Journal of Sports Science*, 20(4), 1271-1282.
- Jong-Kook Song, <u>Hvun Chul Jung</u>, Hyo-Jung Kang, Hyun-Bae Kim (2010). Gender-related difference of body composition, aerobic, anaerobic capacity and isokinetic muscle strength in collegiate Taekwondo athletes. *Korean Journal* of Sport and Leisure Studies, 40, 699-708.

# **Progressed articles**

- Hyun Chul Jung, Soeun Jeon, Nan Hee Lee, Kyungun Kim, Minsoo Kang, Sukho Lee. Effects of exercise intervention on visceral fat in obese youth: meta-analysis. In writing
- Hyun Chul Jung, Myong Won Seo, Sukho Lee, Sung Woo Jung, Jong Kook Song. Vitamin D supplementation improves
  physical performance in taekwondo athletes. In writing.
- 3. <u>Hyun Chul Jung.</u> Myong Won Seo, Sukho Lee, Sung Woo Kim, Jong Kook Song. Vitamin D supplementation and immune function in elite taekwondo athletes. Preparation.
- 4. <u>Hyun Chul Jung</u>, Nan Hee Lee, Soeun Jeon, John D. Smith, Sukho Lee. Acute effects of elevation training mask on heart rate variability in healthy subjects. Preparation.

### **Conference Abstracts**

- 1. <u>Hyun Chul Jung</u>, Myong Won Seo, Sukho Lee, Sung Woo Jung, Jong Kook Song (2017). Effects of vitamin D supplementation on physical performance in collegiate taekwondo athletes, *Oral presentation, The 6<sup>th</sup> International Symposium for Taekwondo Studies*, Muju, Korea.
- Sung Eun Joo, Hyo Jung Kang, Myong Won Seo, <u>Hyun Chul Jung</u>, Sung Woo Kim, Jong Kook Song (2017). 12-week taekwondo training decreased body fat and improved health related fitness in obese women, *Poster presentation, The 6<sup>th</sup> International Symposium for Taekwondo Studies*, Muju, Korea.
- 3. <u>Hyun Chul Jung</u>, Nan Hee Lee, Soeun Jeon, John D. Smith, Michael Maspero, Sukho Lee (2017). Acute effects of elevation training mask on heart rate variability in healthy subjects. *Poster presentation, 2017 ACSM annual meeting, Denver, USA.*
- 4. Nan Hee Lee, <u>Hyun Chul Jung</u>, Gina Ok, Soeun Jeon, Minsoo Kang, Sukho Lee (2017). Effects of Korean wild ginseng drink on recovery from acute strenuous exercise. *Poster presentation, 2017 ACSM annual meeting, Denver, USA*.
- Soeun Jeon, <u>Hyun Chul Jung</u>, Nan Hee Lee, Gina Ok, Kyungun Kim, Minsoo Kang, Sukho Lee (2017). Effects of
  exercise intervention on visceral fat in obese youth: meta-analysis, *Poster presentation*, 2017 ACSM annual meeting,
  Denver, USA
- Gina Ok, Nan Hee Lee, <u>Hyun Chul Jung</u>, Soeun Jeon, Kyungun Kim, Minsoo Kang, Sukho Lee (2017). Effects of energy drink on power and strength performance: meta-analysis, *Poster presentation*, 2017 ACSM annual meeting, Denver, USA
- 7. <u>Hyun Chul Jung</u>, Nan Hee Lee, Gina Ok, Soeun Jeon, Sukho Lee (2016). Acute effects of different stretching protocols combined with potentiating exercise on flexibility and power performance in males. *Oral presentation, 2016 ACSM annual meeting, Boston, USA*
- 8. Sukho Lee, <u>Hvun Chul Jung</u>, Nan Hee Lee, Gina Ok (2016). Acute effects of ginseng supplementation on exercise performance, cognitive function, and fatigue recovery. *Poster presentation*, 2016 ACSM annual meeting, Boston, USA
- 9. Nan Hee Lee, <u>Hvun Chul Jung</u>, Gina Ok, Sukho Lee (2016). Acute kinesio taping does not alter muscular performance of lower extremity in obese adults. *Poster presentation*, 2016 ACSM annual meeting, Boston, USA
- Gina Ok, Nan Hee Lee, <u>Hvun Chul Jung</u>, Minsoo Kang, Sukho Lee (2016). Effects of 7 days Korea ginseng drink supplementation on fatigue recovery. *Poster presentation*, 2016 ACSM annual meeting, Boston, USA
- 11. Jong-Kook Song, Soo-Yeon Park, Stanley Sai Hui, Hyun-Bae Kim, <a href="Hyun Chul Jung">Hyun Chul Jung</a>, Hyo-Jung Kang, Yong-Suk Shin, Sung-Woo Jung, Min-Hyung Kim, Myung-Won Seo, Bo-Ram Woo (2015). Obesity, Physical activity and health-related physical fitness in Korean adolescents aged 12-15 years: The Asia-Fit Study. Poster presentation, 2015 ACSM annual meeting, San Diego, USA.
- 12. <u>Hyun Chul Jung</u>, Hyo Jung Kang, Jong Kook Song (2015). Effect of Taekwondo Training on abdominal visceral fat and bone metabolism in obese adolescents. *Poster presentation*, 2015 ACSM annual meeting, San Diego, USA
- 13. <u>Hyun Chul Jung</u>, Sukho Lee, Hyo-Jung Kang, Min-Hyung Kim, Myung-won Seo, Hyun-Bae Kim, Jong-Kook Song (2015). Taekwondo Training improve CVD risk factors and health-related fitness in obese adolescents. *Poster presentation, The 5<sup>th</sup> International Symposium for Taekwondo Studies, Chelyabinsk, Russia*

- Hyun Chul Jung, Sukho Lee, Min Hyung Kim, Myong-Won Seo, and Jong Kook Song (2015). Comparisons of physique, body composition, and somatotype by weight division between male and female collegiate taekwondo athletes. Poster presentation 2015 Texas ACSM annual conference, Austin, USA
- 15. Min-Hyung Kim, Hyun Chul Jung, Hyo Jung Kang, Myeong-Won Seo, Hyun- Bae Kim, Jong –Kook Song (2013). The effects of 16 weeks Head-down-tilt bed sleep on physique, body composition, vascular compliance and growth hormone in obese children. *Oral presentation, The 94th National Sports Festival Commemorative the 51st KAHPERD Conference, (Gachon Medical Campus, Incheon, Korea, Oct. 18-19).*
- 16. Myong-Won Seo, Min-Hyung Kim, Hyun-Bae Kim, Hyo-Jung Kang, <u>Hyun Chul Jung</u>, Jong-Kook Song (2013). Effect of 8 weeks off-season training program on body composition, physical fitness, anaerobic capacity, and isokinectic muscular strength in collegiate taekwondo athletes. *Oral presentation*, The 4th International Symposium for Taekwondo Studies (Puebla, Mexico, Jul. 15-16).
- 17. Hyo-Jung Kang, Hyun Chul Jung, Jong-Kook Song (2013). Effect of 12 weeks Taekwondo and resistance training on body composition, functional fitness, and bone markers in older women. Poster presentation, The 4<sup>th</sup> International Symposium for Taekwondo Studies (Puebla, Mexico, Jul. 15-16).
- 18. Jong-Kook Song, Hyo-Jung Kang, <u>Hyun Chul Jung</u>, Hyun-Bae Kim (2011). Trends in bone mineral density and physical fitness in obese adolescents. *Poster presentation, 2011 International Sport Science Congress (Keymyung University, Daegu, Korea, Aug. 25-27).*
- Jong-Kook Song, <u>Hyun Chul Jung</u>, Hyo-Jung Kang, Hyun-Bae Kim (2011). Aerobic and anaerobic capacity in collegiate Taekwondo athletes. *Oral presentation, The 3<sup>rd</sup> International Symposium for Taekwondo Studies (Hyundai hotel, Kyungju, Korea, Apr. 29-30).*

# **Book chapter**

 Hyun Chul Jung, Co-author (August 2017). Korean version of Essentials of Strength Training and Conditioning. Chapter 14. Warm-Up and Flexibility Training, Daehan Media, Seoul, Korea. *In progress*

### Certification

Mar 2015	Certificate of Basic Phlebotomy Skills, Austin, Texas
June 2014	Certificate of Taekwondo (the 6th dan of black belt), Kukkiwon, Seoul, Korea
December 2010	Certificate of Instructor of first aid, Red Cross, Suwon, Korea
February 2005	Certificate of Taekwondo instructor level 3, Ministry of Culture, Sports and Tourism, Seoul, Korea
February 2005	Certificate of Taekwondo Sparring referee level 3, Korea Taekwondo Association, Seoul, Korea
February 2005	Certificate of Taekwondo Sparring Instructor level 2, Ministry of Culture, Sports and Tourism, Seoul, Korea
September 2004	Certificate of Body building instructor level 3, Ministry of Culture, Sports and Tourism, Seoul, Korea
December 2001	Certificate of Hapkido (the 4thdan of black belt), Korea Hapkido Association, Seoul, Korea

# **Community Service**

August 2004	2004 Athens Olympic Public Delegation of Taekwondo demonstration, Kyungyang Newspaper
July 2001 -March 2004	Police College, Sri Lanka Volunteer activity, Physical Education (Taekwondo), Korea International Cooperation Agency
September 2000	2000 Sydney Olympic Public Delegation of Taekwondo demonstration, Chosun Newspaper

## Thesis committee

December 2016	Committee member, Master of Science (Kinesiology), Texas A&M University-San Antonio "The effects of blood flow restriction training on $VO_{2max}$ and 1.5 mile run time performance."
December 2016	Committee member, Master of Science (Kinesiology), Texas A&M University-San Antonio "Validation of the fitness tracker for the measurement of physical activity."
December 2017 - present	Committee chair, Master of Science (Kinesiology), University of Louisiana at Monroe "Effects of High Intensity Interval Training on Heart Rate Variability and CVD risk factors."

## **Article Reviews**

2014 Reviewer, International Journal of Exercise Science

- Present

2016 Reviewer, International Journal of Applied Sports Sciences

- Present

### **Research Skills**

◆Software- SAS and SPSS

**◆**Equipment

Physique: Martin's anthropometry

Body composition & Bone mineral density: DXA (Hologic, QDR-4500, USA), & Skinfold thickness measurement

Skeletal maturity: Tanner-White 3 methods

Isokinetic dynamometer: Cybex 770, USA, & Lafayette manual muscle testing system, USA

Aerobic capacity test: TrueOne 2400 (Medics, USA), Quark b<sup>2</sup> (Cosmed, USA)

Anaerobic capacity test: Wingate anaerobic test, Power cycle test

Vascular compliance: VP-1000 (Omron, Japan)

Fitness test: European fitness test, Senior functional fitness test

Blood analysis: ELISA, Spectrophotometer

Electromyography: Biopac system