

# Curriculum Vitae of Qin (Arthur) Zhu

Associate Professor Email: <u>qzhu1@uwyo.edu</u>

Office: Lab:

Corbett Building Office 111 Division of Kinesiology and Health University of Wyoming Laramie, WY 82071

Phone: 307-766-5752

Corbett Building Room 211A Division of Kinesiology and Health University of Wyoming Laramie, WY 82071

Phone: 307-766-5254

# **Career Objective:**

A devoted scholar studying and discovering the principles of human movement

➤ A knowledgeable educator promoting healthy living through vigorous movement

#### **Education:**

> **PhD** in *Human Performance*, minor in *Experimental Psychology* (2008)

Department of Kinesiology, Indiana University

Advisors: Dr. John B. Shea & Dr. Geoffrey P. Bingham

Dissertation Subject: Learning Affordance for Maximum Distance Throws in the

Context of Learning to Throw

➤ **M.Ed** in *Exercise Science* (2002)

Graduate School, Shanghai University of Sport

Advisor: Dr. Jian-Cheng Zhang & Dr. Dan-Ping Chen

Thesis Subject: The Research on Selective Attention in Badminton Competition with

the Technique of Spatial Occlusion

**B.S** in *Coaching Education* (1999)

Department of Coaching and Physical Education, Shanghai University of Sport

Advisor: Dr. Jin-Biao Dai

Honor Paper Subject: Study of the Specific Speed in Movement of Badminton

### **Professional Experience:**

➤ 2014 July – present:

Associate Professor and Director of UW Perceptual-Motor Behavior Laboratory, Department of Kinesiology and Health, *University of Wyoming* 

➤ 2008 – 2014 June:

Assistant Professor and Director of UW Perceptual-Motor Behavior Laboratory, Department of Kinesiology and Health, *University of Wyoming* 

➤ 2007 Jan – May:

Adjunct Faculty, Department of Kinesiology, *Indiana University* 

**>** 2003 − 2007:

Research Assistant in Perception and Action Laboratory, Department of Psychological & Brain Science, *Indiana University* 

**>** 2002 − 2006:

Associate Instructor and Research Assistant in Motor Learning and Control / Ergonomics Laboratories, Department of Kinesiology, *Indiana University* 

**>** 2000–2002:

Associate Instructor and Research Assistant, Department of Coaching and Physical Education, *Shanghai University of Sports* 

#### **Awards & Honors:**

- ➤ 2016: Public media attention on the research article "A dynamical analysis of the suitability of prehistoric spheroids from the Cave of Hearths as thrown projectiles" published in Scientific Reports:
  - UW News, "<u>UW Professor Determines Prehistoric Stone Objects May Have Served as Hunting</u> Weapons", August 17, 2016
  - The Huffington Post, "So That's What Those Stone Age 'Spheroids' Were For", August 19, 2016
  - Wyoming Public Radio, "<u>Prehistoric Stones Used As Weapons, UW Professor Finds</u>", August 24, 2016
- ➤ 2014/12/26: Science Friday featured a story entitled "Birdie In Flight: The Science of Badminton" based on the research article published in Journal of Sports Sciences. Video available at: <a href="http://www.sciencefriday.com/video/12/26/2014/birdie-in-flight-the-science-of-badminton.html">http://www.sciencefriday.com/video/12/26/2014/birdie-in-flight-the-science-of-badminton.html</a>
- ➤ 2012/12/6: The research article "Felt heaviness is used to perceive the affordance for throwing but rotational inertia does not affect either" (published in Experimental Brain Research) was rated as one of "NeuroStars" (Top Cited or Most Widely Discussed) articles by Springer Neuroscience.
- ➤ 2011: Public media attention on the research article "Human readiness to throw: the size-weight illusion is not an illusion when picking the best objects to throw" published in Evolution & Human Behavior:
  - *Indiana News*, January 24, 2011
  - Playbook: The Wired World of Sports / Science, January 24, 2011
  - ScienceDaily, January 24, 2011
  - USNews Science, January 25, 2011
  - New Hampshire Public Radio, February 03, 2011
  - National Evolutionary Synthesis Center (NESCent), February, 2011

Video available at Youtube: https://www.youtube.com/watch?v=vDzF092aaos

- ➤ 2006/10/05: Reported in the article "Badminton Phenom has Olympic dreams" on Herald-Times newspaper, http://www.heraldtimesonline.com/
- ➤ 2005/08/25: Reported in the article "A champion of and for his sport" on Herald-Times newspaper, http://www.heraldtimesonline.com/
- ➤ 2003/04/11: School of HPER Gallahue-Morris Graduate Research Award
- ➤ 2003 2004: Male Athlete of the Year, Club Sports, Division of IU Recreational Sports
- ➤ 2003 2004: Most Improved Club Sport, Club Sports, Division of IU Recreational Sports
- ➤ 2002 2005: School of HPER University Fellowship Award
- ➤ 2002/06/25: Best Graduate Thesis in Shanghai University of Sports
- ➤ 1995 1999: Outstanding student in Department of Coaching and PE at SUS

## **Research & Scholarship:**

#### Grants & Funding:

#### As Principal Investigator (PI)

Funded (total \$160,621):

1. Title: Wyoming INBRE Graduate Assistantship Funding Agency: NIH NIGMS IDeA program

Duration: 2018 ~ 2019

Amount: \$26,200 in salary plus tuition, fees and insurance

2. Title: Wyoming INBRE Graduate Assistantship

Funding Agency: NIH NIGMS IDeA program

Duration: 2017 ~ 2018

Amount: \$25,431 in salary plus tuition, fees and insurance

3. Title: "Developing A Novel Cognitive-Motor Assessment For Screening mTBI Among Active Young Adults"

Funding Agency: CHS Faculty Seed Grant, University of Wyoming

Duration: 2017 ~ 2018

Amount: \$7,150

4. Title: "Bridging Kinesiology and Health Programs Between UW and Universities in East China"

Funding Agency: International Program, University of Wyoming

Duration: 2017 Amount: \$2,000

5. Title: Wyoming INBRE Graduate Assistantship

Funding Agency: NIH NIGMS IDeA program

Duration: 2016 ~ 2017

Amount: \$21,060 in salary plus tuition, fees and insurance

6. Title: "Exploring The Transfer Effects Of Perceptual-Motor Learning Of Coordination"

Funding Agency: Shanghai Peak and High Plateau Disciplines Construction Grant: Phase I,

Shanghai University of Sport, Shanghai Ministry of Education, CHINA

Duration: 2015 June ~ 2017 June

Amount: ¥120,000 (equivalent to \$20,000)

7. Title: "Task-specific Bimanual Training To Improve Upper Limb Function Post Stroke"

Funding Agency: Mountain West IDeA Clinical and Translational Research –Infrastructure Network

(CTR-IN), University of Nevada, Las Vegas, NV (NIGMS# 1U54GM104944-01A)

Duration: 2014 Dec ~ 2015 June

Amount: \$10,980

8. Title: ITHS-RC2 Network Travel Grant for Research Presentation in 2014 Convention

Funding Agency: Institute of Translational Health Sciences, Regional Clinical Research Center Network, University of Washington

Duration: 2014 April Amount: \$1000

#### 9. Title: College of Health Sciences Faculty Travel Subsidy Grant

Funding Agency: College of Health Sciences, University of Wyoming

Duration: 2013 summer

**Amount: \$750** 

# 10. Title: "Investigating Changes in Perceptual-Motor Learning Rates as a Function of Aging in Bimanual Coordination"

Funding Agency: Key Laboratory Initiative Grant for International Collaboration, Shanghai University of Sport, Shanghai Ministry of Education, CHINA (#YK2012012)

Duration: 2012 June ~ 2013 June

Amount: ¥100,000 (equivalent to \$16,600)

#### 11. Title: College of Health Sciences Faculty Travel Subsidy Grant

Funding Agency: College of Health Sciences, University of Wyoming

Duration: 2012 summer

**Amount: \$750** 

#### 12. Title: College of Health Sciences Faculty Travel Subsidy Grant

Funding Agency: College of Health Sciences, University of Wyoming

Duration: 2011 summer

Amount: \$750

# 13. Title: "Investigating the Effect of Bimanual Transfer of Learning on Acquisition of Long Distance Aimed Overarm Throwing"

Funding Agency: Faculty-Grant-In-Aid, University of Wyoming

Duration: 2010 – 2011

Amount: \$7500

# 14. Title: "Investigating the Effect of Bimanual Transfer of Learning on Acquisition of Chinese Handwriting"

Funding Agency: CHS Faculty Seed Grant, University of Wyoming

Duration: 2010 – 2011 Amount: \$7500

#### 15. Title: "Investigating the Effect of String Tension on Striking Performance of Badminton Players"

Funding Agency: YONEX Sports and Division of K&H

Duration: 2009-2010 Amount: \$3,000

# 16. Title: "Interlimb Transfer of Learning and Electrostimulation of Acupoints: Their Respective and Coupled Effects on Acquisition of the Aimed Ballistic Motor Skill"

Funding Agency: NIH INBRE Equipment Grant, University of Wyoming

Duration: 2009-2010 Amount: \$14,000

#### 17. Title: School of HPER Dissertation Award

Funding Agency: School of HPER, Indiana University

Duration: 2006-2007 Amount: \$1,100

#### 18. Title: School of HPER University Fellowship

Funding Agency: Indiana University Duration: 2002–2005 (Annually)

Amount: \$1,100

#### 19. Title: School of HPER Travel-Grant-in-Aid Award

Funding Agency: School of HPER, Indiana University

Duration: 2002–2006 (Annually)

Amount: \$250

#### 20. Title: Department of Kinesiology Travel-Grant-in-Aid

Funding Agency: Department of Kinesiology, Indiana University

Duration: 2002–2006 (Annually)

Amount: \$250

#### <u>As Co-Principal Investigators (Co-PI or Consultant)</u>

Funded (total \$63,150):

### 1. Title: "The Effect of Taping Quadriceps and Hamstrings on Knee Joint Position Sense and ACL

Loading in a Fatigued Jump-landing Task" (with Graduate Student: Taylor Kuehn)

Funding Agency: CHS Student Research Grant, University of Wyoming

Duration: 2018-2019 Amount: \$1000

#### 2. Title: "Effects of Training Frequency on Learning and Transfer of a Novel Rhythmic Coordination"

(with Graduate Student: Shaochen Huang)

Funding Agency: CHS Student Research Grant, University of Wyoming

Duration: 2018-2019 Amount: \$1000

#### 3. Title: "Grasping a Ball with Static and Dynamic Ebbinghaus Illusion in a 3D Virtual Reality

**Environment**" (with Undergraduate Student: Russell N. Todd in Computer Science)

Funding Agency: Wyoming INBRE Undergraduate Research Fellowship

Wyoming NASA Space Grant Undergraduate Research Fellowship

Duration: 2018 – 2019 Amount: \$800 + \$2500

#### 4. Title: "The Speed-Accuracy Tradeoff Problem in an Immersive Virtual Environment" (with

*Undergraduate Student: Russell N. Todd* in Computer Science)

Funding Agency: Wyoming EPSCoR Undergraduate Research Summer Fellowship

Duration: 2017 Summer

Amount: \$4500

#### 5. Title: "Perception of Action in Vertical Dance" (with Undergraduate Student: Sean Feehan)

Funding Agency: Wyoming EPSCoR Undergraduate Research Award

Duration: 2016 Spring

**Amount:** \$800

6. Title: "Throwing At A Remote Target With The Constrained Release Angle" (with Undergraduate

Student: Dakota Anderson)

Funding Agency: Wyoming EPSCoR Undergraduate Research Summer Fellowship

Duration: 2015 Summer

Amount: \$4500

7. Title: "Combining Haptic And Visual Guidance In Perceptual-motor Learning of A Novel Pattern of Bimanual Coordination" (with Graduate Student: Shaochen Huang)

Funding Agency: CHS Student Research Grant, University of Wyoming

Duration: 2015-2016 Amount: \$1000

8. Title: College of Health Sciences Student Travel Subsidy Grant (with Graduate Student: Shaochen

Huang)

Funding Agency: College of Health Sciences, University of Wyoming

Duration: 2015 Summer

Amount: \$750

9. Title: "Bimanual Coordination Training To Improve Upper Limb Function Post Stroke" (with

*Undergraduate Student: Ryan Arey*)

Funding Agency: Wyoming EPSCoR Undergraduate Research Award

Duration: 2015 Spring

Amount: \$800

10. Title: "Use of Natural and Coordinated Two-handed Motion to Improve Gesture-based Interaction

**Design**" (with Dr. Amy Banic at Department of Computer Sciences, University of Wyoming) Funding Agency: UW office for Research & Economic Development, New Research Initiative

Duration: 2014-2015 Amount: \$25,000

11. Title: "Exploring The Effect of Active Music Making on Improving Functional Reach-to-Grasp

Movement " (with Undergraduate Student: Andrea Dahill)

Funding Agency: Wyoming EPSCoR Undergraduate Research Award

Duration: 2013 Spring

Amount: \$750

12. Title: "Kinesthetic Learning of Bimanual Coordination" (with Undergraduate Student: Todd Mirich)

Funding Agency: Wyoming EPSCoR Undergraduate Research Award

Duration: 2013 Spring

**Amount: \$750** 

13. Title: "The Effects of a Resistance Band on Gluteus Medius Muscle Activations and Hip Abduction

Torque during Jump Landing" (with Dr. Boyi Dai at University of Wyoming)

Funding Agency: CHS Faculty Seed Grant, University of Wyoming

Duration: 2013 – 2014

Amount: \$7500

#### 14. Title: "Developing and Validating an On-Site Biomechanical Testing Tool for ACL Injury

**Prevention**" (with Dr. Boyi Dai at University of Wyoming)

Funding Agency: UW Faculty-Grant-In-Aid

Duration: 2013-2014 Amount: \$7,500

#### 15. Title: College of Health Sciences Student Travel Subsidy Grant (with Graduate Student: Kathryn

Leonard)

Funding Agency: College of Health Sciences, University of Wyoming

Duration: 2012 Summer

Amount: \$750

#### 16. Title: "Determining the Effect of Visual Illusion on Discrete and Continuous Tapping Task" (with

Graduate Student: Sushma Alphonsa)

Funding Agency: CHS Student Research Grant, University of Wyoming

Duration: 2012-2013 Amount: \$1000

#### 17. Title: College of Health Sciences Student Travel Subsidy Grant (with Graduate Student: Sushma

Alphonsa)

Funding Agency: College of Health Sciences, University of Wyoming

Duration: 2012 Summer

**Amount: \$750** 

# 18. Title: "Can Observational Learning and Transcutaneous Electrical Nerve Stimulation Improve Gait Kinematics and Velocity in Persons with Chronic Stroke" (with Graduate Student: Jason Falvey)

Kinematics and velocity in Persons with Chronic Stroke" (with Graduate Student: Jason Falve)

Funding Agency: CHS Student Research Grant, University of Wyoming

Duration: 2012-2013 Amount: \$1000

#### 19. Title: **Biomedical Sciences Student Travel Subsidy Grant** (with Graduate Student: Jason Falvey)

Funding Agency: Biomedical Sciences Doctoral Program, University of Wyoming

Duration: 2012 Summer

**Amount: \$750** 

#### 20. Title: College of Health Sciences Student Travel Subsidy Grant (with Graduate Student: Rashmi

Ravi)

Funding Agency: College of Health Sciences, University of Wyoming

Duration: 2011 Summer

Amount: \$750

#### 21. Title: "Intermanual Transfer of Learning Long Distance Aimed Throwing" (with Undergraduate

Student: Todd Mirich)

Funding Agency: Wyoming INBRE Undergraduate Research Award

Duration: 2011 Spring

Amount: \$750

**Publications** (All data-based): accessible with following scholarly identity

RGID: https://www.researchgate.net/profile/Qin\_Zhu9/publications

ORCID: http://www.orcid.org/0000-0002-2088-6043

#### Refereed Book Chapters:

- 1. Pradhan, N., Benavides, A., **Zhu, Q.**, & Banic, A.U. (2015). Evaluation of Fatigue Measurement Using Human Motor Coordination for Gesture-Based Interaction in 3D Environments. In *International Symposium on Visual Computing* (pp. 443-452). Springer International Publishing. DOI: 10.1007/978-3-319-27863-6.
- 2. **Zhu, Q.**, & Bingham, G.P. (2009). Investigating the information used to detect an affordance for maximum distance throws. In J. Wagman & C. Pagano (Eds.) *Studies in Perception and Action X.*, Taylor & Francis Group, LLC. Boca Raton, FL.

#### Refereed Journals:

- 1. \*Hinshaw, T.J., Davis, D.J., Layer, J.S., Wilson, M.A., **Zhu, Q.**, Dai, B. (2018) Mid-flight lateral trunk bending increased ipsilateral leg loading during landing: a center of mass analysis. *Journal of Sports Sciences* DOI: 10.1080/02640414.2018.1504616 (IF = 2.539)
- 2. Bingham, G.P., Snapp-Childs, W., **Zhu**, **Q**. (2018) Information about relative phase in bimanual coordination is modality specific (not amodal), but kinesthesis and vision can teach one another. *Human Movement Science*, 60, 98-106. (IF = 1.841)
- 3. \*Beard, B., McCollum, M.R., Hinshaw, T., Layer, J.S., Wilson, M.A., **Zhu, Q.**, Dai, B. (2018). Lower extremity kinematics differed between a controlled drop-jump and volleyball-takeoffs. *Journal of Applied Biomechanics* DOI: 10.1123/jab.2017-0286 (IF = 1.053)
- 4. Dai, B., Hinshaw, T.J., Trumble, T.A., Wang, C., Ning, X., & **Zhu, Q.** (2018). Lowering minimum eye height to increase peak knee and hip flexion during landing. *Research in Sports Medicine*. DOI: 10.1080/15438627.2018.1447477 (IF = 1.806)
- 5. \*Stephenson, M.L., Hinshaw, T.J., Wadley, H.A., **Zhu, Q.**, Wilson, M., Byra, M., & Dai, B.Y. (2017) Effects of timing of signal indicating jump directions on knee biomechanics in jump-landing-jump tasks. *Sports Biomechanics*, DOI:10.1080/14763141.2017.1346141 (IF = 0.826)
- 6. **Zhu, Q.**, Mirich, T., Huang, S.C., Snapp-Childs, W., Bingham, G. (2017) When kinesthetic information is neglected in learning a novel bimanual rhythmic coordination. *Attention, Perception & Psychophysics*, 79(6), 1830-1840. (IF = 1.863)
- 7. \*Peng, J.Y., Li, A.M., & **Zhu, Q.** (2017) Motor expertise interacts with physical enactment to enhance action memory. *Journal of Sports Sciences*. *36*(2), 198-205. DOI:10.1080/02640414.2017.1291985 (IF = 2.142)
- 8. Dai, B.Y., Cook, R.F., Meyer, E.A., Sciascia, Y., Hinshaw, T.J., Wang, C.Y., **Zhu, Q.** (2017) The effect of a secondary cognitive task on landing mechanics and jump performance. *Sports Biomechanics*, DOI: 10.1080/14763141.2016.1265579 (IF = 1.154)
- 9. \*Alphonsa, S., Dai, B.Y., Benham-Deal, T., & **Zhu, Q.** (2016) Interaction of perception and action in discrete and continuous rapid aiming tasks. *Journal of Motor Behavior*, 49(5), 524-532. DOI: 10.1080/00222895.2016.1241752 (IF = 1.418)
- 10. Wilson, A., **Zhu, Q.**, Stanistreet, I., Barham, L., & Bingham, G. (2016) A dynamical analysis of the suitability of prehistoric spheroids from the Cave of Hearths as thrown projectiles. *Scientific Reports*, 6: 30614. DOI:10.1038/srep30614 (IF = 5.228).
- 11. Wilson, A., Weightman, A., Bingham, G., & Zhu, Q. (2016). Using task dynamics to quantify the

- affordances of throwing for distance and accuracy. *Journal of Experimental Psychology: Human Perception and Performance*, 42(7), 965-981. (IF = 3.358)
- 12. \*Guo, W., Wang, B., Lu, Y., **Zhu, Q**, Shi, Z., & Ren, J. (2016) The relationship between different exercise modes and visuospatial working memory in older adults: a cross-sectional study. *PeerJ* 4: e2254. doi.org/10.7717/peerj.2254. (IF = 2.183)
- 13. Dai, B., Stephenson, M.L., Ellis, S., Donohue, M.R., Ning, X., & **Zhu, Q.** (2016) Concurrent tactile feedback provided by a simple device increased knee flexion and decreased impact ground reaction forces during landing. *Journal of Applied Biomechanics*, 32(3):248-253. (IF = 0.984)
- 14. \*Fisher, H., Stephenson, M.L., Graves, K.K., Hinshaw, T.J., Smith, D.T., Wilson, M.A., **Zhu, Q.**, & Dai, B. (2016). The relationship between force production during isometric squats and knee flexion angles during landing. *Journal of Strength and Conditioning Research*, 30(6):1670-1679. (IF = 2.075)
- 15. \*Alphonsa, S., Dai, B.Y., Bengham-Deal, T., & **Zhu, Q.** (2016). Combined visual illusion effects on the perceived index of difficulty and movement outcomes in discrete and continuous Fitts' tapping. *Psychological Research*, 80(1), 55-68. (IF = 2.863)
- 16. \*Heinbaugh, E.M., Smith, D.T., **Zhu, Q.**, Wilson, M.A., & Dai, B.Y. (2015). The effect of time-of-day on static and dynamic balance in recreational athletes. *Sports Biomechanics*, 14(3):361-73. (IF = 0.867)
- 17. Wilson, M., Dai, B., **Zhu, Q.**, & Humphrey, N. (2015). Estimating trunk muscle compressive force in rope and harness vertical dance. *Journal of Dance Medicine and Science*, 19(4), 163-172. http://dx.doi.org/10.12678/1089-313X.19.4.163. (SJR = 0.23)
- 18. \*Donohue, M. R., Ellis, S. M., Heinbaugh, E. M., Stephenson, M. L., **Zhu, Q.**, & Dai, B. (2015). Differences and correlations in knee and hip mechanics during single-leg landing, single-leg squat, double-leg landing, and double-leg squat tasks. *Research in Sports Medicine*, 23(4), 394-411. (IF = 1.704)
- 19. \*Guo, W., Ren, J., Wang, B., **Zhu, Q.** (2015). Effects of relaxing music on mental fatigue induced by a continuous performance task: Behavioral and ERPs evidence. *PLoS ONE* 10(8): e0136446. doi: 10.1371/journal.pone.0136446 (IF = 3.534)
- 20. Ren, J., Huang, S.C., Zhang, J.C., **Zhu, Q.**, Wilson, A.D., Snapp-Childs, W., & Bingham, G.P. (2015) The 50's Cliff: A decline in perceptuo-motor learning, not a deficit in visual motion perception. *PLoS ONE* 10(4): e0121708. doi: 10.1371/journal.pone.0121708 (IF = 3.534)
- 21. **Zhu, Q.**, & Bingham, G.P. (2014). Seeing where the stone is thrown by observing a point-light thrower: Perceiving the effect of action is enabled by information not motor experience. *Ecological Psychology*, 26, 229-261. (IF = 2.097)
- 22. Dai, B., Heinbaugh, E.M., Ning, X. & **Zhu, Q.** (2014). A resistance band increased internal hip abduction moment and gluteus medius activation during pre-landing and landing. *Journal of Biomechanics*, 47(15), 3674–3680. (IF = 2.716).
- 23. **Zhu, Q.**, Mirich T., & Bingham, G.P. (2014). Perception of relative throw-ability. *Experimental Brain Research*, 232(2), 395-402. (IF = 2.221)
- 24. **Zhu**, **Q.** Expertise of using striking techniques for power stroke in badminton (2013). *Perceptual and Motor Skills*, 117(2), 427-441. (IF = 0.655)
- 25. **Zhu**, **Q.** (2013). Perceiving the affordance of string tension for power strokes in badminton: Expertise allows effective use of all string tensions. *Journal of Sports Sciences*, 3I(11), 1187-1196. (IF = 2.095)
- 26. **Zhu, Q.**, Shockley, K., Riley, M.A., Tolston, M.T., & Bingham, G.P. (2013). Felt heaviness is used to perceive the affordance for throwing but rotational inertia does not affect either. *Experimental Brain*

- Research, 224, 2, 221-231. (IF = 2.221)
- 27. **Zhu, Q.**, & Bingham, G.P. (2011). Human readiness to throw: the size-weight illusion is not an illusion when picking the best objects to throw. *Evolution and Human Behavior*, 32, 288-293. (IF = 3. 946)
- 28. **Zhu, Q.**, & Bingham, G.P. (2010) "The Size-Weight Illusion Is Not An Illusion When Picking The Best Objects to Throw". Available from Nature Precedings <a href="http://hdl.handle.net/10101/npre.2010.4584.1">http://hdl.handle.net/10101/npre.2010.4584.1</a>. (IF = 2.927)
- 29. **Zhu, Q.**, & Bingham, G.P. (2010). Learning to perceive the affordance for long distance throwing: Smart mechanism or function learning. *Journal of Experimental Psychology: Human Perception and Performance*, *36*, 4, 862-875. (IF = 3.061)
- 30. **Zhu, Q.**, & Bingham, G.P. (2009). Learning to throw to maximum distances: Do release angle and speed reflect affordances for throwing? *Human Movement Science*, 28, 6, 708-725. (IF = 2.064)
- 31. **Zhu, Q.**, & Bingham, G.P. (2008). Is hefting to perceive the affordance for throwing a smart perceptual mechanism? *Journal of Experimental Psychology: Human Performance and Perception*, 34, 4, 929-943. (IF = 3.061)
- 32. Ren, J., Zhang, J.C., Yang, Y., Jin, Y.H., **Zhu, Q.**, & Li, N.H. (2001). Research on attentional demand during implicit motor learning. *Journal of Psychological Science*, 24(4), Shanghai, China. (CSSCI-IF = 0.977)
- 33. Ren, J., Zhang, J.C., Yang, Y., Jin, Y.H., **Zhu, Q.**, & Li, N.H. (2001). The implicit learning and distractive practice in motor skill learning: Coping with the stress. *Sport Science*, *21*(3), Beijing, China. (CSSCI-IF = 1.950)
- 34. **Zhu, Q.**, Zhang, J.C., Jin, Y.H., & Li, N.H. (2000). Status quo of research on selective attention in contemporary sports. *Academic Journal of Shanghai Physical Education Institute*, 24(4), Shanghai, China. (CSSCI-IF = 1.543)
- \* Denotes student thesis or dissertation that gets published

#### > Presentations:

#### International / National

- 1. Huang, S.C., Dai, B. & **Zhu, Q.** "Using coordination tasks to screen people with a history of mTBI" Oral presentation at the NASPSPA conference, Denver, CO, June 2018. Refereed abstract published on *Journal of Sport & Exercise Psychology, Sxx*, xx.
- 2. **Zhu, Q.** "Scope and Implications of Motor Behavior Research" Invited WeChat Lecture by International Chinese Society for Physical Activities and Health (ICSPAH), October 28, 2017.
- 3. Huang, S.C., **Zhu, Q.** "Establishing thresholds for visual discrimination of intrinsic and novel coordination patterns" Free communication/slide session at the 2017 Annual Meeting, World Congress on Exercise is Medicine, and World Congress on the Basic Science of Exercise and the Brain of the American College of Sports Medicine, Denver Convention Center, Denver, Colorado, June 2, 2017.
  - Refereed abstract published in Medicine and Science in Sports and Exercise, 49:5 Supplement.
- 4. Wilson, A., **Zhu, Q.**, Stanistreet, I., Barham, L., & Bingham, G. "*Task Dynamics and The Affordances of Prehistoric Spheroids for Throwing*". Oral paper presented at European Workshop on Ecological Psychology, Groningen, Netherlands, July 6, 2016.
- 5. Meyer, E., Sciascia, Y., Cook, R., Hinshaw, T., Wang, C.Y., Zhu, Q., Dai, B.Y. "The Effect of a

- Secondary Cognitive Task on Lower Extremity Biomechanics and Performance during Landing" Poster presented at the 40<sup>th</sup> annual conference of the American Society of Biomechanics, Raleigh, NC, August 2016.
- 6. Dai, B.Y., Hinshaw, T., Trumble, T., Cosgrove, M., Wang, C.Y., **Zhu**, **Q.**, "Lowering Eye Height to Increase Knee and Hip Flexion during Landing" Poster presented at the 40<sup>th</sup> annual conference of the American Society of Biomechanics, Raleigh, NC, August 2016.
- 7. Bingham, G.P., Snapp-Childs, W., **Zhu, Q.**, Huang, S.C. "On the importance of inter-sensory redundancy: Learning a new rhythmic coordination pattern using one mode (vision vs kinesthesis) can teach performance using the other mode" Poster presented at the Vision Sciences Society (VSS) conference, Naples, FL, May 2016.

  Refereed abstract published on *Journal of Vision*
- 8. Huang, S.C., & **Zhu, Q.**, "Combined Visual-Kinesthetic Training Alleviated Visual Dominance Effect in Visual Learning of Bimanual Coordination" Poster presented at the NASPSPA conference, Montreal, Canada, June 2016.

  Refereed abstract published on Journal of Sport & Exercise Psychology, \$38, 70.
- 9. Hart, T.P., & **Zhu, Q.**, "Effects of Pattern Running vs. Reactive Initiation Training on Badminton On-court Agility" Poster presented at the NASPSPA conference, Montreal, Canada, June 2016. Refereed abstract published on Journal of Sport & Exercise Psychology, S38, 65.
- 10. Peng, J.Y., & Zhu, Q., "The Effects of Memory Style and Motor Experience on Action Memory" Poster presented at the NASPSPA conference, Montreal, Canada, June 2016. Refereed abstract published on Journal of Sport & Exercise Psychology, S38, 241.
- 11. Wilson, M., Feehan, S., Peng, J.Y., Dai, B.Y., & **Zhu, Q.** "Visual discrimination of dance movements performed on the ground and in the air" 10-minute verbal presentation at the International Association for Dance Medicine & Science (IADMS) 26th Conference, Hong Kong, October 20 -23, 2016.
- 12. **Zhu, Q.**, Dahill, A., Tryon, D., Dai, B., Lv, J. "The influence of musical training on lifting bottles of unknown weights" Poster presented at the NASPSPA conference, Portland, OR, June 2015. Refereed abstract published on *Journal of Sport & Exercise Psychology*, S37, 69.
- 13. Huang, S.C., Ren, J., Zhang, J., Bingham, G., **Zhu, Q.**, "Haptic information is more reliable than visual information in learning a novel pattern of bimanual coordination" Oral paper presented at the NASPSPA conference, Portland, OR, June 2015.

  Refereed abstract published on *Journal of Sport & Exercise Psychology*, S37, 44.
- 14. Stephenson, M., Hinshaw, T., Trumble, T., **Zhu, Q.**, Dai, B. "The effects of stimulus timing on the kinematics of a directed jump landing" Oral paper presented at the 39<sup>th</sup> annual conference of the American Society of Biomechanics, Columbus, OH, August 2015.
- 15. **Zhu, Q.**, Huang,S.C., Ren, J., Zhang, J.C., Wilson, A.D., Snap-Childs, W., & Bingham, G.P. "Older adults exhibit impaired perceptuo-motor learning of novel coordination patterns and it is not just poor visual motion perception" Poster presented at the NASPSPA conference, Minneapolis, MN, June 2014. Refereed abstract published on *Journal of Sport & Exercise Psychology*, S36, 57.
- 16. Mirich, T., Zhu, Q., Wilson, A.D., & Bingham, G.P. "Learning of novel coordination patterns is information mode specific and vision dominates" Poster presented at the NASPSPA conference, Minneapolis, MN, June 2014.
  Refereed abstract published on Journal of Sport & Exercise Psychology, S36, 44.
- 17. Alphonsa, S., Dai, B.Y., Benham-Deal, T. & **Zhu, Q.** "The differential effect of the perceived index of difficulty on the movement outcomes of discrete and continuous tapping" Oral paper presented at the NASPSPA conference, Minneapolis, MN, June 2014.

- Refereed abstract published on *Journal of Sport & Exercise Psychology*, S36, 18.
- 18. Dai, B., **Zhu, Q.**, Ning, X., & Leigh, S. "Video-based motion capture to calculate 3D knee kinematics and kinetics during landing" Poster presented at the 7th World Congress of Biomechanics, Boston, MA, July 2014.
- 19. Dai, B., Heignbaugh, E.M., Ning, X., **Zhu, Q.**, "A resistance band increased internal hip abduction moments and gluteus medius activation during pre-landing and landing" Oral paper presented at the 7th World Congress of Biomechanics, Boston, MA, July 2014.
- 20. Dai, B., Stephenson, M., Ellis, S., Donohue, M., & **Zhu, Q.** "Landing training with tactile feedback helped to increase maximum knee flexion angle and decrease impact forces" Poster presented at the 32nd International Society of Biomechanics in Sport (ISBS), Johnson City, TN, July, 2014.
- 21. **Zhu, Q.** "On the Affordance of Throwing" Invited oral presentation to the Department of Applied Psychology, Shanghai University of Sport, Shanghai, CHINA, June 6, 2013.
- 22. **Zhu, Q.** "Judging the Destination of Throwing in Point Light Display: Testing the Motor Theory for Perception of Action" Invited oral presentation in the forum of "On the Motor Theory of Biological Motion Perception: Events and Actions as Dynamically Modeled Spatial-Temporal Objects" at the Department of Physical Education, Shanghai University of Finance and Economics, Shanghai, CHINA, June 7, 2013.
- 23. Donohue, M.R., Ellis, S.M., Heinbaugh, E.M., **Zhu, Q.**, & Dai, B. "Similarities and differences in knee mechanics between single leg squat and single leg jump" Poster presented at the 37<sup>th</sup> annual meeting of the American Society of Biomechanics (ASB), Omaha, NE, Aug 2013.
- 24. Wilson, M., Dai, B., **Zhu, Q.,** & Humphrey, N. "Estimating trunk compression force in vertical dance". Poster presented at International Association for Dance Medicine & Science Meeting. Seattle, WA, 2013.
- 25. Wilson, M., Dai, B., **Zhu, Q.**, & Humphery, N. "Estimating trunk muscle force in vertical dance" Poster presented at the 37<sup>th</sup> annual meeting of the American Society of Biomechanics (ASB), Omaha, NE, Aug 2013.
- 26. Alphonsa, S., & **Zhu, Q.** "The perceived index of difficulty determines the accuracy of the discrete tapping" Poster presented at the NASPSPA conference, New Orlean, LA, June 2013. Refereed abstract published on *Journal of Sport & Exercise Psychology*, \$35, 17.
- 27. **Zhu, Q.**, Wilson, A.D., & Bingham, G.P. "Common coding not supported: Expert and novice throwers viewing point-light displays of self vs other's throwing motions to judge target locations" Poster presented at the Vision Sciences Society (VSS) conference, Naples, FL, May 2013. Refereed abstract published on *Journal of Vision*, 13(9), 761.
- 28. Mirich, T., **Zhu, Q.**, Bingham, G.P. "Relative throw-ability of objects of varying size and weight is perceivable as revealed by magnitude estimation methods" Poster presented at the Vision Sciences Society (VSS) conference, Naples, FL, May 2013. Refereed abstract published on *Journal of Vision*, 13(9), 680.
- 29. Wilson, A.D., Weightman, A., **Zhu, Q.**, Bingham, G.P. "Using dynamical simulations to quantify affordances in the task space for throwing to hit distant targets" Poster presented at the Vision Sciences Society (VSS) conference, Naples, FL, May 2013. Refereed abstract published on *Journal of Vision*, 13(9), 749.
- 30. **Zhu, Q.**, Lv, J. "Expert release control in response to changing spatial properties of a remote target" Poster presented at the NASPSPA conference, Honolulu, HI, June 2012. Refereed abstract published on *Journal of Sport & Exercise Psychology*, *S34*, 149.

- 31. Alphonsa, S., & **Zhu, Q.** "The perceived index of difficulty affected accuracy more than movement time in a rapid tapping task" Poster presented at the NASPSPA conference, Honolulu, HI, June 2012. Refereed abstract published on *Journal of Sport & Exercise Psychology*, S34, 65.
- 32. Falvey, J., & **Zhu**, **Q**. "The effect of transcutaneous electrical nerve stimulation combined with mental practice to learn a novel fine motor skill" Poster presented at the NASPSPA conference, Honolulu, HI, June 2012.
  - Refereed abstract published on Journal of Sport & Exercise Psychology, S34, 83.
- 33. **Zhu, Q.**, Leonard, K., & Falvey, J. "The roles of self identity and expertise in judging spatial properties of a hidden remote target in point-light-display of aimed throwing" Poster presented at the NASPSPA conference, Honolulu, HI, June 2012. Refereed abstract published on *Journal of Sport & Exercise Psychology*, S34, 103.
- 34. **Zhu, Q.** "Assessing string tension effect on badminton power stroke performed by players at different levels" Poster presented at the 12<sup>th</sup> Measurement and Evaluation Symposium: New approaches in measuring and assessing physical activity, Boston, MA, March, 2012.
- 35. **Zhu, Q.** "Perception and Action Approach to Study Skill Acquisition in Sport and Rehabilitation" Invited oral presentation to the Department of Psychology, Suchow University, Suzhou, CHINA, June, 2011.
- 36. **Zhu**, **Q.** "Research on Affordances in Sport" Invited oral presentation to the Graduate School, Shanghai University of Sport, Shanghai, CHINA, June, 2011.
- 37. **Zhu, Q.**, & Ravi, R.P. "Effects of target height and distance on the release control of long distance aimed overarm throwing" Poster presented at the 8th Progress in Motor Control Meeting (PMC VIII), University of Cincinnati, Ohio, USA, July, 2011. (Accepted but withdrew due to graduate student leaving).
- 38. **Zhu, Q.** & Ravi, R.P. "Expert Throwers can Perceive Spatial Properties of a Remote Target in Point-Light Display of Self Throws prior to Release" Poster presented at the NASPSPA Conference, Burlington, VT, June, 2011.

  Refereed abstract published on Journal of Sport & Exercise Psychology, S33, 98.
- 39. **Zhu, Q.** "Does String Tension Make Sense to Badminton Players?- A Study on The Affordance of String Tension" Oral paper presented at the NASPSPA Conference, Burlington, VT, June, 2011. Refereed abstract published on *Journal of Sport & Exercise Psychology*, S33, 125.
- 40. **Zhu, Q.**, & Bingham, G.P. "Investigating the Information Used to Detect an Affordance for Maximum Distance Throws" Poster presentation at the 15th International Conference on Perception and Action, University of Minnesota, Saint Paul, Minnesota, USA, July, 2009. Refereed chapter paper published in J. Wagman & C. Pagano (Eds.) Studies in Perception and Action X., Taylor & Francis Group, LLC. Boca Raton, FL.
- 41. **Zhu, Q.**, Dapena, J., Shea, J.B., & Bingham, G.P. "Effects of Object Size and Weight on the Kinematics of Throwing During Acquisition of Maximum Distance Throws" Poster presented at the NASPSPA Conference, Austin, TX, June 2009. Refereed abstract published on Journal of Sport & Exercise Psychology, 31S, 107.
- 42. Bingham, G.P & **Zhu, Q**. "Hefting to Perceive Affordances for Maximum Throwing Distances is a Smart Perceptual Mechanism" Oral paper presented at the International Conference on "A Natural-Physical Perspective on Perception-Action-Cognition", Storrs, CT, June, 2008.
- 43. **Zhu, Q.**, & Shea, J.B. "The Effect of Practice Order on Learning Three Simple Motor Tasks" Poster presented at the NASPSPA/ACSM Conference, Denver, CO, June, 2006. Refereed abstract published on *Journal of Sport & Exercise Psychology*, 28S, 197.

- 44. **Zhu, Q.**, & Shea, J.B. "The Grouping Effect on Simple Motor Task Switching", Seminar paper presented at the NASPSPA Conference, St. Pete's Beach, FL, June, 2005. Refereed abstract published on *Journal of Sport & Exercise Psychology*, 27S, 164.
- 45. Parry, T.E., Shea, J.B. & **Zhu**, **Q.** (2005). "*Task Switching effects of a single-segment stimulus on the performance of a multi-segment motor task*" Seminar paper presented at the NASPSPA Conference, St. Pete's Beach, FL, June, 2005. Refereed abstract published on *Journal of Sport & Exercise Psychology*, 27S, 121.
- 46. **Zhu, Q.**, & Shea, J.B. "The Effect of Switch Practice and Amount of Pre-switch Trials On Task Switching Performance" Oral paper presented at the AAHPERD National Convention, Chicago, IL, April, 2005.
- 47. **Zhu, Q.**, & Shea, J.B. "The Effect of Practice on Task Switching Performance" Poster presented at the NASPSPA Conference, Vancouver, Canada, June, 2004. Refereed abstract published on *Journal of Sport & Exercise Psychology*, 26S, 205.
- 48. **Zhu, Q.**, & Chen, D.P. "Research on Selective Attention in Modern Badminton Competition with the Technique of Spatial Occlusion" Poster presented at the NASPSPA Conference, Savannah, GA, June, 2003.
  - Refereed abstract published on Journal of Sport & Exercise Psychology, 25S, 144.

#### Regional / State

- 1. **Zhu, Q.** "Perceptual-motor Learning of Bimanual Coordination and Applications" invited talk by Department of Health and Exercise Science, Colorado State University, Fort Collins, CO, April 29, 2016.
- 2. **Zhu**, **Q.** "Distinct Visual-motor Control in Discrete and Continuous Fitts' Tapping" invited talk by Department of Psychology, Colorado State University, Fort Collins, CO, February 13, 2015.
- 3. **Zhu, Q.**, Shea, J.B., & Bingham, G.P. "How People Became Sensitive to the Throwability of an Object: Learning Affordances while Learning to Throw" Poster presented at the 79<sup>th</sup> Annual Convention of Rocky Mountain Psychological Association, Albuquerque, NM, April, 2009.

#### University / Local

- 1. **Zhu, Q.** "Studies of Throwing Affordances Inform the Function of Prehistoric Spheroids from the Cave of Hearths" Invited Talk presented at UW Anthropology Seminar, Laramie, WY, December 8, 2017.
- 2. **Zhu, Q.** "Functional Release Control for Successful Long Distance Targeted Throwing" Oral paper presented at the College of Health Sciences Grand Rounds, Laramie, WY, April, 2013.
- 3. **Zhu**, **Q.** "Does String Tension Make Sense to Badminton Players: A Study of the Affordances of String Tension" Oral paper presented at the K&H Research Seminar, Laramie, WY, April , 2011.
- 4. **Zhu, Q.** "THE SIXTH SENSE: Hefting to Perceive the "Throwability" A Smart Perception Emerged from Action" Invited oral paper presented at the UW Physiology Club Seminar, Laramie, WY, April, 2009.
- 5. Bingham, G.P. & **Zhu**, **Q**. "Hefting to perceive the Affordance for Maximum Throwing Distance is a Smart Perceptual Mechanism" Invited oral paper presented at the Cognitive Lunch at Indiana University, Bloomington, IN, November , 2008.
- 6. **Zhu, Q.** "The Perceptual Information of the Affordance for Throwing" Invited oral presentation at the Center for Cardiovascular Research and Alternative Medicine (C-CRAM), University of Wyoming,

#### > Other Publications:

- 1. **Zhu, Q.**, & Chen, D.P. (2002). "The research on selective attention in badminton competition with the technique of Spatial Occlusion", *Unpublished Thesis for Master Degree, Shanghai University of Sport.*
- 2. **Zhu**, **Q**., & Dai, J.B. (1999). "Study of the speed in movement of Badminton", *China Badminton Coach*, Shanghai, China.

### > Patent or Copyright

- 1. Software Rendering Real-time Motion Tracking Using Body-attached Sensors in Virtual Reality by Todd, R.N. and **Zhu, Q.** 
  - ➤ Software copyright (TXu002080957) effective on December 21, 2017.
  - ➤ NASA Technology Transfer System e-NTR #: 1526664571 Case #: HQN-11545-1 Docket #: 18-086 Report Date: 2018-06-25

#### > Work in Progress:

#### *Manuscript in Review:*

- 1. Dong, M., Lyu, J., & **Zhu**, **Q**. Agility training for novice badminton players: To be physical or mental? Submitted to *International Journal of Sports Medicine* (IF = 2.453)
- 2. \*Huang, S., Dai, B.Y., **Zhu, Q.** Advantage of early focus on visual information in bi-modal training of bimanual coordination. Submitted to *Psychological Research* (IF = 2.329)
- 3. \*Lu, Y., Shi, C., **Zhu, Q.**, Ren, J. Quantifying anticipatory skill of table tennis players based on Hick's Law. Submitted to *European Journal of Sport Science* (IF = 2.690)
- 4. Wilson, A.D., Huang, S., Bingham, G.B., **Zhu, Q.** Age and the egocentric constraint on coordination stability: An exploratory report. Submitted to *Cortex* (IF = 4.279)

#### Manuscripts in Progress:

- 1. Wilson, A.D, **Zhu**, **Q**., Bingham, G. Affordances and the Ecological Approach to Throwing for Long Distance and Accuracy. Invited chapter to be included in *Handbook of Embodied Cognition and Sport Psychology*, MIT Press.
- 2. \*Hart, T., & **Zhu**, **Q**. The expertise of inter-joint coordination in maximum effort directional jumps. In preparation to be submitted to *Human Movement Science* (IF=1.841)

#### Research Projects in Progress:

- 1. "Developing a Novel Visual-Motor Coordination Assessment for Screening m-TBI" (data collection is undergoing)
- 2. "Perceiving Configural Forms in Vertical Dancing" (data collection is undergoing)
- 3. "Grasping a Ball with Static and Dynamic Ebbinghaus Illusion in a 3D Virtual Reality Environment" (in preparation)
- 4. "The Effect of Taping Quadriceps and Hamstrings on Knee Joint Position Sense and ACL Loading in Fatigued Jump-landing Task" (in preparation)
- 5. "Effect of Consistency of Visual and Kinesthetic Information on Producing Intrinsic Bimanual Coordination Pattern" (in preparation)

- 6. "The Inter-person coordination in badminton and table tennis plays" (in preparation)
- 7. "Learning Affordance of Throwing for Long Distance and Accuracy" (in preparation)

#### > Student Research Supervision

#### <u>Undergraduate Research Advisees (13)</u>

- 1. Autumn Hopkin, 2018–2019, funded by McNair Scholars Program
- 2. *Russell Todd*, 2017–2019, received INBRE and NASA Space Grant undergraduate research fellowship
- 3. Andrew Amen, 2016 spring & Summer
- 4. Regan Wilson, 2016 spring
- 5. Sean Feehan, 2016 spring, received EPSCoR undergraduate research fellowship
- 6. Dakota Anderson, 2015 summer, received EPSCoR undergraduate summer research fellowship
- 7. Ryan Arey, 2015 spring, received EPSCoR undergraduate research fellowship
- 8. *Kara Purcelley*, 2015 2016
- 9. Andrea Dahil, 2013 fall, received EPSCoR undergraduate research fellowship
- 10. Rob Whittaker, 2012 spring
- 11. *Brandon Stoner*, 2012 summer
- 12. Caitlin Ann Hudak, 2011spring
- 13. *Todd Mirich*, 2011–2014, supported by the ASPIRE program and received INBRE/EPSCoR undergraduate student research fellowship

#### Graduate Research Advisees (18)

As a Chair of Student Research Committee:

- 1. *Thomas Hart*, Plan A Master student, 2015–2017
- 2. *Shaocheng Huang*, Plan A Master student, 2014–2016

Thesis Title: Combining visual and haptic guidance to maximize the effectiveness of perceptual-motor learning of bimanual coordination

*Note:* Shaochen was accepted by Biomedical Science doctoral program at the University of Wyoming after graduation, still under my mentorship.

3. Sushma Alphonsa, Plan A Master student, 2011–2013

Thesis Title: Effects of visual illusions on discrete and continuous tapping performance Note: Sushma was accepted by Pathokinesiology doctoral program at the Utah State University after graduation.

- 4. Jason Falvey, BMS Doctoral student, 2012–2013, quit program due to personal decision
- 5. *Katherine Leonard*, Plan A Master student, 2012–2013, quit program due to being admitted to a PT school

#### As a Member of Student Research Committee:

- 1. *Angela Benavides*, Plan A Master student 2015-2017, chaired by Dr. Amy Ulinski in Department of Computer Science
- 2. *Bradley Beardt*, Plan A Master student 2015-2017, chaired by Dr. Boyi Dai in Division of Kinesiology and Health
- 3. *Taylour Hinshaw*, Plan A Master student, 2015-2017, chaired by Dr. Boyi Dai in Division of Kinesiology and Health
- 4. Rajiv Khadka, Doctoral student, 2016-present, chaired by Dr. Amy Ulinski in Department of

- Computer Science
- 5. *Maja Gorsic*, Doctoral student, 2015–present, chaired by Dr. Domen Novak in Department of Electrical and Computer Engineering
- 6. *Mara Cosgrove*, Plan A Master student, 2014–2016, chaired by Dr. Boyi Dai in Division of Kinesiology and Health
  - Thesis Title: Age and sex effects on landing force and asymmetry in youth soccer players
- 7. *Mitchell Stephenson*, Plan A Master student, 2013–2015, chaired by Dr. Boyi Dai in Division of Kinesiology and Health
  - Thesis Title: The effect of specific signal forewarning on ACL loading factors and performance in an unanticipated jump landing
- 8. *Harry Fisher*, Plan A Master student, 2012–2014, chaired by Dr. Boyi Dai in Division of Kinesiology and Health
  - Thesis Title: The relationship between force production during isometric squats and knee flexion angles during landing
- 9. *Katherine Cawthorn*, Plan A Master student, 2012–2014, chaired by Dr. Boyi Dai in Division of Kinesiology and Health
  - Thesis Title: Strength, balance, and body composition in physically active individuals with mild Scoliosis: A preliminary study
- 10. *Neera Pradhan*, Plan B Master student, 2013–2014, chaired by Dr. Amy Ulinski in Department of Computer Science
- 11. *Erika Heinbaugh*, Plan A Master student, 2012 2014, chaired by Dr. Boyi Dai in Division of Kinesiology and Health
  - Thesis Title: The effects of time of day on balance performance in recreational athletes
- 12. *Derrick McMahen*, Plan A Master student, 2011–2012, chaired by Dr. Tristan Wallhead in Division of Kinesiology and Health
  - Thesis Title: A didactic analysis of tactical transfer during the tactical games approach

#### Host of Visiting Research Scholar/Student (2)

- 1. *Jieyu Peng*, Master student, 2015–2016, Department of Applied Psychology, Shanghai University of Sport, CHINA
- 2. *Lingli Chen*, Associate Professor, 2017-2018, School of Humanities and Social Sciences, National University of Defense Technology, CHINA

# **Teaching Experience:**

University of Wyoming, Laramie

<b>FALL 2018</b>			
Course Number	<u>Title</u>	Credit Hours	<b>Enrollment</b>
KIN 4020	Motor Behavior	3 credits	
KIN 5039	Perception & Action	3 credits	
	in Motor Skills		
<b>SUMMER 2018</b>			
Course Number	<u>Title</u>	Credit Hours	<b>Enrollment</b>
KIN 4020	Motor Behavior	3 credits	20
SPRING 2018			
Course Number	<u>Title</u>	Credit Hours	<u>Enrollment</u>

KIN 3060	Understanding Skill Acquisition for Teaching	3 credits	20
KIN 4020	Motor Behavior	3 credits	30
FALL 2017 Course Number KIN 4020 KIN 5038	Title Motor Behavior Advances in Research of Sport Expertise	Credit Hours 3 credits 3 credits	Enrollment 22 6
SUMMER 2017 Course Number KIN 4020	Title Motor Behavior	Credit Hours 3 credits	Enrollment 28
SPRING 2017 Course Number KIN 3060 KIN 4020	Title Understanding Skill Acquisition for Teaching Motor Behavior	Credit Hours 3 credits 3 credits	Enrollment 18
FALL 2016 Course Number KIN 4020 KIN 5038	Title Motor Behavior Perception/Action in Motor Skills	Credit Hours 3 credits 3 credits	Enrollment 30 6
SUMMER 2016 Course Number KIN 4020	Title Motor Behavior	Credit Hours 3 credits	Enrollment 28
SPRING 2016 Course Number KIN 3060  KIN 5586	Title Understanding Skill Acquisition for Teaching Variability of Movement	Credit Hours 3 credits	Enrollment 18
FALL 2015 Course Number KIN 4020 KIN 5038	Title Motor Behavior Advances in Research of Sport Expertise	Credit Hours 3 credits 3 credits	Enrollment 28 6
SUMMER 2015 Course Number KIN 4020	Title Motor Behavior	Credit Hours 3 credits	Enrollment 26
SPRING 2015 Course Number KIN 5039	Title Perception/Action in Motor Skills	Credit Hours 3 credits	Enrollment 5

KIN 3060	Understanding Skill Acquisition for Teaching	3 credits	25
FALL 2014	T C		D 11
Course Number KIN 4020	<u>Title</u> Motor Behavior	<u>Credit Hours</u> 3 credits	Enrollment 20
KIN 4020 KIN 5586	Variability of Movement	3 credits	30 4
KIN 3360	variability of Movement	3 credits	4
<b>SUMMER 2014</b>			
Course Number	<u>Title</u>	Credit Hours	<b>Enrollment</b>
KIN 4020	Motor Behavior	3 credits	15
KIN 4090	Foundations of Coaching	3 credits	21
FALL 2013			
Course Number	Title	Credit Hours	Enrollment
KIN 4020	Motor Behavior	3 credits	25
KIN 5039	Perception/Action in	3 credits	5
	Motor Skills		
SPRING 2013			
Course Number	Title	Credit Hours	Enrollment
KIN 4020	Motor Behavior	3 credits	30
KIN 3060	Understanding Skill	3 credits	13
	Acquisition for Teaching		_
<b>FALL 2012</b>			
Course Number	Title	<u>Credit Hours</u>	<u>Enrollment</u>
KIN 5586	Advances in Research	3 credits	5
	of Sport Expertise		
<b>SUMMER 2012</b>			
Course Number	<u>Title</u>	Credit Hours	<b>Enrollment</b>
KIN 4090	Foundations of Coaching	3 credits	13
SPRING 2012			
Course Number	Title	Credit Hours	Enrollment
KIN 4020	Motor Behavior	3 credits	33
KIN 3060	Understanding Skill	3 credits	14
	Acquisition for Teaching		
FALL 2011	T:41.	Cue dit Hanna	Envallment
Course Number KIN 4020	<u>Title</u> Motor Behavior	<u>Credit Hours</u> 3 credits	Enrollment 23
KIN 4020 KIN 5039	Perception/Action	3 credits	6
KH V 3037	in Motor Skills	3 credits	O
<b>SUMMER 2011</b>			
Course Number	<u>Title</u>	<b>Credit Hours</b>	<b>Enrollment</b>
KIN 4090	Foundations of Coaching	3 credits	12
SPRING 2011			
Course Number	Title	Credit Hours	Enrollment
KIN 4020	Motor Behavior	3 credits	11

KIN 3060	Understanding Skill Acquisition for Teaching	3 credits	9
<b>FALL 2010</b>	1		
Course Number	Title	Credit Hours	<b>Enrollment</b>
KIN 4020	Motor Behavior	3 credits	32
KIN 5586	Advances in Research	3 credits	6
1111 ( 0000	of Sport Expertise	o orogina	Ü
SPRING 2010			
Course Number	Title	Credit Hours	Enrollment
KIN 4900	Motor Learning	3 credits	14
1211 ( 1,000	1,10,101 <b>_0,1</b> 111118	5 515 6115	
<b>FALL 2009</b>			
Course Number	<u>Title</u>	Credit Hours	<b>Enrollment</b>
KIN 4900	Motor Learning	3 credits	17
KIN 5586	Perception/Action	3 credits	1
	in Motor Skills		
SPRING 2009			
Course Number	Title	Credit Hours	Enrollment
KIN 4900	Motor Learning	3 credits	9
1111	g	0 010010	
<b>FALL 2008</b>			
Course Number	Title	Credit Hours	Enrollment
KIN 4900	Motor Learning	3 credits	18
11111		2 0100113	10

# Indiana University, Bloomington

SPRING 2007: HPER-T693 Experimental Design and Analysis (3cr)

**2003** – **2007**: HPER-P452 Motor Learning (4cr) **2002 – 2006**: HPER-E105 Badminton (1cr) **2003 – 2006**: HPER-E181 Tennis (1cr)

#### > Guest Lectures:

Teaching Badminton striking techniques in KIN-2000 (Movement Core I: Fall 2008: Striking/Fielding)

**2009**—**present:** Introduction to Motor Learning and Control in KIN-1005 (Introduction to Kinesiology).

# > Advising:

Year	# of Undergraduate Advisees	# of Graduate Advisees
2008	10	1
2009	20	1
2010	25	1
2011	30	3
2012	37	1
2013	38	1
2014	15	1
2015	12	2
2016	15	2

2017 12 2

### **University Service:**

#### University of Wyoming

- 1. Member of the Faculty Dispute Resolution Panel, University of Wyoming, WY (2014 2017)
- 2. Steering Committee Member of the Biomedical Sciences (BMS) Doctoral Program, University of Wyoming, WY (2010 present).

#### College of Health Sciences

- 1. Chair of College of Health Science Research Committee (2015 present)
- 2. Member of College of Health Sciences Research Planning Committee for Institute of Wyoming Health (2015 present)
- 3. Member of College of Health Sciences Student Dispute Committee (2015 present)
- 4. Member of College of Health Sciences Faculty Development Committee (2015)
- 5. External member for Plan B Orals Committees, Division of Communication Disorders. (2011 present).
- 6. Member of College of Health Sciences Research Committee (2009 2012).

#### > Division of Kinesiology and Health

- 1. Leader and coordinator to initiate international collaboration program with identified kinesiology and health programs within five universities in east China (2017 present)
- 2. Member of K&H Committee of revising documents for Tenure and Promotion (2016-2017)
- 3. Search Committee Member for the Assistant Professor position in Exercise Physiology, Division of Kinesiology and Health, University of Wyoming, WY (2014 2015).
- 4. Coordinate to host the delegation from Suzhou University of Science and Technology, June 15–16, 2014
- 5. Organizer of Human Movement Science Journal Club/Research Seminar for faculty and students in Kinesiology and Health (2013 present)
- 6. Member of K&H Student Critical Thinking Assessment (CTA) Academy (2013 present).
- 7. Member of Corbett Building Renovations/Additions Committee (2013 present).
- 8. Member of K&H Newsletter Committee (2013 present).
- 9. K&H Search Committee Member for the Assistant Professor position in Sport & Exercise Biomechanics, Division of Kinesiology and Health, University of Wyoming, WY (2011 2012).
- 10. Coordinator to host Dr. Geoffrey Bingham to give research presentations for K&H, CHS and BMS program students at University of Wyoming, WY (2010 September).
- 11. Search Committee Member for the Assistant Professor position in Physical Activity and Health, Division of Kinesiology and Health, University of Wyoming, WY (2010 2011).
- 12. Search Committee Member for the Assistant Professor position in Sport/Exercise Psychology, Division of Kinesiology and Health, University of Wyoming, WY (2009 2010).

#### **Professional Service:**

### > Professional Memberships:

1. Vision Sciences Society

- 2. Institute of Translational Health Sciences at University of Washington
- 3. International Society for Perception and Action
- 4. Rocky Mountain Psychological Association
- 5. North American Society for the Psychology of Sport and Physical Activity
- 6. American Alliance for Health, Physical Education, Recreation and Dance
- 7. USA Badminton Coaching Education Department
- 8. USA Badminton Court Official Committee

#### > Journal Review

- 1. Ad-Hoc reviewer for Journal of Motor Behavior
- 2. Ad-Hoc reviewer for Journal of Motor Learning and Development
- 3. Ad-Hoc reviewer for International Journal of Sports Science & Coaching
- 4. Ad-Hoc reviewer for International Journal of Sports Medicine
- 5. Ad-Hoc reviewer for Journal of Applied Biomechanics
- 6. Ad-Hoc reviewer for American Journal of Psychology
- 7. Ad-Hoc reviewer for Research Quarterly of Sport and Exercise Science
- 8. Ad-Hoc reviewer for Research in Sports Medicine
- 9. Ad-Hoc reviewer for Journal of Sport and Health Science
- 10. Ad-Hoc reviewer for Frontiers in Movement Science and Sport Psychology
- 11. Ad-Hoc reviewer and Advisory Board member for Journal of Sports Sciences
- 12. Ad-Hoc reviewer for Brain and Cognition
- 13. Ad-Hoc reviewer for *Philosophical Psychology*
- 14. Reviewer and Editorial Member for Journal of Educational and Developmental Psychology
- 15. Editorial Board Member of Journal of Bioengineering & Biomedical Science

#### ➤ Book Review

- 1. Invited reviewer for a book proposal from the Holcomb Hathaway, Publishers, Inc., Scottsdale, AZ 85258, USA (2013).
- 2. Invited reviewer for a book proposal from the *Sport and Leisure* section editorial board of Routledge, Taylors & Francis Group Ltd, Oxford, OX14 4RN, UK (2012).

#### > Grant Review

- 1. Invited grants reviewer for CTR-IN Pilot Research Grant, Mountain West CTR-IN Program at UNLV (2015 & 2017)
- 2. Reviewer for CHS Faculty-Grant-In-Aid, CHS Faculty Travel Subsidy, CHS Student Research Grant, CHS Student Poster Award at University of Wyoming (2009 present)
- 3. Invited grants reviewer for NSF *The Perception, Action, and Cognition Panel* (2010 October & 2017 September).

## > Professional Services and Other Appointments:

- 1. Research and Planning Committee member in the Wyoming Parkinson Project run by the Patient Centered Outcome Research Institute (PCORI)
- 2. Regional liaison in Wyoming for Rocky Mountain Psychological Association (2010 present)
- 3. Program Committee Member, Abstract Reviewer and Conference Moderator for the oral paper session of "Perception and Performance" in 79<sup>th</sup> Annual Convention of Rocky Mountain Psychological Association, Albuquerque, NM, in April 2009

- 4. Identified Dr. Geoffrey Bingham from Indiana University for Craig Series Lecture at University of Wyoming, WY (2009 April)
- 5. Coordinator for IU-SUS academic exchange program, Indiana University, IN (2003 2007)
- 6. Director & Coach of IU Badminton Camp, Indiana University, IN (2004 June)
- 7. President of IU Badminton Club, Indiana University, IN (2002 2003)
- 8. Administrative Assistant, China Badminton Association, CHINA (2001 2002)
- 9. Professional badminton player serving Junior National Team of China, CHINA (1983–1995)

# **Special Skills:**

#### > Computer Techniques:

- Hardware repair
- Familiar with using following Software:
  - ✓ Microsoft Office Package
- ✓ Adobe Premiere & Photoshop

✓ JavaScript

✓ MaxTRAQ & MaxMATE

- Statistics and Programming:
  - ✓ Matlab

✓ E-Prime

✓ SPSS

✓ MovAlyzer

#### > Language

English and Chinese, proficiency in speaking and writing

#### > Badminton

National level player and coach, Pan-Am Accredited Umpire

#### > Communication

Good at working in a cross-cultural and multi-disciplinary environment