



College of Health Sciences
Division of Kinesiology and Health
Dept. 3196 • 1000 E. University Avenue • Corbett Building • Laramie, WY 82071
(307) 766-5284 • fax (307) 766-4098 • e-mail: kinesiology@uwyo.edu • www.uwyo.edu/kandh

Dear Graduate Student,

Thank you for expressing an interest in our graduate program in the Division of Kinesiology and Health, University of Wyoming. Following is a list of the graduate faculty members in the Division of Kinesiology and Health, some information about their areas of research interest, and two or three of their most recent publications. I am providing you with this information so that you can identify a faculty member under whom you think you would like to study. Once you identify the faculty member (or members) with whom you think you would like to study, ***contact them directly*** via e-mail. Let them know who you are and what you are interested in studying. That faculty member(s) will then contact you to discuss the possibility of pursuing the M.S. degree under her/his supervision. Your admission to the graduate program in Kinesiology and Health is very much dependent upon you having a faculty member who is interested in supporting your application packet and serving as your graduate advisor.

If you have other questions about contacting one or more faculty about your interest in their area of research expertise, don't hesitate to call or e-mail.

Sincerely,

Derek Smith

Derek Smith, Ph.D., Director
307-766-5271 (tel); 307-766-4098 (fax)
smithdt@uwyo.edu

GRADUATE FACULTY, RESEARCH INTERESTS, AND RECENT PUBLICATIONS

TAMI BENHAM DEAL, P.E.D., Professor – Motor Development and Health Education

benham@uwyo.edu

Dr. Benham Deal's primary line of research focuses on children's and adolescents' physical activity. Dr. Benham Deal's second line of research examines health literacy and critical thinking.

Alphonsa, S., Dai, B., **Benham-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.

Alderman, B., **Benham-Deal, T.**, Beighle, A., & Erwin, H., & Olsen, R. (2012). Contribution of physical education to young adolescents' daily physical activity. *Pediatric Exercise Science*, Pediatric Exercise Science, 2012, 24, 634-648.

Benham-Deal, TB, Jenkins, JM, Deal, LO, Byra, A (2010). The impact of professional development to infuse health and reading in elementary schools. *American Journal of Health Education*, 41 (3), 155-166.

Alderman, BL, **Benham-Deal, T**, Jenkins, J. (2010). Change in Parental Influence on Children's Physical Activity over Time. *Journal of Physical Activity and Health*, 7, 60-67.

Benham-Deal, TB, Deal, LO, Hudson, N. (2010). The Road to Health Literacy – Principals Take the Wheel. *Principal*, 89 (3), 20-25. [Invited]

MARK BYRA, Ph.D., Professor – Physical Education Teacher Education

byra@uwyo.edu

Dr. Byra's research interests revolve around the Spectrum of Teaching Styles, models of teaching, student interest and engagement in physical education, development of pre-service teacher knowledge, and the development of knowledge and skill in coaches.

Kirby, S., **Byra, M.**, Readdy, T., & Wallhead, T. (2015). Effects of Spectrum teaching styles on college students' psychological needs and self-determined motivation. *European Physical Education Review*, 21, 521-540.

Byra, M., Sanchez, B., & Wallhead, T. (2014). Behaviors of students and teachers in the command, practice, and inclusion styles of teaching: Instruction, feedback, and activity level. *European Physical Education Review*, 20, 3-19.

Iserbyt, P., & **Byra, M.** (2013). Task cards – Design and use in the reciprocal style of teaching. *Journal of Physical Education, Recreation, and Dance*, 84(2), 20-26.

Iserbyt, P., & **Byra, M.** (2013). The design of instructional tools affects secondary school students' learning of Cardiopulmonary Resuscitation (CPR) in reciprocal peer learning: A randomised controlled trial. *Resuscitation*, 84, 1591-1595.

BOYI DAI, Ph.D., Assistant Professor – Biomechanics

bdai@uwyo.edu

Dr. Dai's research interests revolve around injury biomechanics, sports biomechanics, and ergonomics. Dr. Dai utilizes motion, force, electromyography measurements, and musculoskeletal modeling to understand the mechanisms of exercise, sports, and work related injuries and provide information for injury prevention and post-injury rehabilitation. He has investigated the injury mechanisms of ACL injuries, ACL re-injuries, and low back injuries and has also conducted technique analysis for elite discus and javelin throwers.

Dai, B., Stephenson, M.L.*, Ellis, S.M.*, Donohue, M.R.*, Ning, X., Zhu, Q. (in press). Concurrent tactile feedback provided by a simple device increased knee flexion and decreased impact ground reaction forces during landing. *Journal of Applied Biomechanics*. [Data-based]

Fisher, H.*, Stephenson, M.L.*, Graves, K.K.*, Hinshaw, T.J.*, Smith, D.T., Zhu, Q., Wilson, M.A., **Dai, B.** (in press). The relationship between force production during isometric squats and knee flexion angles during landing. *Journal of Strength and Conditioning Research*. [Data-based]

Butler, R.J., **Dai, B.**, Huffman, N., Garrett, W.E., Queen, R.M. (in press) Differences in lower extremity landing mechanics during a stop jump persist after anterior cruciate ligament reconstruction and when returning to sport. *Clinical Journal of Sport Medicine*. [Data-based]

- Alphonsa, S. *, **Dai, B.**, Benham-Deal, T.B., & 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. [Data-based]
- Dai, B.**, Mao, M., Garrett, W.E., & Yu, B. (2015). Biomechanical characteristics of an anterior cruciate ligament injury in javelin throwing. *Journal of Sport and Health Science*. 4(4):333-340. [Data-based, invited publication]
- 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. [Data-based]
- Wilson, M.A., **Dai, B.**, Zhu, Q., & Humphrey, N. (2015). Trunk muscle activation and estimating spinal compressive force in rope and harness vertical dance. *Journal of Dance Medicine and Science*, 19(4):163-172. [Data-based]

JAYNE JENKINS, Ph.D., Professor – Physical Education Teacher Education
jjenkins@uwyo.edu

- Dr. Jenkins' research interests revolve around curriculum and instruction. Investigations include pre-service teacher development (e.g., pedagogical content knowledge) particularly in terms of observation and peer coaching as well as curriculum design, development, models, and instructional models.
- Curry, J., **Jenkins, J. M.**, Weatherford, J., (2015) Focus on freshmen: Basic Instruction Programs Enhancing Physical Activity. *The Physical Educator*. 72, 621-639.
- Kelting, T., **Jenkins, J. M.**, & Lux Gaudreault, K. (2014). I could really focus on the students. *Journal of Physical Education, Recreation, and Dance*. 85(8), 32-37.
- Ingersoll, C., **Jenkins, J. M.**, & Lux, K. (2014). Knowledge Development in Early Field Teaching Experiences. *Journal of Teaching in Physical Education*. 33, 363-382.
- Ingersoll, C., Lux Gaudreault, K., & **Jenkins, J. M.** (2014). There is no lack of people to go to for support: Policy, Community, and individual influences on one pre-service teacher's knowledge development. *Global Journal of Health and Physical Education Pedagogy*. 3(1), 37-53.
- Jenkins, J. M.** (2014). Pre-service Teacher Observations of Experienced Teachers. *The Physical Educator*. 71(2), 302-318.

EVAN JOHNSON, Ph.D., Assistant Professor – Exercise Physiology
evan.johnson@uwyo.edu

- Dr. Johnson's research interests revolve around examining the physiological mechanisms and overall health benefits related to optimal hydration, physical activity, and heat exposure.
- Perrier ET, **Johnson EC**, McKenzie AL, Ellis LA, Armstrong LE. Urine colour change as an indicator of change in daily water intake: a quantitative analysis. *Eur J Nutr*. Accepted for publication.
- Muñoz CX, **Johnson EC**, McKenzie AL, Guelinckx I, Graverholt G, Casa DJ, Maresh CM, Armstrong LE. Habitual total water intake and dimensions of mood in healthy young women. *Appetite*. Accepted for publication.
- Armstrong LE, **Johnson EC**, McKenzie AL, Muñoz CX. An Empirical Method to Determine Inadequacy of Dietary Water. *Nutrition*. Accepted for publication.
- Johnson EC**, Muñoz CX, Le Bellego L, Klein A, Casa DJ, Maresh CM, Armstrong LE. Markers of the hydration process during fluid volume modification in women with habitual high or low daily fluid intakes. *Eur J Appl Physiol*. 2015 Jan 7.
- Johnson EC**, Pryor JL, Casa DJ, Belval LN, Vance JS, Demartini JK, Maresh CM, Armstrong LE. Bike and run pacing on downhill segments predict Ironman triathlon relative success. *J Sci Med Sport*. 2015 Jan;18(1):82-7.
- Kavouras SA, **Johnson EC**, Bougatas D, Arnaoutis G, Panagiotakos DB, Perrier E, Klein A. Validation of the Urine Colour Scale in Children. *Eur J Nutr*. 2015 Apr 24 [EPub ahead of print].

CHRISTINE PORTER, Ph.D., Assistant Professor – Public Health
cporter12@uwyo.edu

- Dr. Porter is working to understand and (following Kurt Lewin's theory that the best way to understand something is to try to change it) organize social change that addresses health disparities. Her research uses

community-based participatory action research (CBPR) approaches to such change and investigate public health strategies for supporting for the public's creation of its own health. She is particularly interested in documenting, assessing, and furthering sustainable food systems approaches to eradicating hunger, obesity, and inequity. She feels fortunate that she is able to pursue these interests with many partners as she is the project director and principal investigator for [Food Dignity \(www.fooddignity.org\)](http://www.fooddignity.org)

Daftary, S., **Porter, C.M.**, Gervais, S., Marshall, D. & Vigil D. (forthcoming in 2016) "What grows in East New York: a case study of East New York Farms! and examination of expectations of urban agriculture". In C. Bosso & R.L. Sandler (Ed.), *Feeding Cities: Improving Local Food Access, Security, and Sovereignty*, to be published in late 2016 by Earthscan/Routledge: New York.

Porter, C.M., McCrackin, P. & Naschold, F. (2015, epub ahead of print) "Minigrants for community health: a randomized controlled trial of their impact on family food gardening." *Journal of Public Health Management & Practice*. Journal impact factor: 1.4

Daftary, S., Herrera, H. & **Porter, C.M.** (2015) "The unattainable trifecta of urban agriculture." *Journal of Agriculture, Food Systems, and Community Development*. 6(1): 19-32
<http://www.agdevjournal.com/attachments/article/608/JAFSCD-Unattainable-Trifecta-Urban-Ag-December-2015.pdf>

Porter, C.M. (2015, epub ahead of print) "Revisiting Precede-Proceed: a leading model for ecological and ethical health promotion." *Health Education Journal*. Journal impact factor: 0.8

Porter, C.M., Herrera, H., Marshall, D., & Woodsum, G.M. (2014). Shared voices, different worlds: Process and product in the Food Dignity action research project. *Gateways: International Journal of Community Research and Engagement*, 7(1), 116-128.

TUCKER READDY, Ph.D., Assistant Professor – Exercise Psychology and Sport Sociology
tucker.readdy@uwyo.edu

Dr. Readdy's line of research is centered on coach and athlete motivation within the collegiate sport context, including how coach-athlete interactions can optimize player performance through enhancing their autonomy, competency, and relatedness to others. Other potential research themes include self-concept and identity in the transition into and out of collegiate sport, the psychological and sociological effects of the increasing professionalization of youth and collegiate sport, and the psychosocial stressors encountered by collegiate coaches.

Raabe, J. (student author), & **Readdy, T.** (in press, November 2015). Self-determination theory in the context of collegiate cheer: A mixed-methods exploratory study. *Research Quarterly for Exercise & Sport*. (data-based)

Readdy, T., Zakrajsek, R.A., Raabe, J. (in press, November 2015). Real-world experiences of the coaching pathos: Orchestration of American collegiate sport. *The Sport Psychologist*. (data-based)

Raabe, J., Zakrajsek, R., & **Readdy, T.** (in press, October 2015). Teammate influence on collegiate swimmers' basic psychological need satisfaction: A qualitative perspective. *Journal of Intercollegiate Sport*. (data-based)

Readdy, T. & Wallhead, T. (in press, December 2014). Manifestation of anti-fat bias in pre-service physical education teachers. *The Physical Educator*. (data-based)

Kirby, S. (student author), Byra, M., **Readdy, T.**, & Wallhead, T. (2015). The effect of the practice and inclusion teaching styles on basic psychological needs satisfaction and self-determined motivation. *European Physical Education Review*, 21, 521-540. (data-based)

Readdy, T., Raabe, J., & Harding, J. (2014). Student-athlete perceptions of an extrinsic reward system: An exploration of self-determination theory in the context of college football. *Journal of Applied Sport Psychology*, 26, 157-171.

DEREK SMITH, Ph.D., Associate Professor – Exercise Physiology/Physical Activity and Health
smithdt@uwyo.edu

Dr. Smith's current research interests and projects are centered around the cardioprotective benefits of a habitually physically active lifestyle and effective strategies to promote the adoption and maintenance of a physically activity lifestyle in youth and adults. Three areas of current investigation include: (1) the efficacy of theory-based internet-delivered physical activity behavior change programs in sedentary and overweight adults; (2) the efficacy of a web-based physical activity tracking tool and a school community-based participatory research approach to increase physical activity levels of K-12 schoolchildren; and (3)

the influence of habitual physical activity on select cardiometabolic disease risk factors – inflammation, oxidative stress, insulin resistance and fibrinolysis.

Strath, S.J., Ainsworth, B.E., Ekelund, U., Freedson, P.S., Gary, R.A., Richardson, C.R., **Smith, D.T.**, Swartz, A.M., and L.A. Kaminsky. Guide to the assessment of physical activity: Clinical and Research Applications. A scientific statement from the American Heart Association. *Circulation*, 128(20): 2259-79, 2013. [PMID 24126387](#).

Fisher, H., Stephenson, M.L., Graves, K.K., Hinshaw, T.J., **Smith, D.T.**, Zhu, Q., Wilson, M.A., Dai, B. The relationship between force production during isometric squats and knee flexion angles during landing. *Journal of Strength and Conditioning Research*, 2015, (in press). [PMID: 26566166](#)

Heinbaugh, E.M., **Smith, D.T.**, Zhu, Q., Wilson, M.A., and Dai, B. The effect of time-of-day on static and dynamic balance in recreational athletes. *Sports Biomechanics*, 2015, 14(3): 361-73. [doi: 10.1080/14763141.2015.1084036](#)

Smith, D.T., Judge, S., Malone, A., Moynes, R.C., Conviser, S., and Skinner, J.S. Effects of bioDensity training and Power Plate whole-body vibration on strength, balance, and functional independence in older adults. *Journal of Aging and Physical Activity*, 2015, 24(1): 139-48. [doi: 10.1123/japa.2015-0057](#). **Publications (Refereed Journals) - continued**

Langabeer, J., Prasad, S., Seo, M., **Smith, D.T.**, Segrest, W., Owen, T., Gerard, D., and Eisenhauer, M. The effect of inter-hospital transfers, EMS, and distance on ischemic time in a rural STEMI system of care. *American Journal of Emergency Medicine*, 2015, 33(7): 913-916. doi: <http://dx.doi.org/10.1016/j.ajem.2015.04.009>

Stephenson, M.L., **Smith, D.T.**, Heinbaugh, E.M., Moynes, R.C., Rockey, S.S., Thomas, J.J., and B. Dai. Total lower extremity lean mass percentage positively correlates with jump performance. *Journal of Strength and Conditioning Research*, 2015, 29(8): 2167-75. [doi: 10.1519/JSC.0000000000000851](#).

TRISTAN WALLHEAD, Ph.D., Associate Professor – Physical Education Teacher Education
wallhead@uwyo.edu

Dr. Wallhead's research interests include (1) examining the efficacy of sport-based curricular models such as Sport Education and Teaching Games for Understanding in facilitating student learning, and the role of physical education curricular models in promoting extra-curricular youth physical activity.

Wallhead, T. L., & Dyson, B. (in press). A didactic analysis of content development during Co-operative Learning in primary physical education. *European Physical Education Review*.

Readdy, T., & **Wallhead, T. L.** (in press). Manifestation of anti-fat bias in pre-service physical education teachers. *The Physical Educator*.

Hastie, P., & **Wallhead, T. L.** (2015). Operationalizing physical literacy through Sport Education. *Journal of Sport and Health Science*, 4, 132-138. DOI:10.1016/j.jshs.2015.04.001.

Kirby, S., Byra, M., Readdy, T., & **Wallhead, T.L.** (2015). The effect of the practice and inclusion teaching styles on basic psychological needs satisfaction and self-determined motivation. *European Physical Education Review*. DOI: 10.1177/1356336X15585010

Garn, A.C., & **Wallhead, T.** (in press). Social goals and basic psychological needs in high school physical education. *Sport, Exercise and Performance Psychology*.

Wallhead, T. L., Garn, A., & Vidoni, C. (in press). Effect of a Sport Education program on motivation for physical education and leisure-time physical activity. *Research Quarterly for Exercise and Sport*.

QIN (ARTHUR) ZHU, Ph.D., Associate Professor – Motor Learning and Control
qzhu1@uwyo.edu

Dr. Zhu's area of expertise is motor learning and motor control. His research focuses on the coupling of perceptual and motor learning, especially how motor skills could be acquired through the crosstalk between perception and action. He is also interested in the control aspect of motor skills where the maximum efficiency could be evaluated with consideration of physical law and environmental factors.

Wilson, A., Weightman, A., Bingham, G., **Zhu, Q.** (In press). Using task dynamics to quantify the affordances of throwing for distance and accuracy. *Journal of Experimental Psychology: Human Perception and Performance*, DOI: 10.1037/xhp0000199. (IF = 3.358)

Dai, B., Stephenson, M.L., Ellis, S., Donohue, M.R., Ning, X., & **Zhu, Q.** (In press). Concurrent tactile feedback provided by a simple device increased knee flexion and decreased impact ground reaction forces during landing. Submitted to *Journal of Applied Biomechanics* (IF = 0.984)

- Alphonsa, S., Dai, B.Y., Bingham-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)
- Fisher, H., Stephenson, M.L., Graves, K.K., Hinshaw, T.J., Smith, D.T., Wilson, M.A., **Zhu, Q.**, & Dai, B. (in press). The relationship between force production during isometric squats and knee flexion angles during landing. *Journal of Strength and Conditioning Research* (IF = 2.075)
- 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)
- 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)