



Austin T. McCulloch

Education and Training

Texas A&M University (TAMU) PhD, Kinesiology, emphasis in Motor Neuroscience (ABD)	College Station, TX Expected May 2021
Tarleton State University (TSU) MS, Kinesiology BS, Kinesiology, Minor in Mathematics	Stephenville, TX May 2015 December 2012
Texas Education Agency Teaching Certifications Physical Education, grades K to 12 Mathematics, grades 8 to 12	2012-2018 2012-2018

Professional Experience

Graduate Teaching Assistant , Dept. of Health and Kinesiology, TAMU	2017-Current
Graduate Research Assistant , TAMU (NSF funded) with Dr. John J. Buchanan	2015-2017
Adjunct Instructor , Department of Kinesiology, TSU	2015-2017
Graduate Teaching Assistant , Department of Kinesiology, TSU	2014-2015
Graduate Assistant , Residential Living & Learning, TSU	2013-2014
Student Teaching (P.E., Athletics) , Glen Rose ISD, Glen Rose, TX	Fall 2012

Courses Taught

Adjunct Instructor Physiology of Exercise (Kine-420), Online Instruction	TSU	2015-2017
Graduate Teaching Assistant Motor Learning & Skill Performance (Kine-406), Hybrid Instruction Motor Learning & Skill Performance (Kine-406), Face-to-Face Instruction Beginning Racquetball (Kine-199), Activity Course Intro. to Health & Fitness (Kine-223), Online Instruction The Science of Basic Health & Fitness (Kine-120), Online Instruction Physiology of Exercise (Kine-420), Face-to-Face Instruction Foundations of Kinesiology (Kine-200), Face-to-Face Instruction	TAMU TAMU TAMU TAMU TAMU TSU TSU	2020-2021 2018-2019 2018 2017-2018 2017-2018 2015 2014-2015
Student Teaching Elementary and High School Physical Education Junior High and High School Athletics (Football)	Glen Rose ISD Glen Rose ISD	2012 2012

Skills

Proficient

- Blackboard, Web-based learning management system
- IBM SPSS Software, Statistical and graphing software
- SigmaPlot, Statistical and graphing software
- Microsoft Excel and Word, Electronic spreadsheet program and word processing software

Competent

- Matlab, Numerical computation and graphing program
- SAS, Statistical and graphing software
- Stata, Statistical and graphing software
- Microsoft PowerPoint and Publisher, Presentation and publishing programs
- Zoom or Skype, Online conferencing platforms

Novice

- R, Statistical and graphing software

Publications

Peer-Reviewed

1. **McCulloch, A. T.**, Park, I., Wright, D. L., & Buchanan, J. J. (2020). Off-line learning in a rhythmic bimanual task: Early feedback dependency is reduced over wakefulness. *Psychological Research*.
2. Park, I., Buchanan, J. J., **McCulloch, A. T.**, Chen, J., & Wright, D. L. (2020). Motor and spatial representations of action: Cortical excitability in M1 after training with bimanual skill. *Experimental Brain Research*.
3. Chen, J., **McCulloch, A. T.**, Kim, H., Kim, T., Verwey, W., Buchanan, J. J., & Wright, D. L. (2020). Application of anodal tDCS at primary motor cortex immediately after practice of a motor sequence does not improve offline gain. *Experimental Brain Research*.
4. Buchanan, J. J., Park, I., Chen, J., Mehta, R. K., **McCulloch, A. T.**, Rhee, J., & Wright, D. L. (2018). Expert monitoring and verbal feedback as sources of performance pressure. *Acta Psychologica*. 186: 39-46

Peer-Reviewed Proceedings Paper

1. Muthukumaraswamy, S., Banerjee, A., **McCulloch, A. T.**, Buchanan, J. J., & Robson, N. (2017). An AR system for monitoring arm movements for stroke patients, *Proceedings of the 2017 Industrial and Systems Engineering Conference*, Pittsburgh, PA, May 20-23, 2017.

Under Review/Preparation

1. Banerjee, A., Muthukumaraswamy, S., **McCulloch, A. T.**, Buchanan, J. J., & Robson, N. (In Preparation). An AR system for monitoring arm movements for stroke patients.

Presentations

Oral Presentation

1. **McCulloch, A. T.**, Park, I, and Buchanan, J. J. (2019, April). *Corticospinal excitability changes after training suggest implicit coding of a bimanual motor skill*. Presented at: Texas A&M Institute for Neuroscience Symposium, Texas A&M University.
2. **McCulloch, A. T.** (2019, February; 2019, March). *Off-line learning occurs after early feedback dependency for a rhythmic bimanual task*. Presented at: 1) Kinesiology Graduate Student Bi-annual Symposium, Texas A&M University; 2) Student Research Week, Texas A&M University.
3. **McCulloch, A. T.**, (2018, September). *Non-invasive brain stimulation impacts the underlying control processes in bimanual coordination movements*. Presented at: Kinesiology Graduate Student Bi-annual Symposium, Texas A&M University.

Poster Presentation

1. **McCulloch, A. T.**, Park, I., Chen, J., Wright, D. L., and Buchanan, J. J. (2018, November). *Corticospinal excitability changes after training suggest implicit coding of a bimanual motor skill*. Poster presentation at the Society for Neuroscience Conference, San Diego, California.
2. **McCulloch, A. T.**, Park, I., Chen, J., Kim, H., Kim, T., Nazifi, M., Wright, D. L., and Buchanan, J. J. (2017, November). *Anodal transcranial direct current stimulation impacts the underlying control processes in bimanual movements*. Poster presentation at the Society for Neuroscience Conference, Washington D.C.
3. Park, I., **McCulloch, A. T.**, and Buchanan, J. J. (2017, June). *Off-line consolidation in learning a novel bimanual coordination skill*. Poster presentation at the North American Society for the Psychology of Sport and Physical Activity Conference; San Diego, California.
4. **McCulloch, A. T.**, Muthukumaraswamy, S., Buchanan, J. J., Banerjee, A., and Robson, N. (2017, June). *Does the dimension (2D or 3D) of a visual presentation influence reaction time and movement time in an imitation task?* Poster presentation at the North American Society for the Psychology of Sport and Physical Activity Conference; San Diego, California.
5. **McCulloch, A. T.**, Park, I., Chen, J., Kim, H., Kim, T., Nazifi, M., Wright, D. L., and Buchanan, J. J. (2017, May). *Anodal tDCS influences the control process underlying bimanual movements*. Poster presentation at the Texas A&M Institute for Neuroscience Symposium; Texas A&M University; College Station, Texas.
6. **McCulloch, A. T.** (2016, March). *The JJ Shuttle and in-game defensive basketball performance for collegiate male players*. Poster presentation at the Texas Chapter of the American College of Sports Medicine annual meeting; Texas A&M University; College Station, Texas.
7. **McCulloch, A. T.** (2013, November). *A comparative analysis: Upper body power output and drive distance in an elite NCAA Division II university women's golf team*. Poster presentation at the Texas A&M University System 11th Annual Pathways Student Research Symposium; Texas A&M University Kingsville; Kingsville, Texas.

Funding

Research Grants, College of Education and Human Development, TAMU

- Graduate Research Grant (2018) *Awarded: \$845*
- Graduate Research Scholars Grant (2016) *Awarded: \$500*

Travel Grants, College of Education and Human Development, TAMU

- Graduate Travel Grant (2018) *Awarded: \$500*
- Graduate Travel Grant (2017) *Awarded: \$500*

Unfunded

Research Grant, College of Education and Human Development, TAMU

- The Dean's Graduate Award (2019) *Unfunded: \$5000*

Service

University Service

- Student Research Week Volunteer, Oral Presentation Judge, TAMU *Spring 2019*

Department Service

- Motor Neuroscience Faculty Search Committee, Student Member, TAMU *2018-2019*
- Motor Neuroscience Faculty Search Committee, Student Member, TAMU, *2017-2018*

Professional

Professional Memberships

- Society for Neuroscience (SfN) *2017-2019*
- American College of Sports Medicine (ACSM) *2014-2017*
- American College of Sports Medicine – Texas Chapter (TACSM) *2014-2017*
- TAHPERD *2010-2012*

Workshops and Training

- Teaching and Learning Essentials: Backward Design, Bloom's & Assessment – Hosted by the Center for Teaching Excellence, Texas A&M University, Fall 2019
- Oral Presentation Workshop – Hosted by Student Research Week Committee and the University Writing Center, Texas A&M University, Spring 2019
- Data Acquisition & Analysis Using Signal: software training – Hosted by the Roy Sillitoe lab at the Texas Children's Hospital, Houston, Texas, Fall 2018
- Teaching Assistant Institute Preparation – Hosted by the TAMU Center for Teaching Excellence, Texas A&M University, Fall 2018

Undergraduate Activities and Achievements

Presidential Leadership Scholarship	2009-2012
Fantastic Field Day Volunteer	2010, 2011, 2012
Summer Conference Director	2012
Cubic Academy Grant Recipient (future teachers of Science and Mathematics)	2010-2012
Senior Residential Leader	2011-2012
Distinguished Student	2008-2011
Who's Who Among College Students	2010-2011
Duck Camp Leader (Freshman Camp)	2009, 2010
Orientation Advisor	2009, 2010
Delta Epsilon Iota	Inducted 2010
Presidential Academic Scholarship	2008-2009

Statement of Accuracy and Authenticity

This statement of accuracy and authenticity certifies that all the information in this CV is accurate and represents the education, experiences, and accomplishments of Austin T. McCulloch.



Date: 7/27/2020