

MICHAEL J. HIGGINS
PhD, ATC/PT, CSCS

EDUCATION

Doctor of Philosophy, Biomechanics and Movement Sciences

University of Delaware, Newark, DE.; February 2003.

Master of Education, Athletic Training/Sports Medicine

(NATA Approved Graduate Curriculum); University of Virginia
Charlottesville, VA.; August 1991.

Bachelor of Science, Physical Therapy

State University of New York at Buffalo, Buffalo, N.Y.; Graduated Cum Laude, May 1988.

Bachelor of Arts, Biology, Minor Chemistry and Coaching

William Penn University, Oskaloosa, IA; Graduated Suma Cum laude,
May 1986.

EXPERIENCE

Professor/Director Graduate Athletic Training Program, University of Virginia, Charlottesville, Va. Responsible for the curriculum design, approval, and accreditation of the professional Masters Athletic Training program.

7/12- 8/16

Chair Department of Kinesiology/Professor/Director ATP, Towson University, Towson, MD.

Kinesiology Chair: Responsible for the day to day operations of a department of 32 full time faculty and 20 part time/adjunct faculty. Responsibilities include but not limited to budgetary oversight, faculty workloads, class scheduling, curriculum development, faculty mentoring, and student advising. ***ATP Director*** Responsible for day-to-day operations of didactic and clinical education of athletic training students in a CAATE approved Curriculum.

5/10- 5/12

Associate Professor/Assistant Chair Department of Kinesiology/Director ATP, Towson University, Towson, MD.

Assistant Chair: developed class schedules and instructor schedules for fall, mini, spring and summer semesters, meeting with students and parents, program development. Responsible for day-to-day operations of didactic and clinical education of athletic training students in a CAATE approved Curriculum.

8/04-5/10

Assistant Professor; Director of the Athletic Training Program, Towson University, Towson, MD.

Responsible for day-to-day operations of didactic and clinical education of athletic training students in a CAATE approved Curriculum.

7/95-8/04

Assistant Professor/Associate Athletic Trainer; University of Delaware, Newark, DE.

Assistant Professor: Director of the Athletic Training Interest Program. Responsible for the organization, development, planning, and instruction of courses in a CAATE Accredited Undergraduate Athletic Training Program. Supervise and instruct athletic training students in the clinical setting. Supervise undergraduate theses. Serve on Graduate Thesis Committees. Academic Advisor for Health and Exercise Science students. Serve on University and College Committees.

Associate Athletic Trainer: Head Athletic Trainer for the Men's Basketball and Lacrosse teams.

Director of the concussion testing program. Responsible for prevention, evaluation and care of athletic injuries for 23 NCAA Division I intercollegiate athletic teams. Implement, supervise, and evaluate rehabilitation protocols. Preceptor for athletic training students in a CAATE approved program in the daily operations of team and athlete care.

- 6/96-8/98 **Physical Therapist/Athletic Trainer;** University of Delaware Physical Therapy Clinic, Newark, DE.
Evaluated, treated, and developed rehabilitation programs for outpatient orthopedic patients. Responsible for the supervision and instruction of Physical Therapy intern students.
- 7/93 - 7/95 **Physical Therapist/Athletic Trainer;** The Union Memorial Sports Medicine at Bel Air, Bel Air, MD.
Clinical: Evaluated and rehabilitated orthopedic injuries in an outpatient clinic. Coordinated Clinical Education for athletic training and physical therapy students. Developed and lectured in Coach's Care and Prevention classes. Provided in-services for orthopedic residents.
Athletic Training: Responsible for athletic training coverage of area high school athletic events, area athletic events, and a professional volleyball tournament.
- 9/92 - 7/93 **Clinical Instructor/Associate Athletic Trainer;** Duquesne University, Pittsburgh, PA.
Organized, developed, planned, and instructed courses in a CAATE undergraduate Athletic Training program. Supervised and instructed student athletic trainers in the clinical setting. Liaison between the Athletic Department and the Health Center. Organized athlete insurance information. Implemented, supervised, and evaluated rehabilitation protocols of all athletes. Served on Academic Advisory Committees.
- 7/91 -9/92 **Physical Therapist/Athletic Trainer;** The Union Memorial Sports Medicine Center; Baltimore, MD.
Clinical: Responsibilities included the rehabilitation and evaluation of surgical and non-surgical athletic injuries. Clinical instructor for athletic training and physical therapy students. Assisted in the organization and planning of a new sports medicine center. Lectured to area sports organizations on a variety of athletic injury topics.
Athletic Training: Provided athletic training services for area athletic events, semi-pro football team, Bud-Light Triathlon, Maryland State Games, and United States Olympic Gymnastic Trails.
- 6/90 - 7/91 **Graduate Assistant Athletic Trainer;** University of Virginia, Charlottesville, VA.;
Responsible for care, prevention, evaluation, and rehabilitation of athletic injuries for men's and women's intercollegiate teams -- with primary responsibilities of football and baseball. Organized and conducted undergraduate student athletic trainer biweekly in-services. Directed rehabilitation programs for outpatient orthopedic physical therapy patients. Managed Athletic Training room personnel. Completed Strength and Conditioning internship.
- 7/90 - 7/91 **Physical Therapist;** HealthCare Physical Therapy, Charlottesville, VA.
Evaluated, treated, and developed rehabilitation programs for outpatient orthopedic patients.
- 7/88 - 6/90 **Physical Therapist/Athletic Trainer;** The Union Memorial Sports Medicine Center; Baltimore, MD.
Clinical: Responsible for prevention, evaluation, education and rehabilitation of athletic injuries for area athletes and orthopedic outpatients. Planned and participated in presentations for area sports organizations.
Athletic Training: Administered game coverage to area high school football and lacrosse teams and semi-pro football team; practice and game coverage of Coppin State College NCAA Division I men's and women's basketball teams; participated in covering the United States Figure Skating Championships, Maryland State Games, and Bud Light Triathlons.

PUBLICATIONS

Books

Higgins, M. Therapeutic Exercise: Theory to Clinical Practice, F.A. Davis, Philadelphia, PA. 2011.

Saliba S and **Higgins M.** Modalities and Manual Therapy in Sports Medicine, in DeLee, Drez, and Miller's Orthopaedic Sports Medicine: Principles and Practice, 5th ED. Elsevier publishing. 2018.

Peer reviewed publications

Christopher G, Koldenhoven R, **Higgins M**, Hertel L. External ankle supports alter running biomechanics: a field-based study using wearable sensors 2019 *Physiol. Meas.* 40 044003

Brokaw E, Fine M, Kindschi K, Santago C, Lum P, **Higgins M.** Cross-sectional evaluation of visuomotor tracking performance following subconcussive head impacts. *Technology and health care: official journal of the European Society for Engineering and Medicine* 2018, 26(1):1-10 · DOI: 10.3233/THC-171079

Caswell SV, Lincoln AE, Myer GD, Hepburn L, **Higgins M**, Putukian M, Cortes N. Characterizing Verified Head Impacts in High School Girls' Lacrosse. *Am J Sports Med.* 2017: June Accepted for publication

Cortes N, Lincoln AE, Myer GD, Hepburn L, **Higgins M**, Putukian M, Caswell SV. Video Analysis Verification of Head Impact Events Measured by Wearable Sensors. *Am J Sports Med* 363546517706703. 2017 May 01

Kindschi K, **Higgins M**, Hilman A, Penczek G, Lincoln A. Video Analysis of High Magnitude Head Impacts in Men's Collegiate Lacrosse. *BMJ Open Sport Exerc Med* 2017;0:e000165. doi:10.1136/bmjsem-2016-000165.

Dorminy, M; Tierney, R.; McDevitt, J; **Higgins, M**, Hoogeveen, A "Effect of Soccer Heading Ball Speed on S100B, Sideline Concussion Assessments, and Head Impact Kinematics". *Brain Injury* accepted for publication March 2015

Higgins M, Tierney R, Ryan C, Paden A. Comparison of Facemask Removal times in lacrosse helmets. *Proc IMechE Part P: J Sports Engineering and Technology* 1–7 IMechE 2015 DOI: 10.1177/1754337115583567

Woodman H., Cicia K., Tierney R.T., McDevitt J., **Higgins M.**, Moughan B., & Aronoff S. Effect of an acute bout of heading on the neurocognitive and postural performance in a pediatric population. (2012). *Temple University Journal of Orthopaedic Surgery & Sports Medicine*, 7; 22-26.

Phillips J., Cintron R., Tierney R.T., Mansell J., McDevitt J., Toone N., **Higgins M.**, Mishra A., & Krynetskiy E. (2012). APOE E and Promoter Genotype and Concussion in Collegiate Athletes. *Temple University Journal of Orthopaedic Surgery & Sports Medicine*, 7; 27-31.

McDevitt J.; Tierney R; Mansell J ;Driban J; **Higgins M**, Toone N ;Mishra K ;Krynetskiy E. Neuronal structural protein polymorphism and concussion in college athletes: A pilot study *Brain Injury* 2011

Tierney R, Mansell J, **Higgins M**, et al. Apolipoprotein E Genotype and Concussion in College Athletes. *Clinical Journal of Sports Medicine* 2010 Nov. 20(6);464-468.

Mansell, J., Tierney, R., **Higgins, M** et al. Concussive signs and symptoms following head impacts in collegiate athletes. *Brain Injury.* 2010 August; 24(9): 1070-1074.

Mansell, J., Tierney, R., Driban, J., **Higgins, M.**, Clegg, S., Krynetskiy, E., Mishra, A. Genetic Variation and Individualized Medicine. *Journal of Sport Rehabilitation.* 2010;19,389-398.

Higgins M, Tierney R, Driban J, Edell S, Watkins R. Preliminary Analysis of Lacrosse Equipment on Cervical Spine Position in the Lacrosse Athlete. *J Athl Train*. 2010 Jan-Feb;45(1):39-43.

Higgins M, Teirney R, Caswel S, Driban J, Mansell J, Glegg S. In Vivo Model of Functional Head Impact Testing in Non-Helmeted Athletes. *Journal of Engineering and Sports Technology* 2009;223(P3):117-123

Tierney R, **Higgins M**, Caswell S, Brady J, Driban J. *Gender Differences in Head Acceleration During Soccer Heading*. *Journal of Athletic Training*. 2008;43(6):578-584.

Higgins MJ, Halstead PD, Snyder-Mackler L, Barlow D. Measurement of Impact Acceleration: Mouthpiece Accelerometer Versus Helmet Accelerometer. *Journal of Athletic Training* 2007;42(1):1-10

Teirney, RT., Sitler, MR., Swanik, CB., Swanik, KA., **Higgins, MJ.**, Torg, JS. Gender Differences in Dynamic stabilization During Head Acceleration. *Temple University Journal of Orthopaedic Surgery and Sports Medicine*. 2006. 1(1):47-52.

Teirney, RT., Sitler, MR., Swanik, CB., Swanik, KA., **Higgins, MJ.**, Torg, JS. Gender Differences in Head-Neck Segment Dynamic stabilization During Head Acceleration. *Med Sci Sports Exerc*. 2005;37(2);272-279.

Higgins M. Rehabilitation of the Low Back Requires a Unique Approach. *Biomechanics* Nov, 2004

Higgins M, Eaton C. Non-Traditional Uses of Neuromuscular Electrical Stimulation. *Athletic Therapy Today*. Sept., 2004

Williams GN, **Higgins MJ**, Lewek M. Aging Skeletal Muscle: Physiologic Changes and The Effects of Training. *Physical Therapy*. 2002; 82:62-68

Higgins, M., Perrin, DH. (1997). Comparison of Weight-Bearing and Non-Weight-Bearing Conditions on Knee Joint Reposition Sense. *Journal of Sport Rehabilitation*, 6, 327-334

Higgins, M. (1997). Functional Activities-- Transition from Rehabilitation to Practice” *Athletic Therapy Today*, July, 97.

Peer Reviewed Published Abstracts

Morris KA, Mangum LC, Higgins M, Saliba S. Muscle Activity Differences of the Lumbar Multifidus During Rehabilitation Exercises in Patients With and Without Non-Specific Low Back Pain. June 2019, Vol54 (6s), pp. S-385

Hill KB, Mangum LC, Sutherlin MA, Hart JM, Higgins M, Saliba S, Transverse Abdominis and Lumbar Multifidus Activity in Individuals With and Without Low Back Pain During Walking. June 2019, Vol54 (6s), pp. S-385

Koldenhoven RM, Virostek A, **Higgins M**, Hertel J. Runners With Exercise-Related Lower Leg Pain Exhibit Increased Contact Time and Strength Deficits. June 2019, Vol54 (6s), pp S-157

Paizs SC, Walton SR, Higgins MJ, Resch JE. Ultrasound Imaging of Neck Musculature in Individuals With and Without History of Concussion. June 2019, Vol54 (6s), pp. S-285

Daniell B, Walton SR, Malin SK, **Higgins MJ**, Resch JE. An Investigation of the Effects of Concussion on Metabolism and Caloric Intake, *JAT*: June 2018, Vol. 53, No. 6s, pp. S-1-S-383.. <https://doi.org/10.4085/1062-6050-53.6s.s1>

Hernden K, Mangum LC, **Higgins M**, Saliba S. Relationship of Ulnar Collateral Ligament Characteristics Using Ultrasound Imaging and Demographic Information in Collegiate Baseball Players. *JAT*: June 2018, Vol. 53, No. 6s, pp. S-1-S-383.. <https://doi.org/10.4085/1062-6050-53.6s.s1>

Gregory CJ, Koldenhoven RM, **Higgins M**, Hertel J. Effects of External Supports on Running Mechanics in Individuals With History of Lateral Ankle Sprains, *JAT*: June 2018, Vol. 53, No. 6s, pp. S-1-S-383.. <https://doi.org/10.4085/1062-6050-53.6s.s1>

Bula, M.; Stritch, T.; and **Higgins, M.** (2016) "Preliminary Analysis of Incident Rate of Head Impacts in Collegiate Women's Lacrosse," *International Journal of Exercise Science: Conference Proceedings*: Vol. 9: Iss. 4, Article 23.

Higgins MJ, Bowman TGA Comparison of Head Impacts in National Collegiate Athletic Association Division 1 and Division 3 Men's Lacrosse Athletes (2015) Supplement. *Journal of Athletic Training*: June 2015, Vol. 50, No. 6 Supplement, pp. S-1-S-312. doi: <http://dx.doi.org/10.4085/1062-6050-50.6.s1>

Lisman P, Wilder N, Nadelen M, Livezey R, Ponce P, **Higgins M**. Association between the functional movement screen and noncontact lower extremity injury in collegiate football players. *Medicine and Science in Sports and Exercise (Supplement)*, 46:S768, 2015. Annual meeting of the American College of Sports Medicine, 2015.

Ryan C., Paden A., Tierney R.T., McDevitt J., **Higgins M**. Facemask removal of commonly worn lacrosse helmets. Eastern Athletic Trainers' Association. January 2013, Buffalo, NY. Poster presentation. *Graduate Student Award Winner*.

Mansell, J., Tierney, R.T., Driban, J., **Higgins, M.**, Clegg, S., Krynetskiy, E., Mishra, A. Translational Research Model to Assess the Role of Genetics in Concussion. *J Athl Train* 2010:45(Supplement).

McDevitt J., Tierney R.T., Mansell J.L., **Higgins M.**, Toone N., Mishra A., Krynetskiy E. Neuronal Structural Protein Polymorphisms and MTBI in College Athletes. *J Athl Train* 2010:45(Supplement).

Tierney R.T, Mansell J.L., **Higgins M.**, McDevitt J., Toone N., Mishra A., Krynetskiy E. Apolipoprotein E Polymorphisms and Concussion in College Athletes. *J Athl Train* 2009:44(Supplement).

Mansell J.L., Tierney R.T., **Higgins M.**, McDevitt J., Toone N., Glutting J. Concussion signs and symptoms following head impacts in college athletes with a previous concussion. *J Athl Train* 2009:44(Supplement).

Markis E, Tierney R, Dribian J, **Higgins M**. Evaluation of Head Impact Acceleration During Soccer Heading. *Journal of Athletic Training*. 2008: *JAT* 43(3)S3

Wilbur K, Foulke K, Tierney R, **Higgins M**, Driban J, Schultz S. Effect of Plyometric Neck muscle training on head-neck segment kinematics and Dynamic Stabilization during Soccer heading. *JAT* 42(2) S27; 2007

Higgins M, Tierney R, Caswell S, Brady J, McHardy K, Dribian J. An Intraoral Mouthpiece Accelerometer Is A Reliable Technique For Measuring Head Acceleration During Soccer Heading. *JAT* 42(2) S28; 2007

Tierney R, **Higgins M**, Caswell S, Brady J, McHardy K, Dribian J. Gender Differences In Head Acceleration During Soccer Heading With And Without Soccer Headgear. *JAT* 42(2) S27; 2007

Higgins MJ, Halstead PD, Snyder-Mackler Barlow D. A mouthpiece accelerometer can

accurately predict headform acceleration upon impact. *JAT* 39(2) S50; 2004.

Kaminski TW, **Higgins MJ**. Understanding the relationship between heading a soccer ball and Neuropsychological performance in girls interscholastic soccer. *JAT* 39(2); S18, 2004.

Tierney RT, Sitler MR, Swanik CB, Swanik KA, **Higgins MJ**, Torg J. Gender differences in dynamic stabilization during head acceleration. *JAT* 39(2); S20, 2004.

Sitler MR, Tierney RT, Swanik CB, Swanik KA, **Higgins MJ**, Torg J. Knowledge and direction of force application effect head acceleration. *JAT* 39(2); S119, 2004.

Kaminski TW, **Higgins MJ**. Examining End-Range Eccentric Force in a Group of Subjects with Self-reported Functional Ankle Instability. *Med Sci Sp Exc* 36(5); S287. 2004.

Peer Reviewed Posters Presentations

Higgins MJ, Bowman TG. A Comparison of Head Impacts in National Collegiate Athletic Association Division 1 and Division 3 Men's Lacrosse Athletes. National Athletic Trainers' Association Annual Convention. June, 2015. St. Louis MO.

Kindschi K, **Higgins M**, Hillman A, Caswell S, Bowman T, Lincoln A, Penczak G. Head Impact Exposure in Collegiate Men's Lacrosse. Med Star Health Systems Research Symposium. Washington D.C. May 2015

Kindschi K, **Higgins M**, Hillman A, Caswell S, Bowman T, Lincoln A, Penczak G. Head Impact Characteristics in Collegiate Men's Lacrosse. Med Star Health Systems Research Symposium. Washington D.C. May 2015

Hoogeveen A.M., Tierney R.T., McDevitt J.K., Dorminy M.L., **Higgins M**. Effect of Ball Speed During Soccer Heading on Concussion Assessment Scores. National Athletic Trainers' Association Annual Convention. June, 2013. Las Vegas, NV.

McDevitt J., Tierney R.T., Mansell J.L., **Higgins M**, Toone N., Mishra A., Krynetskiy E. Neuronal Structural Protein Polymorphisms and MTBI in College Athletes. February, 2012. Temple Pharmacy School, Philadelphia, PA. Poster presentation. (Award winner)

Tierney R.T., Mansell J.L., **Higgins M**, McDevitt J., Bright, N., Gaughan, J., Mishra A., Krynetskiy E. Apolipoprotein E Polymorphisms and Concussion in College Athletes. Mid Atlantic Region Conference, American College of Sports Medicine. November 2010. Harrisburg, PA. Oral presentation.

McDevitt J., Tierney R.T., Mansell J.L., **Higgins M**, Toone N., Mishra A., Krynetskiy E. Neuronal Structural Protein Polymorphisms and MTBI in College Athletes. Eastern Athletic Trainers' Association. January, 2010. Boston, MA. Poster presentation. *Graduate Student Award Winner*.

Tierney R.T., Mansell J.L., **Higgins M**, McDevitt J., Bright, N., Gaughan, J., Mishra A., Krynetskiy E. Apolipoprotein E Polymorphisms and Concussion in College Athletes. Mid Atlantic Region Conference, American College of Sports Medicine. November 2010. Harrisburg, PA. Oral presentation.

Mansell, J., Tierney, R.T., Driban, J., **Higgins, M**, Clegg, S., Krynetskiy, E., Mishra, A. Translational Research Model to Assess the Role of Genetics in Concussion. Pennsylvania Athletic Trainers Society Convention. June, 2010. Harrisburg, PA.

Mansell, J., Tierney, R.T., Driban, J., **Higgins, M.**, Clegg, S., Krynetskiy, E., Mishra, A. Translational Research Model to Assess the Role of Genetics in Concussion. National Athletic Trainers' Association Annual Convention. June, 2010. Philadelphia, PA. Oral Presentation.

McDevitt J., Tierney R.T., Mansell J.L., **Higgins M.**, Toone N., Mishra A., Krynetskiy E. Neuronal Structural Protein Polymorphisms and MTBI in College Athletes. National Athletic Trainers' Association Annual Convention. June, 2010. Philadelphia, PA. Oral presentation.

Tierney R.T., Mansell J.L., **Higgins M.**, McDevitt J., Toone N., Mishra A., Krynetskiy E. Apolipoprotein E Polymorphisms and Concussion in College Athletes. National Athletic Trainers' Association. June 2009. San Antonio, TX. Oral presentation.

Mansell J.L., Tierney R.T., **Higgins M.**, McDevitt J., Toone N., Glutting J. Concussion signs and symptoms following head impacts in college athletes with a previous concussion. National Athletic Trainers' Association. June 2009. San Antonio, TX. Poster presentation.

Mansell JL, Tierney RT, **Higgins M**, McDevitt J, Toone N, Glutting J. Concussion signs and symptoms following head impacts in college athletes with a previous concussion. Temple University College of Health Professions Research Day 4/09

McDevitt J, Tierney RT, Mansell JL, Driban J, Toone N, **Higgins M**, Mishra A, Krynetskiy E. Neuronal structural protein polymorphisms and concussion in collegiate athletes. Temple University College of Health Professions Research Day 4/09

Tierney, RT, Driban, JB, Clegg, S, Mansell, J, **Higgins, M**, Brown, MD. Effect of Soccer Heading on Brain Injury Protein Markers and Signs and Symptoms. Eastern Athletic Trainers Association Clinical Symposia, Boston, MA. 1/09

Markis E.A., Tierney, R.T., Driban, J., & **Higgins, M.** Evaluation of head impact acceleration during soccer heading in high school athletes. National Athletic Trainers' Association. June 2008. Oral presentation

Higgins M, Tierney R, Driban J, Edell S, Watkins R. Effect of Lacrosse Equipment on Cervical Spinal-Cord Space During Immobilization. Eastern Athletic Trainers Association Valley Forge, Pa. 1/2008.

Tierney, R.T., **Higgins, M.**, Caswell, S., Brady, J., McHardy, K., Driban, J., & Darvish, K. Gender Differences in Head and Neck Kinematics and Dynamic Stabilization during Soccer Heading With and Without Soccer Headgear. Eastern Athletic Trainers' Association. January 2007. *Research Grant Award Oral Presentation.*

Tierney, R.T., **Higgins, M.J.**, Caswell, S.V., Brady, J.L., McHardy, K., & Driban, J.B. Gender Differences in Head Acceleration during Soccer Heading Wearing Soccer Headgear. National Athletic Trainers' Association Annual Convention. June 2007. Oral Presentation.

Sikora K, **Higgins M**, Parr J. Medial Epicondyle Avulsion Fracture in a High School Lacrosse Player: A Case Report. Mid-Atlantic Athletic Trainers Association Annual Meeting and Symposia, Virginia Beach, Va. 5/2007

Marshall M, **Higgins M**, Beaulieu K. Triangular Fibrocartilage Tear in a Three Sport High School Athlete. A Case report. Mid-Atlantic Athletic Trainers Association Annual Meeting and Symposia, Virginia Beach, Va. 5/2007

Higgins, M.J., **Tierney, R.T.**, Caswell, S.V., Brady, J.L., McHardy, K., & Driban, J.B. An Intraoral Mouthpiece is a Reliable Technique for Measuring Head Acceleration during Soccer Heading. National Athletic Trainers' Association Annual Convention. June 2007. Oral Presentation.

Foulke K, **Higgins M.** “Effect of Plyometric Neck Muscle Training on Head Kinematics in Division I Female Soccer Players” Eastern Athletic Trainer’s Association, Boston 1/2007

Wilbar, K., Foulke, K., Tierney, R.T., Driban, J., **Higgins, M.**, & Shultz, S. Effect of Plyometric Neck Muscle Training on Head and Neck Kinematics and Dynamic Stabilization during Soccer Heading – A Pilot Study. Eastern Athletic Trainers’ Association. January 2007. Poster Presentation.

Higgins, M., Tierney, R.T., Caswell, S., Brady, J., McHardy, K., Driban, J. Reliability of an Intraoral Mouthpiece Accelerometer When Measuring Head Acceleration during Soccer Heading. Eastern Athletic Trainers’ Association Annual Convention. January 2007. Poster Presentation.

Tierney, R.T., **Higgins, M.**, Caswell, S., Brady, J., McHardy, K., Driban, J., & Sitler, M. Gender Differences in Head and Neck Kinematics and Dynamic Stabilization During Soccer Heading With and Without Soccer Headgear. Pennsylvania Athletic Trainers’ Society Annual Convention. June 2006. *Research Grant Award Oral Presentation.*

Black M, Braut D, **Higgins MJ**, O’Brien T. Acute Exertional Anterior Compartment Syndrome In A Collegiate Football Player: A Case Report. . Mid-Atlantic Athletic Trainers Association Annual Meeting and Symposia, Virginia Beach, Va. 5/2006

Black M, Braut D, **Higgins MJ**, O’Brien T. Acute Exertional Anterior Compartment Syndrome In A Collegiate Football Player: A Case Report. Eastern Athletic Trainer’s Association, Philadelphia 1/2006

Tierney, R.T., **Higgins, M.**, Caswell, S., Brady, J., McHardy, K., Driban, J., & Sitler, M. Gender Differences in Head and Neck Kinematics and Dynamic Stabilization During Soccer Heading With and Without Soccer Headgear. Pennsylvania Athletic Trainers’ Society Annual Convention. June 2006. *Research Grant Award Oral Presentation.*

Higgins MJ, Halstead PD, Barlow DH. Relationship Between COG and Soft Palate Acceleration During Headform Impact EATA Poster Presentation, Philadelphia, PA. 2004.

Tierney, R.T., Sitler, M.R., Swanik, C.B., Swanik, K.A., **Higgins, M.**, & Torg, J.S. Gender Differences in Head-Neck Segment Dynamic Stabilization During Head Acceleration. National Athletic Trainers' Association Annual Convention. June 2004. Oral Presentation.

Sitler, M.R., Tierney, R.T., Swanik, C.B., Swanik, K.A., **Higgins, M.**, & Torg, J.S. Force Application and Direction Effect Head-Neck Segment Acceleration. National Athletic Trainers' Association Annual Convention. June 2004. Poster Presentation.

Higgins MJ, Halstead PD, Barlow DH. Impact Acceleration at the COG, Soft Palate, and Helmet During Impact Testing. EATA Poster Presentation, Boston, MA. 2003.

Published Reviews

Higgins, M. (2000). Review of Sports Nutrition. Driscoll. Doody Publishing

Higgins, M (1999). Review of Basic and Applied Sciences for Sports Medicine. Maughan Butterworth-Heinemann. Doody publishing.

Book Reviews

AAOS Sports Medicine

Luttgens: Kinesiology: Scientific Basis of Human Motion, 9e WCB/McGraw-Hill

GRANTS

University of Virginia 3 Cavalier; Resch J, PI, Panzer M, **Co-PI, Higgins M** Co PI. Proof of Concept: Hit Alert Optics System 60,000 Funded

National Operation Committee on Standards for Athletic Equipment (NOCSAE)

Higgins M PI. Head Impact Exposure and Characteristics in Men's and Women's Collegiate and Scholastic Lacrosse. 250,000. (not funded)

Mind Matters Challenge: NCAA/DOD 2/2015; **PI Higgins M**, Co PI Caswell S and Bowman T. The Effect of Instructional Sessions on Players Head Impact kinematics and Characteristics in Men's and Women's Lacrosse. 400,000 (not funded)

School of Emerging Technologies (SET) Towson University 2014; **PI Higgins M**, Co PI Caswell S, Bowman T, Halstead PD. Validation of Head Impact Sensors and Real Time Head Impact Kinematics in Sport, Funded: 36,200.

FDRG, **PI M Higgins 2013** Kinematic Analysis of Lacrosse impacts 4,997 Funded

Maryland Industrial Partner 2011 **Higgins M PI**, Nadelen M, Barton A Co Investigator: Newo Technologies and V-Core validation. 93,250 not funded

National Football League Charities 2011 **Higgins M PI**, Tierney R Co-investigator Kinematics of Sports Related Head Impacts in Real Time Utilizing a Mouthpiece Accelerometer. 99,700 not funded

National Collegiate Athletic Association Covassin T PI, Higgins M, Schatz P, Kovan J Co Investigators, Examining Long-Term Effects and Quality of Life in Concussed Collegiate Athletes: NCAA Study 100,000 not funded.

Mid-Atlantic Athletic Trainers Association Grant. (2011). **Higgins M. (PI)**, Tierney R.T., Dorminy, M., Hoogeveen, A., McDevitt, J., Bright, N., Atiemo, E., Kropf, E. Study assessing Effect of Ball Speed on Head Impact Kinematics and Concussion Assessment Scores during Soccer Heading. \$1,250, Funded

Genotype and Mild Traumatic Brain Injury in College Athletes (NOCSAE)

PI Tierney R. Co PI **Higgins M**, Brown M, Driban J, Mansell J. Temple University Grant Contract 57,000 2 years. Received score not funded 8/08

Eastern Athletic Trainers Association Effect of Genotype, Cervical Strength and Gender on Mild Traumatic Brain Injury in Football and Soccer. PI Tierney R. Co PI **Higgins M**, Brown M, Driban J, Mansell J. 5,000 . not funded 10/08

Genotype and Mild Traumatic Brain Injury in College Athletes

PI Higgins M. Co PI Tierney, Brown M, Driban J, Mansell J. Towson University Grant Contract. Funded 4,500 FDRC Fall 2008

Pennsylvania Athletic Trainers Association "Effect Of Soccer Heading On Brain Injury Protein Marker Concentration" PI Tierney R. Co PI **Higgins M**, funded 5,000

Higgins M. PI Effect of Lacrosse Equipment on Cervical Spine Position in a Spine Boarded Athlete. Faculty Developmental Grant Towson University, funded 5,000

Higgins M. PI Gender Differences in Head-Neck Segment Kinematics and Dynamic Stabilization During Soccer Heading. Faculty Developmental Grant Towson University, Funded 5,000.

Gender Differences In Head Acceleration During Soccer Heading With And Without Soccer Headgear. PI Tierney R. Co PI **Higgins M.**, Pennsylvania Athletic Trainers Society funded 4,000

Gender Differences in Head Acceleration During Soccer Heading. PI Tierney R. Co PI **Higgins M.**, Eastern Athletic Trainers Association – funded 4,000

Effect of Soccer Headgear on Head Impact Magnitude During Soccer Heading. Mid-Atlantic Co-investigator. Athletic Trainers Association – 1,500 Funded

University of Delaware Department of Health and Exercise Science Research Grant - 3,000

PRESENTATIONS

INVITED:

Thoracic Mobilization for the treatment of Cervical and Shoulder Pain and Dysfunction. NATA Annual Meeting and Clinical Symposia, Las Vegas, NV June 2019

PNF for the Lower Extremity. NATA Annual Meeting and Clinical Symposia, Las Vegas, NV June 2019

Translation Exercise bridging the gap between rehabilitation and performance (EBP), Fredericksburg Regional Sports Medicine Conference, Fredericksburg, Va, Dec, 2018

Manual Therapy for Lumbopelvic Pathology. NATA Annual Meeting and Clinical Symposia, New Orleans, La. June 2018

Vestibular Assessment and Therapy for Concussion Management. NATA Annual Meeting and Clinical Symposia, New Orleans, La. June 2018

Sacroiliac Joint Evaluation. Lynchburg University Sports Medicine Symposium. Lynchburg, Va. March 2018

Manual Therapy for the Throwing Shoulder. Art and Science of Sport Medicine Conference, Charlottesville Va, April, 2018.

Head Impacts in Lacrosse: Should We Be Concerned? (EBP approved) Fredericksburg Regional Sports Medicine Conference, Fredericksburg, Va, Dec, 2017

Head Impact Sensor Technology: How Will this Impact Athletic Training Care in the Future? Lacrosse: To Helmet or Not to Helmet? How On-Field Head Impact Biomechanics is Leading the Charge. Feature Presentation NATA Clinical Symposia, Houston, TX. June 2017.

Integration of the Kinetic Chain: The Trunk. Functional Mechanics /Impact On Athletic Injuries, (EPP approved) Art and Science of Sport Medicine Conference, Charlottesville Va, June, 2017

Integration of the Kinetic Chain: Does it Increase Athletic Performance, (EBP approved) Mid Atlantic Athletic Trainers Association Annual Meeting, Va. Beach, Va, May, 2017

Evaluation and Treatment of the Lumbopelvic Region. Lynchburg College, March 2017

Manual Therapy Techniques for the Lumbar Spine. Eastern Athletic Trainers Association Annual Meeting and Symposia. Philadelphia, Pa Jan, 2017.

Integration of the Kinetic Chain: The Trunk, (EBP approved) Fredericksburg Regional Sports Medicine Conference, Fredericksburg, Va, Dec, 2016

Integration of the Kinetic Chain: The Trunk. Functional Mechanics /Impact On Athletic Injuries, (EBP approved) HCA Virginia Sports Medicine, Richmond Va, May, 2016

Effectiveness of Core Strengthening Exercise Programs on Lumbar Pain and Athletic Performance. (EBP approved) ACHIEVING Best Practices in Injury Prevention and Management for Youth Athletes. George Mason University, Fairfax Va. April, 2016

The Use Of Clinical Prediction Rules And Evidenced Based Therapies For Lumbar Spine Rehabilitation with Lab, (EBP approved) Virginia Athletic Trainers Association Symposia, Williamsburg, Va. Jan. 2016

Stabilizing and Strengthening the Trunk in the Olympic Athlete United States Olympic Committees International Coaching Enrichment Certificate Program (ICECP) Newark, DE. Oct, 2015.

NATA EBP Webinar: Clinical Prediction Rules and Evidenced Based Rehabilitation for the Lumbar Spine. Sept 23rd, 2015.

Manual Therapy for Cervical Spinal Movement Restrictions National Athletic Trainers Association Annual Meeting and Symposium St, Louis, Mo June 2015

Grand Rounds: What Would The Experts Do! Therapeutic Exercise. National Athletic Trainers Association Annual Meeting and Symposium St, Louis, Mo June 2015

The Use Of Clinical Prediction Rules And Evidenced Based Therapies For Lumbar Spine Rehabilitation. (EBP approved) Mid-Atlantic Athletic Trainers Association Symposia, Virginia Beach, Va. May 2015

Face Mask Removal Techniques for Lacrosse Helmets. ACHIEVE Conference. George Mason University, Fairfax, VA. April 2015.

US Lacrosse Sports Medicine Symposium: The Use of Sensors to Measure Head Impacts in Sport - panelist / Workshop Baltimore, MD, Jan. 2015

US Lacrosse Sports Medicine Symposium-Workshop on Emergency Care of the Lacrosse Athlete, Baltimore, MD, Jan. 2015

Spine Sparing Training Techniques for the Olympic Athlete. United States Olympic Committees International Coaching Enrichment Certificate Program (ICECP) Newark, DE. Sept, 2014.

Lacrosse Impact Exposure Data. Sport Legacy Institute. Hit Count Conference. Boston, Ma, July 14

Future Research in Head Impact Exposure. Sport Legacy Institute. Hit Count Conference. Boston, Ma., July 14

Advanced Topics Course: Manual Therapy Techniques for the Lumbar spine, Pelvis and Hip. National Athletic Trainers Association Symposia and Expo. June 2014

Beyond the Basics: Advanced Manual Therapy Techniques of the Upper Extremity that Every Athletic Trainer Should Know. National Athletic Trainers Association Annual Meeting and Clinical Symposium: Indianapolis, IN. June 29, 2014

Evidenced Based Functional Rehabilitation. Mid-Atlantic Athletic Trainers Association Symposia, Virginia Beach, Va. May 2014

SI Joint Evaluation and Rehabilitation. Graduate Lecture Seminars, Temple University. Philadelphia, Pa. March 2014.

Evidence based management of the injured athlete according to NATA position and consensus statements. University of Delaware, Newark De. 4/2014

Functional Core Training for Prevention of Spinal Injuries. United States Olympic Committee International Coaching Enrichment Certificate Program (ICECP) Newark, DE. Sep. 2013. International Coaches from 34 different countries

Incorporating vestibular assessment and therapy into your concussion management program. Lab Leader: National Athletic Trainers' Association. June 2013, Las Vegas, NV.

SI Joint Evaluation and Rehabilitation. Graduate Lecture Seminars, Temple University. Philadelphia, Pa. March 2013. Area Athletic Trainers, Graduate Students and faculty. (20)

Using Clinical Prediction Rules in the Treatment of Spinal Pain. Medical Aspects of Sports. Newark, DE February 2013

Preventing Spinal Injuries in Olympic Athletes. United States Olympic Committee International Coaching Enrichment Certificate Program (ICECP) Newark, DE. Oct. 2012. International Coaches from 25 different countries

Evaluation and Treatment of The Injured Athlete (on field and sideline evaluation), Evidence based practice according to NATA position and consensus statements. University of Delaware, Newark De. 8/2012

The Use of Clinical Prediction Rules in the Treatment of Cervical Pain. NATA Annual Meeting and Clinical Symposia, St. Louis, Mo. June 2012

Pathomechanics and Rehabilitation of the Shoulder: Volleyball. The TEAM Approach to Sports Medicine: Focus on the Shoulder. Richmond Va, Jan7, 2012.

Pathomechanics and Rehabilitation of the Shoulder: Swimming. The TEAM Approach to Sports Medicine: Focus on the Shoulder. Richmond Va, Jan7, 2012.

Kinetic Chain Functional Assessment. Graduate Lecture Seminars, Temple University. Philadelphia, Pa. Feb 17, 2012..

SI Joint Evaluation and Rehabilitation. Graduate Lecture Seminars, Temple University. Philadelphia, Pa. March 23, 2012.

Strategies for Low Back Health in the Athlete. United States Olympic Committee International Coaching Enrichment Certificate Program (ICECP) Newark, DE. Sept 25, 2011.

Myofascial Techniques NATA Conference and Symposia, New Orleans, La June 2011

The Use of Clinical Prediction Rules in the Treatment of the Cervical, Thoracic and Lumbar Spine. A Manual Therapy Approach. Advanced Topics Lecture. NATA Conference and Symposia, New Orleans, La June 2011

Emerging Technologies in Helmeted Sports: A Look at Football, Ice Hockey, and Lacrosse
Lacrosse helmets what do we really know? NATA Conference and Symposia, New Orleans, La June 2011

Functional Assessment Utilizing a Deep Squat. Temple University, Philadelphia, PA Department of Kinesiology, April 2011

Sacroiliac Joint and Hip Evaluation and Treatment. Temple University, Philadelphia PA, October 2010

Strategies for Low Back Health in the Athlete. United States Olympic Committee International Coaching Enrichment Certificate Program (ICECP) Newark, DE. October 6, 2010.

Spinal “SNAGS” a Manual Therapy Technique for the Spine. NATA Convention and Symposia, Philadelphia, Pa. June 22, 2010

Strain- Counter Strain for the Athletic Trainer. Mid-Atlantic Athletic Trainers Association Symposium. Virginia Beach, VA, May 14, 2010.

Shoulder Labral Pathologies: Diagnosis and Treatment. Mid-Atlantic Athletic Trainers Association Symposium. Virginia Beach, VA, May 14, 2010.

Building a Solid Foundation: Training the Core. American Osteopathic Academy of Sports Medicine. Anaheim, CA. April 15, 2010.

Functional Control of the Upper and Lower Extremity in Sports. Return to Play-Functional Integration. Richmond, Va, Jan. 9, 2010.

Strategies for Low Back Health in the Athlete. United States Olympic Committee International Coaching Enrichment Certificate Program (ICECP) Newark, DE. September 18, 2009.

Spinal Mobilization Techniques Utilizing “SNAGS” and “NAGS” NATA Convention and Symposia, San Antonio, TX. June 21, 2009

Muscle Energy Techniques for the Lumbar Spine. Art and Science of Sports Medicine. University of Virginia, Charlottesville, Va. June 4, 2009

Non-Operative Evaluation and Treatment of Patellofemoral Instability. Patellofemoral Instability and the Role of the Medial Patellofemoral Ligament: Anatomy, Diagnostic Imaging, Non Operative and Surgical Treatments Baltimore, MD, March 28 2009.

Maintaining Strength and Speed In-Season with Training and Restoration, Hammer Strength Clinics. Montclair, NJ, March 14, 2009.

Clinical Biomechanics of the Overhead Athlete. Advance Concepts for Managing the Overhead Athlete. Richmond, Va, Jan, 10, 2009.

Prevention Strategies for The Low Back. United States Olympic Committee International Coaching Enrichment Certificate Program (ICECP) Newark, De, October 3, 2008.

How, Where, When, Why: The Decision Making Process for Return to Play. University of Delaware Physical Therapy . Newark, De., June 25, 2008.

Manual Therapy for the Upper Extremity, Mid-Atlantic Athletic Trainers’ Clinical Symposium, Virginia Beach, Va, May 17, 2008.

Manual Therapy for the Lower Extremity, National Athletic Trainers Association One Day Workshop, Virginia Beach, Va, May 15, 2008.

Dynamic Warm-Up for the Gymnast – Wilmington, De, April 12, 2008.

Principles of Biomechanics, Delaware State Strength Training and Conditioning Symposia, Newark, De, April 22, 2007.

Lumbar Spine Evaluation, Temple University, Philadelphia, Pa, March 11, 2007.

SI Evaluation and Treatment, Temple University, Philadelphia, Jan 15, 2007.

Lumbar Spine Evaluation, MAATA Meeting and Clinical Symposia, Virginia Beach, Va, May 20, 2006

Evaluation of the Lumbar Spine and SI –EATA Meeting and Clinical Symposia, Philadelphia, 2006

Core Stability for Back and SI Pathologies, EATA Meeting and Clinical Symposia, Philadelphia, 2006

Core Exercises for the Lacrosse Player – US Lacrosse Convention, Philadelphia, 2006

“Prevention Strategies for the Low Back” NATA Convention and Symposia, Baltimore, MD. 2004

“Prevention Strategies for the Low Back” Medical Aspect of Sports; Newark, DE 2004

“Protective Eyewear for Athletes” NATA National Convention and Symposia, St. Louis, MO., 2003

“Alternate Mobilization Techniques of the Lumbar Spine” Medical Aspect of Sports; Newark, DE, 2001.

“Alternate Mobilization Techniques of the Lumbar Spine” St Steven-St. Agnes Sports Medicine Conference; Fairfax, VA, 2000.

“Alternate Mobilization Techniques of the Lumbar Spine” NATA National Convention and Symposia, Nashville, TN: 2000

“Protecting the Wrist and thumb in Sports Injuries” 1999 Surgery and Rehabilitation of the Hand and Wrist; Philadelphia, PA.; 1999

“Rehabilitation of the Lumbar Spine: Distinguishing between Flexion and Extension Conditions” Salisbury State University Annual Sports Medicine Clinic; Salisbury, MD.1999

"Muscle Energy Techniques for Sacroiliac Dysfunction"
EATA District II Student Athletic Trainers Conference; Newark, Del. 1997

"Muscle Energy Techniques for Sacroiliac Dysfunction" Medical Aspects of Sport; Newark DE. 1997

"Role of the Fitness Professional in the Health Care System” University of Delaware; Newark, Del.; 1995

“Open vs. Closed Chain Exercises”: The Union Memorial Hospital; Baltimore, MD.; 1994.

"Effects of Steroids": Havre de Grace High School; Havre de Grace, MD; 1993

"Prevention of Heat Illness": Bel Air Athletic Club; Bel Air, MD; 1992

Instructor for the use and set-up of KIN-COM rehabilitative equipment. Chattanooga, TN.; 1992

"Rehabilitative Exercise in Sports Medicine"; The Union Memorial Hospital; Baltimore, MD.; 1992

"First Aide for Common Athletic Injuries"; Maryland Special Olympics; Solomon's Island, MD.; 1990

"Injuries to Bicyclists"; Baltimore Bicycle Club; Baltimore, MD.; 1990

ABSTRACT PLATFORM PRESENTATION

Hoogeveen AM, Tierney RT, McDevitt JK, Dorminy ML, **Higgins M**; Effect of Ball Speed During Soccer Heading on Concussion Assessment Scores. . National Athletic Trainers' Association. June 2013, Las Vegas, NV. Oral presentation.

Ryan C., **Higgins M.**, Paden A., Tierney R.T., McDevitt J., Facemask removal of commonly worn lacrosse helmets. National Athletic Trainers' Association. June 2013, Las Vegas, NV. Oral presentation.

Mansell, J., Tierney, R.T., Driban, J., **Higgins, M.**, Clegg, S., Krynetskiy, E., Mishra, A. Translational Research Model to Assess the Role of Genetics in Concussion. National Athletic Trainers' Association Annual Convention. June, 2010. Philadelphia, PA.

McDevitt J., Tierney R.T., Mansell J.L., **Higgins M.**, Toone N., Mishra A., Krynetskiy E. Neuronal Structural Protein Polymorphisms and MTBI in College Athletes. National Athletic Trainers' Association Annual Convention. June, 2010. Philadelphia, PA.

Tierney R.T, Mansell J.L., **Higgins M.**, McDevitt J., Toone N., Mishra A., Krynetskiy E. Apolipoprotein E Polymorphisms and Concussion in College Athletes. National Athletic Trainers Association Clinical Symposia – San Antonio Tx 6/09

Mansell J.L., Tierney R.T., **Higgins M.**, McDevitt J., Toone N., Glutting J. Concussion signs and symptoms following head impacts in college athletes with a previous concussion. National Athletic Trainers Association Clinical Symposia – San Antonio Tx 6/09

Markis EA, Tierney RT, Driban J, **Higgins M**: Evaluation of Head Impact Acceleration during Soccer Heading in High School Athletes. NATA Convention and Symposia, St. Louis, MO., 2008.

Higgins M, Tierney R, Caswell S, Braady J, McHardy K, Dribian J. An Intraoral Accelerometer Is A Reliable Method For Measuring Head Acceleration During Soccer Heading. NATA Convention and Symposia Anaheim CA, 2007.

Tierney R, **Higgins M**, Caswell S, Brady J, McHardy K, Dribian J. Gender Differences In Head Acceleration During Soccer Heading With And Without Soccer Headgear. NATA Convention and Symposia Anaheim CA, 2007

Wilbur K, Foulke K, Tierney R, **Higgins M**, Driban J, Schultz S. Effect of Plyometric Neck muscle training on head-neck segment kinematics and Dynamic Stabilization during Soccer heading. NATA Convention and Symposia Anaheim CA, 2007

Tierney R, **Higgins M**, Caswell S, Brady J, McHardy K, Dribian J. Gender Differences In Head Acceleration During Soccer Heading With And Without Soccer Headgear. EATA Boston, 2007

Kaminski TW, **Higgins MJ**. Understanding the relationship between heading a soccer ball and Neuropsychological performance in girls interscholastic soccer. NATA Convention and Symposia, Baltimore, MD 2004.

Tierney RT, Sitler MR, Swanik CB, Swanik KA, **Higgins MJ**, Torg J. Gender differences in dynamic stabilization during head acceleration. NATA Convention and Symposia, Baltimore, MD 2004.

Higgins MJ, Halstead PD, Snyder-Mackler L, Barlow DH. A mouthpiece accelerometer can accurately predict headform acceleration upon impact. NATA Convention and Symposia, Baltimore, MD. 2004

POSTER

McDevitt J., Tierney R.T., Mansell J.L, Driban J., **Higgins M.**, Toone, N., Mishra, A., Krynetskiy, E. Neuronal structural protein polymorphism and concussion in college athletes. February, 2012. Temple University Pharmacy School Research Day, Philadelphia, PA. Poster Presentation (Winner).

Mansell, J., Tierney, R.T., Driban, J., **Higgins, M.**, Clegg, S., Krynetskiy, E., Mishra, A. Translational Research Model to Assess the Role of Genetics in Concussion. Pennsylvania Athletic Trainers Society Convention. June, 2010. Harrisburg, PA.

McDevitt J., Tierney R.T., Mansell J.L., **Higgins M.**, Toone N., Mishra A., Krynetskiy E. Neuronal Structural Protein Polymorphisms and MTBI in College Athletes. Eastern Athletic Trainers' Association. January, 2010. Boston, MA. Poster presentation. *Graduate Student Award Winner.*

Cecil A, Navarre N, **Higgins M**, Parisi D. Isolated Greater Tuberosity Fracture In College Female Field Hockey Player. Mid-Atlantic Athletic Trainers Association Annual Symposia 5/08

Higgins M, Tierney R, Driban J, Edell S, Watkins R. *Effect of Lacrosse Equipment on Cervical Spinal Cord Space During Immobilization.* Eastern Athletic Trainers Association 1/08

Sikora K, **Higgins M**, Parr J. An Avulsion Fracture of the Medical Epicondyle in a Three Sport High School Athlete: Case Report. MAATA, Virginia Beach 2007

Marshall M, **Higgins M**, Beaulieu K. A Triangular Fibrocartilage Tear in a Three Sport High School Athlete: Case Report. MAATA, Virginia Beach 2007

Higgins M, Tierney R, Caswell S, Braady J, McHardy K, Dribian J. An Intraoral Accelerometer Is A Reliable Method For Measuring Head Acceleration During Soccer Heading. EATA Boston Ma, 2007

Tierney R, **Higgins M**, Caswell S, Braady J, McHardy K, Dribian J. Gender Differences In Head Acceleration During Soccer Heading With And Without Soccer Headgear. EATA Boston, 2007

Black M, Braut D, **Higgins M**, O'Brien T. Acute Exertional Compartment Syndrome in a Collegiate Football Player. EATA Philadelphia Pa, 2006.

Higgins MJ, Halstead PD, Barlow DH. Relationship Between COG and Soft Palate Acceleration During Headform Impact. EATA, Philadelphia, PA. 2004.

Higgins MJ, Halstead PD, Barlow DH. Relationship Between COG and Soft Palate Acceleration During Headform. EATA, Boston, MA 2003

STUDENT PRESENTATIONS (recent)

Bula, MK, Stritch T, **Higgins M**. Incidence Rate of Head Impacts in Women's Lacrosse. Mid-Atlantic ACSM regional Conference, Harrisburg, PA. Nov. 2015.

Mackrell C, Nadelen M, Penczek G, **Higgins M**, Ponce P, and Lisman P. Normative data for the functional movement screen in collegiate male lacrosse players. Mid-Atlantic Regional Chapter of the American College of Sports Medicine Annual Scientific Meeting, 2014; Maryland Athletic Trainers' Association Annual Symposium, 2015; Mid-Atlantic Athletic Trainers' Association Annual Symposium, 2015.

Livezey R, Wilder N, Nadelen M, **Higgins M**, Ponce P, and Lisman P. Normative data for the functional movement screen in collegiate football players. Mid-Atlantic Regional Chapter of the American College of Sports Medicine Annual Scientific Meeting, 2014; Maryland Athletic Trainers' Association Annual Symposium, 2015.

Duggan S, Livezey R, Stritch T, Hildebrand E, Nadelen M, **Higgins M**, and Lisman P. Atypical deltoid ligament dissociation in a collegiate women's lacrosse player: a case report. Maryland Athletic Trainers' Association Annual Symposium, 2015; Mid-Atlantic Athletic Trainers' Association Annual Symposium, 2015.

Prince E, Watts A, Ford J, Wilder J, Nadelen M, Hildebrand E, **Higgins M**, and Lisman P. Ventricular hypertrophy secondary to hypertension and obesity in a collegiate football player: a case report. Maryland Athletic Trainers' Association Annual Symposium, 2015; Mid-Atlantic Athletic Trainers' Association Annual Symposium, 2015.

Womeldorf E, Gunzelman E, Leonard-Garner M, Nadelen M, Hildebrand E, **Higgins M**, and Lisman P. Chronic ankle instability and pain secondary to ligamentous laxity and ankle osteophytes in a collegiate men's basketball player: a case report. Mid-Atlantic Athletic Trainers' Association Annual Symposium, 2015.

Beatty R, Mackrell C, Penczek G, Nadelen M, Hildebrand E, **Higgins M**, and Lisman P. Bankart lesion in a collegiate men's lacrosse player: a case report. Maryland Athletic Trainers' Association Annual Symposium, 2015.

Television/Radio/News

CAPITAL NEWS SERVICE: Athletic Trainers Absent In Many Md. High Schools, Concerns Raised About Student Safety-Ashely Westerman May 23, 2014

Baltimore Sun – Overuse Injuries- March 2013

WBAL Radio Mary Beth Marsden - DNA and Concussions

Chronicle of Higher Education- In Preventing Concussions, Fancy Helmets Aren't Always Fail Safe. 6/19/2011

TU in 2 Can Helmets Prevent Concussion

Stack Magazine on line Video – Profession of Athletic Training

WJZ TV Relationship between Genetics and Head Injury

“Healthy Living” with Tina Vindum. Sirius Satellite Radio. Back Health for Winter Sports. 11/2007.

New York Times Play Magazine. “Twist and Ouch” by Gretchen Reynolds

“Voice America” Sports Health with Vincent Disabella Host. National webcast.

“Core Stability and Back Pain” 11/2006.

“What is Athletic Training” Youth in Sports. CN8, March 2003.

“Health Hour: Sports Medicine Tips for the injured Athlete” WJBK 91.3 Baltimore, 1989.

REVIEWER**JOURNALS**

Journal of Athletic Training
Sports Medicine
Athletic Training and Sports Health Care
Journal of Applied Biomechanics
Journal of Sport Rehabilitation
Journal of Sport Engineering and Technology

GRANTS

National Athletic Trainers Association
Mid-Atlantic Athletic Trainers Association
Eastern Athletic Trainers Association

**CONTINUING
EDUCATION**

The Art and Science of Sports Medicine Conference. Charlottesville, VA 4/2019
University of Virginia Running Medicine Conference, Charlottesville, Va 3/2019
Master Dry Needling Level 1 – Charlottesville, Va 1/2019
Fredericksburg Regional Sports Medicine Conference, Fredericksburg, Va, Dec, 2018
National Athletic Trainers Clinical Symposium, New Orleans, La. 6/2018
Fredericksburg Regional Sports Medicine Conference, Fredericksburg, Va, Dec, 2017
National Athletic Trainers Clinical Symposium, Houston, TX. 6/2017
The Art and Science of Sports Medicine Conference. Charlottesville, VA 6/2017
Mid-Atlantic Athletic Trainers Association Symposium. Virginia Beach, VA. 5/2017
University of Virginia Running Medicine Conference, Charlottesville, Va 3/2017
EATA Meeting and Clinical Symposia, Philadelphia, Pa, 1/2017
Fredericksburg Regional Sports Medicine Conference, Fredericksburg, Va, Dec, 2016
National Athletic Trainers Symposium, Baltimore, Md. 2016
Mid-Atlantic Athletic Trainers Association Symposium. Virginia Beach, VA. 2016
Maryland Athletic Trainers Association Symposium, Towson, MD, 2016
ACHIEVE Conference, George Mason University. Fairfax, VA 2016
National Athletic Trainers Symposium, St. Louis, Mo. 2015
Mid-Atlantic Athletic Trainers Association Symposium. Virginia Beach, VA. 2015.
Maryland Athletic Trainers Association Symposium, Towson, MD, 2015
ACHIEVE Conference, George Mason University. Fairfax, VA 2015
US Lacrosse Sports Medicine Symposium. Baltimore, MD, 2015
National Athletic Trainers Symposium, Indianapolis, In 2014
Sport Legacy Institute, Hit Count Conference, Boston, Ma 2014
Mid-Atlantic Athletic Trainers Association Symposium. Virginia Beach, VA. 2014.
Maryland Athletic Trainers Association Symposium, Towson, MD, 2013
National Athletic Trainers Symposium, Las Vegas, NV 2013
Mid-Atlantic Athletic Trainers Association Symposium Greenville, SC. 2013
Medical Aspects of Sport, Newark, 2013
National Athletic Trainers Symposium., St. Louis, Mo 2012
Mid-Atlantic Athletic Trainers Association Symposium. Greenville, SC. 2012
The Team Approach in Treating the Upper Extremity. Richmond, Va, 2012
National Athletic Trainers Symposium. New Orleans La, 2011
National Athletic Trainers Symposium. Philadelphia, Pa 2010.
Mid-Atlantic Athletic Trainers Association Symposium. Virginia Beach, VA. 2010.
Delaware State Strength and Conditioning Clinic, Newark, DE April 17, 2010
American Osteopathic Academy of Sports Medicine. Anaheim, CA. April 15, 2010.
Functional Training of the Upper and Lower Extremity. Richmond, Va Jan, 9, 2010..
National Athletic Trainers Symposium. San Antonio TX, 6/21/09.
The Art and Science of Sports Medicine Conference. Charlottesville, VA 6/09
Patellofemoral Instability and the Role of the Medial Patellofemoral Ligament: Anatomy, Diagnostic Imaging, Non Operative and Surgical Treatments Baltimore, MD, 2009.
Hammer Strength Clinics. Montclair, NJ, 2009

Advance Concepts for Managing the Overhead Athlete. Richmond, Va, 2009
 NATA National Convention and Symposia, St. Louis, Mo, 2008
 MAATA Clinical Symposium, Virginia Beach, Va, 2008
 EATA Meeting and Clinical Symposia, Valley Forge, Pa, 2008
 NATA National Convention and Symposia, Anaheim, Ca, 2007
 Delaware Strength Training and Conditioning Symposia, Newark, De, 2007
 EATA Meeting and Clinical Symposia, Boston, Ma, 2007
 NATA National Convention and Symposia, Atlanta, Ga, 2006
 MAATA Clinical Symposium, Virginia Beach, Va, 2006
 EATA Meeting and Clinical Symposia, Philadelphia, Pa, 2006
 NATA National Convention and Symposia, Indianapolis, In, 2005
 EATA Meeting and Clinical Symposia, Boston, Ma, 2005
 NATA National Convention and Symposia: Baltimore, Md, 2004
 Medical Aspect of Sports, Newark, DE; 2004
 EATA Meeting and Clinical Symposia: Boston, Ma, 2004
 NATA National Convention and Symposia: St. Louis, Mo, 2003
 Recent Updates on Concussion Testing with IMPACT. Philadelphia, Pa, 2003
 EATA Meeting and Clinical Symposia: Boston Ma, 2003
 Medical Aspect of Sports, Newark, De, 2003
 Medical Aspect of Sports, Newark, De, 2002
 New Developments Sports Related Concussions: Pittsburgh, Pa, 2001
 Medical Aspect of Sports, Newark, De, 2001
 NATA National Convention and Symposia: Nashville, Tn, 2000
 Medical Aspect of Sports, Newark, De, 2000
 1999 Surgery and Rehabilitation of the Hand and Wrist: Philadelphia, Pa, 1999
 Salisbury State University Annual Sports Medicine Clinic: Salisbury, Md, 1999
 Medical Aspect of Sports, Newark, De, 1999
 NATA National Convention: Baltimore, Md, 1998
 Medical Aspects of Sport: Newark De, 1997
 University of Delaware Orthopedic Journal Club 95-2001
 Foot and Ankle "An Overview": Newark, De, 1996
 Meniscal Pathologies: Newark, De, 1996
 Enhancing and Evaluating College Teaching: Newark De, 1996
 Comprehensive Care of the Shoulder: Williamsburg, Va, 1994
 International Human Performance Congress: Richmond, Va, 1994
 Sports Medicine Symposium: Baltimore, Md, 1994.
 Examiner for the NATA examination: 1991 - 2001
 Spring Sports Seminar: Pittsburgh, Pa, 1993
 Sports Medicine Symposium: Baltimore, Md, 1992
 "Use of KIN-COM for Neuromuscular Control": Baltimore, Md, 1992
 "Treatment of Anterior Shoulder Pain": Baltimore, Md, 1992
 Art and Science of Sports Medicine: Charlottesville, Va, 1991
 Sport Psychology Conference: Charlottesville, Va, 1991
 Mid-Atlantic Trainers' Conference: Virginia Beach, Va, 1991
 NATA Clinical Symposia, Baltimore, MD, 1988.

CERTIFICATIONS
LICENSES

National Athletic Trainers Association
 National Strength and Conditioning Association
 NATABOC examiner
 Maryland Physical Therapy License
 Virginia Athletic Trainer's License
 Virginia Physical Therapy License
 Delaware Athletic Trainers' License
 Delaware Physical Therapy License
 Certified CPR/AED and First Aid Instructor

**UNIVERSITY
SERVICE**

University Undergraduate Research Committee
Search Committee Chair – Department of Kinesiology
College of Health Professions College Council
Department of Kinesiology Curriculum Committee chair (2010-2015)
Department of Kinesiology Chair Search Committee (2005 & 2008)
Department of kinesiology Graduate Director of Teacher Education Search Committee
Co-Director of the Medical Aspect of Sport Conference 96-2004
Co-Director of the University of Delaware Athletic Training Student Workshop 95-97

**DISCIPLINE/COMMUNITY
SERVICE**

NATA Manual Therapy Certificate Planning Committee 2015- present
NATA REF Grant reviewer 2014-present
Grant Committee NATA District III 2010-Present
EATA Grant reviewer (ad hoc)
USA Cheer Safety Committee 2014-present
Mid-Atlantic Athletic Trainer's Association District III Educational planning committee 2010-2016
Proposal Review Committee for NATA Annual Meeting and Symposia 2008-present
Original research free communication review committee NATA District III 2005-10
Past President - DATA 2006-08
President Delaware Athletic Trainer's Association 2003-2006
District II Executive Committee Member 2003-2006
President Elect Delaware Athletic Trainer's Association 2001-2003
Treasurer Delaware Athletic Trainers Association 1996-2000
District II Audit Committee 1996-2000
Co-Director of the EATA District II Student Athletic Trainers' Conference 2004
Athletic Training Task Force Member of the State Board of Physical Therapy Examiners
Special Olympics Volunteer

AWARDS

National Athletic Trainers Most Distinguished Athletic Trainer
National Athletic Trainers Association Service Award
Towson Academy of Scholars
Eastern Athletic Trainers Association Graduate Research Award
Frank George Doctoral Award (Eastern Athletic Trainers Association)
Academic All-American NCAA Division III football