

Sarah J. de la Motte, PhD, MPH, ATC

Uniformed Services University
4301 Jones Bridge Rd, Bethesda, MD 20814
Phone: (301) 295-9460 Email: sarah.delamotte@usuhs.edu

EDUCATION

Uniformed Services University MPH	2012
Virginia Commonwealth University PhD in Rehabilitation & Movement Science	2008
San Diego State University MA in Biomechanics/Athletic Training	2002
University of the Pacific BA in Sport Science/Athletic Training	2000

PROFESSIONAL APPOINTMENTS/EMPLOYMENT

Research Assistant Professor, Injury Prevention Research Laboratory Uniformed Services University of the Health Sciences, Bethesda, MD 20184	2012 – present
Postdoctoral Research Fellow, Injury Prevention Research Laboratory Uniformed Services University of the Health Sciences, Bethesda, MD 20184	2008 – 2012

RESEARCH INTERESTS

Interested in using Public Health models and principles to inform the development of practical musculoskeletal injury prevention programs that effectively translate research findings in to everyday practice. Additional interest in clinical predictive screening tools and targeted injury prevention strategies for musculoskeletal injury, and injury prevention through group fitness.

GRANT FUNDING

Title	Awarding Agency	Dates	Amount
Military Entrance & Processing Screen To Assess Risk of Training (MEPSTART). Co-Investigator. Beutler, AI, de la Motte SJ , Deuster P, O'Connor F, Lisman P.	United States Military Entrance Processing Central Command	Aug 12– Sept 15	\$500,000
The Combat Readiness Evaluation (CORE): Predicting & Preventing Musculoskeletal Injury in Deploying Marines. Co-Investigator. Beutler AI, de la Motte SJ , Deuster P, O'Connor F, Blivin S.	Office of Naval Research	Apr 10– Apr 13	\$560,000

The Effect of a Neuromuscular Warm-up Program on Preventing Stress Fracture and Lower Extremity Injury in Military Cadets. Co-Investigator. Cameron K, Beutler AI, Padua DA, de la Motte SJ , DiStefano LJ, Marshall SW.	US Army Congressionally Direction Medical Research Program	Oct 11– Sept 14	\$229,500
The Effect of a Neuromuscular Warm-up Program on Preventing Lower Extremity Injury in Military Cadets. Co-Investigator. Beutler AI, de la Motte SJ , Padua DA, Cameron K, DiStefano LJ, Marshall SW.	American Medical Society for Sports Medicine	May 10– May 11	\$25,000
The Effect of a Neuromuscular Warm-up Program on Preventing Lower Extremity Injury in US Air Force Cadets. Co-Investigator. Beutler AI, de la Motte SJ , Nelson J.	USU Intramural Research	Sept 10– Sept 12	\$150,000
The effects of lacrosse protective equipment on supine cervical alignment. Principal Investigator. de la Motte SJ , Wikstrom D, Moore B.	Far West Athletic Trainer's Association	Jan 01– May 02	\$2,000

Other Research Activities

Principal Investigator. **de la Motte SJ**, Niebuhr D, Gubata M, Packnett E. Risk Factors for Existing Prior to Service Discharge Disability for Lower Extremity Injury, Fiscal Year 2010. Accession Medical Standards Analysis & Research Activity, Division of Preventive Medicine & Epidemiology, Walter Reed Army Institute of Research, Silver Spring, MD 20910, 2012-present

Principal Investigator. **de la Motte SJ**, Niebuhr D, Gubata M, Packnett E. Risk Factors for Disability Discharge in the Air Force, 2001-2009. Division of Preventive Medicine & Epidemiology, Walter Reed Army Institute of Research, Silver Spring, MD 20910, 2011-present

Principal Investigator. **de la Motte SJ**, Arnold BL, Ross SE. 3-D Analysis of a Functional Reach Test in Subjects with Functional Ankle Instability. Virginia Commonwealth University, Richmond, VA 23284, 2006-2008

Additional Research Experience

Research Associate. Marshall SW, Padua DA, Beutler AI, Guskiewicz KM, Garrett WE, Tokish JT, DeBerardino T, Pyne S, Yu B, Kirkendall D. Epidemiology of Jump Landing Movements and ACL injury. NIH R01 AR050461-01, 2008-present

Research Assistant. Sports Medicine Research Laboratory, Virginia Commonwealth University, Richmond, VA 23284, 2004-2008

Research Assistant. Onate JA. Lower Extremity Assessment Program for Collegiate Athletes: NCAA LEAP. NIH R03 AR054031-02, 2005

HONORS & AWARDS

NATA Outstanding Doctoral Research Presentation Award, Annual meeting of the *National Athletic Trainers' Association*, St. Louis, MO, June 2008

HONORS & AWARDS

Honored Speaker, Virginia Commonwealth University School of Education Commencement Ceremony, Richmond, VA 23284, December 2008

Dean's List, Virginia Commonwealth University, Richmond, VA 23284, 2004-2008

Graduate Student Research Award, *Far West Athletic Trainers' Association*, San Diego, CA, February 2002

Dean's List, San Diego State University, San Diego, CA 92128, 2000-2002

Dean's List, University of the Pacific, Stockton, CA 95211, 1996-2000

RELATED PROFESSIONAL SKILLS

Advanced knowledge of STATA & IBM SPSS statistical packages

Basic knowledge of SAS statistical package

Advanced knowledge of biomechanics assessment techniques, including kinetic and kinematic analysis using Motion Monitor Motion Capture Software, Vicon, and force plate technologies

Intermediate knowledge of MATLAB & LabVIEW

Basic knowledge of Geographical Information Systems

Advanced knowledge of Microsoft Office applications, including Word, Excel, PowerPoint

Advanced knowledge of EndNote

Basic knowledge of Microsoft Access

SCHOLARLY ACTIVITIES

A. Publications

Journal Articles, refereed

1. Carow S, Haniuk E, Cameron KL, DiStefano LJ, Padua DA, Marshall SW, **de la Motte SJ**, Beutler A, Gerber J. Risk of lower extremity injury in a military population after performing a supervised injury prevention program. Accepted, *Journal of Athletic Training*, August 2012.
2. Padua DA, DiStefano LJ, Marshall SW, Beutler AI, **de la Motte SJ**, DiStefano MJ. Retention of movement pattern changes after a lower extremity injury prevention program is affected by program duration. *American Journal of Sports Medicine* 2012;40(2):300-6.
3. Arnold BL, Linens SW, **de la Motte SJ**, Ross SE. Concentric evertor strength deficits are associated with functional ankle instability: A meta-analysis. *Journal of Athletic Training* 2009; 44(6):653-662.
4. Beutler AI, **de la Motte SJ**, Marshall SW, Padua DA, Boden BP. Muscle strength and qualitative jump-landing differences in male and female military cadets: The JUMP-ACL study. *Journal of Sports Science & Medicine* 2009;8(4):663-671.
5. Arnold BL, **de la Motte SJ**, Linens SW, Ross SE. Ankle instability is associated with balance impairments: A meta-analysis. *Medicine & Science in Sports & Exercise* 2009;41(5):1048-1062.

B. Scientific Presentations

1. **de la Motte SJ**, O'Connor FO, Deuster P, Beutler AI. Functional Movement Screen scores in pre-deploying Marines - Can they predict musculoskeletal injury risk? *Uniformed Services University Medical Research Symposium*, May 2012.
2. **de la Motte SJ**, Beutler AI. Can a 10-minute warm-up reduce musculoskeletal injury in Air Force Academy Cadets? *Air Force Medical Support Medical Research Symposium*, Washington, DC, August 2011.
3. **de la Motte SJ**, DiStefano LJ, Beutler AI, Marshall SW, Cameron K, Padua DA. A comparison of transverse and sagittal plane jump-landing tasks using the Landing Error Scoring System. *Journal of Athletic Training* 2011;46(S1):S-174. Annual meeting of the *National Athletic Trainers' Association*, New Orleans, LA, June 2011.
4. **de la Motte SJ**, Beutler AI, Padua DA, DiStefano LJ, Marshall SW. Results of an injury prevention training program in cadets vary based on level of supervision. *Medicine & Science in Sports & Exercise* 2011;43(5):426-427. Annual meeting of the *American College of Sports Medicine*, Denver, CO, May 2011.
5. **de la Motte SJ**, Salgado CA, Beutler AI. Effectiveness of two supervision levels of a musculoskeletal injury prevention program for reducing injury incidence among West Point Cadets. *Uniformed Services University Medical Research Symposium*, May 2011.
6. **de la Motte SJ**, Arnold BL, Ross SE. CAI subjects show spinal rotation differences at maximal reach of the Star Excursion Balance Test. *Journal of Athletic Training* 2010;45(S1):S-68. Annual meeting of the *National Athletic Trainers' Association*, Philadelphia, PA, June 2010.
7. **de la Motte SJ**, Beutler AI, Salgado CA. Results of an injury prevention training program in cadets vary based on level of supervision. *Uniformed Services University Medical Research Symposium*, May 2010.
8. **de la Motte SJ**, Beutler AI, Salgado CA. Qualitative jump-landing differences in 2,753 male and female military cadets. *Uniformed Services University Medical Research Symposium*, May 2009.
9. **de la Motte SJ**, Arnold BL, Ross SE, Pidcoe PE. Kinesio[®] tape at the ankle increases hip adduction during dynamic balance in subjects with functional ankle instability. *Journal of Athletic Training* 2009;44(S1):S-27. Annual meeting of the *National Athletic Trainers' Association*, San Antonio, TX, June 2009.
10. **de la Motte SJ**, Arnold BL, Ross SE. Ankle rotational torque is significantly lower in FAI subjects on the Star Excursion Balance Test. *Medicine & Science in Sports & Exercise* 2009;41(5):S1. Annual meeting of the *American College of Sports Medicine*, Seattle, WA, June 2009.
11. **de la Motte SJ**, Arnold BL. Effect of proprioceptive measures on detecting functional ankle instability: A meta-analysis. *Journal of Athletic Training* 2008;43(S1):S-108. Annual meeting of the *National Athletic Trainers' Association*, St. Louis, MO, June 2008.

B. Scientific Presentations

12. **de la Motte SJ**, Arnold BL. Individuals with ankle instability have decreased postural sway. Abstract O18. Annual meeting of the *Southeast Chapter of the American College of Sports Medicine*, Charlotte, NC, February 2005.

Discussant

1. Grasso MK, **de la Motte SJ**, Williamson J, Beutler AI. Decreasing musculoskeletal injury risk in US Air Force Academy cadets - Can 8 training sessions really reduce injury risk? *Uniformed Services University Medical Research Symposium*, May 2012.

2. Overmann E, **de la Motte SJ**, O'Connor FO, Deuster P, Beutler AI. The Military Entrance Processing Screen To Assess Risk of Training (MEPSTART): Predicting and preventing musculoskeletal injury in Basic Trainees. *Uniformed Services University Medical Research Symposium*, May 2012.

3. Beutler AI, **de la Motte SJ**, Nelson J, Zuppan M, Marshall SW. Preventing lower extremity injury in US Air Force Academy Cadets. *Defense Safety Oversight Council Annual Symposium*, Washington, DC, May 2011.

4. Salgado CA, Grasso MK, **de la Motte SJ**, Beutler AI. Developing the Combat Readiness Evaluation (CORE): Predicting & preventing musculoskeletal injury in deploying Marines. *Uniformed Services University Medical Research Symposium*, May 2011.

5. Salgado CA, **de la Motte SJ**, Beutler AI. Results of a 6-week injury prevention training program in active duty Midshipmen. *Uniformed Services University Medical Research Symposium*, May 2010.

6. Matzek B, **de la Motte SJ**, Beutler AI. Predisposing factors in chronic exertional compartment syndrome. *Uniformed Services University Medical Research Symposium*, May 2010.

7. Arnold BL, **de la Motte SJ**. Ankle inversion and eversion power measures as measured by the PrimusRS are reliable. *Medicine & Science in Sports & Exercise* 2008;40(5):S220. Annual meeting of the *American College of Sports Medicine*, Indianapolis, IN, May 2008.

8. Arnold, BL, **de la Motte SJ**, Warren B. Individuals with ankle giving way produce an inversion moment at submaximal ankle torques. *Medicine & Science in Sports & Exercise* 2006;38(5):S86. Annual meeting of the *American College of Sports Medicine*, Denver, CO, May 2006.

C. Invited Presentations

1. **de la Motte SJ**. The unique role of Athletic Trainers: Keys to successful large-scale injury prevention, treatment & rehabilitation research. Annual meeting of the *National Athletic Trainers' Association*, St. Louis, MO, June 2012.

2. **de la Motte SJ**. Decreasing musculoskeletal injury risk in US Air Force Academy Cadets. *Defense Safety Oversight Council Acquisition and Technologies Program Task Force*, The Pentagon, May 2012.

CLINICAL ATHLETIC TRAINING EXPERIENCE

Athletic Trainer, Pacific Athletic and Industrial Rehabilitation, Stockton, CA 95029, 2002-2004

Head Athletic Trainer, St. Mary's High School, Stockton, CA 95029, 2003

Intern Athletic Trainer, Women's Soccer, Men's Volleyball. University of the Pacific, Stockton, CA 95211, 2002-2003

Graduate Assistant Athletic Trainer, Men's Soccer, Women's Basketball, Men's Volleyball. University of California, San Diego, CA 92093, 2000-2002

TEACHING EXPERIENCE

Lecturer, Musculoskeletal Module, First Year Medical Students, Uniformed Services University, Bethesda, MD 20814, 2011-present

Lecturer, Sports Medicine Fellowship Program, Uniformed Services University, Bethesda, MD 20814, 2008-present

Instructor, Introduction to Medical Terminology, Virginia Commonwealth University, Richmond, VA 23284, 2006-2008

Approved Clinical Instructor, San Diego State University, San Diego, CA 92128, 2000-2002

Approved Clinical Instructor, University of the Pacific, Stockton, CA 95211, 2002-2004

Lecturer, Athletic Training Seminar, University of the Pacific, Stockton, CA 95211, 2002

SERVICE ACTIVITIES

Professional

Manuscript Reviewer, *Medicine & Science in Sports & Exercise*, 2010-present

Manuscript Reviewer, *Journal of Athletic Training*, 2009-present

Session Proposal Reviewer, *National Athletic Trainers' Association Annual Meeting & Clinical Symposia Program Planning Committee*, 2009-present

Academic Session Moderator, *National Athletic Trainers' Association Annual Meeting & Clinical Symposia*, 2008-2009

Moderator, *Mid-Atlantic Athletic Trainers' Association Annual Meeting*, 2007-2008

National Athletic Trainers' Association Board of Certification Qualified Examiner, State of California, State of Virginia, 2000-2007

University

Merit Review Committee, Uniformed Services University, Bethesda, MD 20814, 2012-present

National Institutes of Health Fellows Committee Representative, Postdoctoral Fellows' Association, Uniformed Services University, Bethesda, MD 20814, 2009-2010

Liaison to Faculty/Administration, Postdoctoral Fellows' Association, Uniformed Services University, Bethesda, MD 20814, 2009-2010

University

Department of Family Medicine Representative, Postdoctoral Fellows' Association, Uniformed Services University, Bethesda, MD, 20814, 2009-2010

Graduate Honor Council Board Member, Virginia Commonwealth University, Richmond, VA, 23284, 2006-2008

Community

Membership Advisor, Kappa Alpha Theta, Epsilon Psi Chapter, University of Richmond, Richmond, VA 23226, 2007-2008

PROFESSIONAL CERTIFICATIONS

National Athletic Trainers' Association Board of Certification, Certified Athletic Trainer 2000-present

American Red Cross, CPR for the Professional Rescuer, 2008-present

Functional Movement Screen, Certified Examiner, 2009-present

CrossFit Level 1 Certified, 2012

MEMBERSHIPS

National Athletic Trainers' Association, BOC Certified Member

American College of Sports Medicine

GROUP EXERCISE INSTRUCTOR EXPERIENCE

Group Exercise Instructor, The George Washington University, BodyStep, 2012-present

Group Exercise Instructor, Gold's Gym Van Ness, Capitol Hill & Rockville, BodyPump, BodyAttack, BodyStep, 2009-present

Group Exercise Instructor, Gold's Gym Willow Lawn, Richmond, VA, 23284, 2007-2008

Certified Les Mills Instructor, BodyAttack, BodyStep & BodyPump, 2007-present