# **REBECCA M. MIRO**

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#### Education

- 1995 **Florida International University**, College of Health, Miami, FL Bachelor of Science (B.S), Prosthetics & Orthotics, Cum Laude
- 1998 **Florida International University**, College of Business, Miami, FL Master of Business Administration, M.I.S. Concentration
- 2013 **University of South Florida**, College of Education, Tampa, FL Graduate Certificate, Research Methods
- 2014 **University of South Florida**, College of Education, Tampa, FL Ph.D., Higher Education Administration, Research Methods cognate

#### **Professional Experience**

2019-present Research Prosthetist (WOC appointment), James A. Haley VA, Tampa, FL

2014-2017	<b>PhD Program Administrator</b> , School of Physical Therapy & Rehabilitation Sciences, College of Medicine, University of South Florida, Tampa, FL.
2009-present	<b>Unit Research Administrator</b> , School of Physical Therapy & Rehabilitation Sciences, College of Medicine, University of South Florida, Tampa, FL.
2008-2009	<b>Grant Compliance &amp; Financial Analyst</b> , Office of Research & Innovation, University of South Florida, Tampa, FL
2005-2008	<b>Contract Research Administrator</b> , Pre-Award office, Moffitt Cancer Center, Tampa, FL.
2003-2005	Senior Research Administrator, Office of Sponsored Programs, Emory University, Atlanta, GA.
2001-2003	<b>Coordinator, Research Programs</b> , Division of Sponsored Research, Florida International University, Miami, FL.
1999-2001	<b>Grants Specialist</b> , Division of Sponsored Research, Florida International University, Miami, FL.

#### **License and Certifications**

2019 2015-2018 2005-present January 2013	Prosthetist. ABC # CP004368 Certified Clinical Research Professional Certified Research Administrator, Research Administrators Certification Council (valid through 2020) Continuous Scale Physical Functional Performance Test Administrator and Provisional Trainer
Professional and Co	ommunity Boards, Committees, and Memberships
2019-	VA RR&D Rehabilitation Engineering and Prosthetics/Orthotics Portfolio (RRD5)- Merit Grant Reviewer
2019	Highsmith MJ, Stevens P, <b>Miro RM (Panelist &amp; Coordinator)</b> , Highsmith JT, Kahle JT, Lucarevic J, Muller M, Pruziner A, Rabago C, Randolph BJ, Remington W, Smith DG, Stoop D, Swisher LL, Webster J. Multi-Sector State of the Science Conference: Transfemoral Socket Design and Considerations. 2-day conference hosted by University of South Florida, School of Physical Therapy & Rehabilitation Sciences (DOD grant # W81XHW-15-1-0410). August 26 and 27, 2019. Tampa, FL.
2018-	American Academy of Orthotists & Prosthetists, Online Education Committee
2016-2017	Member, School of Physical Therapy & Rehabilitation Sciences, PhD Program Committee
2015-present	Member, School of Physical Therapy & Rehabilitation Sciences, Research Committee
2014-2018	Member, Institutional Review Board, University of South Florida
2012-2016	American Academy of Orthotists and Prosthetists (AAOP), Resident member
2012-2015	American Academy of Orthotists & Prosthetists (AAOP), Secondary Knowledge Committee
2010-2012	School of Physical Therapy & Rehabilitation Sciences, Executive Cabinet

# Other Service to the University

2018-2019	Faculty Evaluation committee, member
2018-2019	Lead, Assistant Director for Research search committee

# Teaching

University of South FL, School of Physical Therapy & Rehabilitation Sciences		
Fall 2019	PHT 8702. Prosthetics & Orthotics. Course Director: RM Miro.	
Fall 2018	PHT 8702. Prosthetics & Orthotics. Course Director: RM Miro.	
Fall 2014	PHT 8702 Prosthetics & Orthotics. Primary Course Director: MJ Highsmith.	
	Guest Lecturer: RM Miro. Topic: Prosthetic Education.	
Northcentral University		

# \*note: B and C courses are supplemental

2014-2018	DIS 9901 A,B,C. Components of the Dissertation. Lead Instructor: RM Miro.
2014-2018 2014-2018	DIS 9902 A,B,C. The Dissertation Proposal. Lead Instructor: RM Miro. DIS 9903 A,B,C. Institutional Review Board and Data Collection. Lead
2014-2018	Instructor: RM Miro. (Courses B and C are supplemental) DIS 9904 A,B,C. The Dissertation Manuscript and Defense. Lead Instructor: RM Miro.

## **Research Funding**

## <u>Submitted</u>

## <u>Current</u>

Highsmith MJ (PI), **Miro RM (Co-I)**. Enhanced Auto-Diagnostic Adaptive Precision Trainer for Myoelectric Prosthetic Users (eADAPT-MP). Design Interactive. USF Project #: 6140103900. Project Period: 01/28/2019-06/30/2020. Total Project Costs (incl F&A): \$184,172.

Highsmith MJ (PI), **Miro RM (Co-I)**. Enhanced Auto-Diagnostic Adaptive Precision Trainer for Myoelectric Prosthetic Users (eADAPT-MP). Florida High Tech Corridor matching funds. Project Period: 01/28/2019-06/30/2020. Total Project Costs: \$81,183.

Highsmith MJ (PI), Hill O (Co-PI), Phillips S (Co-PI), Maikos J (Co-PI), Stevens P (Co-PI), Campbell J (Co-PI), Miro RM (**Research Coordinator**). *The IM ABLE Study: A Cross-Sector, Multi-Site Initiative to Advance care for Warriors and Veterans following Neuromusculoskeletal Injury of the Lower Limb*. Department of Defense. Solicitation number: W81XWH-15-OPORP-OORA. Proposal number: OP150089. USF Project #: 6140103500. Project Period: 10/1/2016-9/30/2019. Total Project Costs (incl F&A): \$1,305,163.

# **Completed**

Highsmith MJ (PI), Kahle JT (Co-PI), **Miro RM** (**Research Coordinator**). *The Effect of Prosthetic Socket Interface Design on Perspiration and Residual Limb Skin Condition for the Transfemoral Amputee*. Department of Defense. Solicitation number: W81XWH-14-DMRDP-CRMRP-NMSIRA. Proposal number: MR140125. USF Project #: 6140103200. Total project costs (incl F&A): \$940,714. Project period: 10/01/2014-09/30/2019.

Highsmith MJ (PI), Lura DL (Co-PI), Carey SL (Co-I), **Miro RM**, Wernke M. *A Clinical Trial Comparing Functional Performance of Voluntary Opening and Closing Body-Powered Prosthetic Terminal Devices*. TRS, Inc. 2% effort. Amount: \$24,999. Project period: 06/01/2013-01/29/2015.

Quillen WS (PI), Highsmith MJ (Co-PI), Kim SK (Co-I), **Miro RM (Coordinator)**. *Metabolic and Biomechanical Measures of Gait Efficiency of Three Multi-Axial, Vertical Shock and Energy Storing-Return Prosthetic Feet During Simple & Complex Mobility Activities*. Department of Defense (DOD) Congressionally Directed Medical Research Programs (CDMRP). 10% effort. Award # W81XWH-112-0170. Award amount: \$714,744. Project period: 09/15/2011-09/14/2014.

Quillen WS (PI), Swisher LL (Co-PI), Highsmith MJ (Co-I), Kim SH (Co-I), Chisolm TH (Co-I), **Miro, RM (Coordinator)**. *Occurrence of Impairments in Balance, Gait, Vestibular & Hearing Functions*. Department of Defense (DOD). 5% effort. Award # W81XWH-11-1-0634. Award amount: \$264,600. Project period: 09/20/2011-09/19/2014.

Highsmith MJ (PI), Kahle JT (Co-PI), Orriola J (Co-I), **Miro RM (Co-I, Coordinator)**, Sutton B (Co-I), Groer S (Co-I), Lewandowski AL, Ertl JP (Co-I). *Prosthetic Management Following Transtibial Amputation: A Systematic Review to Establish Assessment and Treatment Pathways*. American Orthotic and Prosthetic Association. 7% effort. Award number pending. Award amount: \$50,000. Project period: 01/16/2013 – 06/30/2014.

Highsmith MJ (PI), Kahle JT (Co-PI), Mengelkoch LJ (Co-I), Carey SL(Co-I), Fitzgerald SG(Co-I), **Miro RM (Coordinator)**. *Comparative Outcomes Assessment of the C-Leg and X2 Knee Prosthesis: A Pilot Study*. Otto Bock Healthcare. 5% effort. Award # 6140101200. Award amount: \$210,526. Project period: 01/05/2010-06/30/2014.

Mayer JM (PI), Quillen WS (Co-PI), **Miro RM (Research Coordinator)**. *Low Back Injury Prevention in Firefighters*. Federal Emergency Management Agency (EMW-2009-FP-00418). 15% effort. Project period: 04/30/2010- 04/29/2012.

# <u>Not Funded</u>

**Miro RM** (PI), Highsmith MJ (Co-PI), Ho LT, Hanson A. *Effectiveness of mHealth applications for persons with chronic conditions, including amputation: A systematic review of the literature.* Orthotic & Prosthetic Education & Research Foundation (OPERF). Soliciation: Small Grants program. Project Period: June 1, 2020 – May 31, 2021. \$24,530.

**Miro RM** (PI), Highsmith MJ (Co-PI), Ho LT, Hanson A. *Patient education for persons with chronic conditions, including amputation: a systematic literature review.* Orthotic & Prosthetic Education & Research Foundation (OPERF). Soliciation: Small Grants program. Project Period: July 1, 2019 – June 30, 2020. \$24,530.

**Miro RM (PI)**, Highsmith MJ (Co-PI), Quillen WS (Co-PI). Learn to Shoot Again program. National Veterans Sports Programs. Solicitation number: VA-ASG-2017-01. Project period: 10/1/2016-9/30/2017. Total costs (incl F&A): \$365,832.

Highsmith MJ (PI), Kahle JT (Co-PI), **Miro RM** (Research Coordinator). *Comparison of prosthetic socket interface design type: performance, comfort, fit, and preference in the transtibial amputee.* Department of Defense. Solicitation number: W81XWH-14-PRORP-CTA. Proposal number: OR140107. Project period: 06/01/2015-05/31/2017. Total costs: \$993,027.

Highsmith MJ (PI), Orendurff M (Co-PI), **Miro RM** (Study Coordinator). The Effects of Prosthetic Feet Componentry, from Different Functional Classification Levels, on Secondary Health Effects in Traumatic Lower Limb Amputees. Department of Defense. Solicitation number: W81XWH-14-PRORP-CTDA. Proposal number: OR140211. Project period: 07/01/2015-12/31/2016. Total costs: \$296,437.

Kim S (PI), Highsmith MJ (Co-PI), Reed K (Co-PI), **Miro RM** (Research Coordinator). Optimal Gait Training Strategy for Individuals with Transfemoral Amputation. Department of Defense. Solicitation number: W81XWH-14-PRORP-CTA. Proposal number: OR140180. Project period: 09/01/2015-08/31/2018. Total costs: \$760,958.

Highsmith MJ (PI), Kahle JT (Co-PI), **Miro RM** (Research Coordinator). *Effectiveness of the osteomyoplastic bone bridge compared to traditional transection in below knee amputation surgery*. Department of Defense. Solicitation number: W81XWH-14-DMRDP-CRMRP-NMSIRA. Proposal number: MR140123. Project period: 10/01/2014-09/30/2016.

Highsmith MJ (PI), Kahle JT (Co-PI), **Miro RM** (Research Coordinator). *The comparative effectiveness of the sub atmospheric prosthetic socket interface in the in acute amputation*. Department of Defense. Solicitation number: W81XWH-14-DMRDP-CRMRP-NMSIRA. Proposal number: MR140124. Project period: 10/01/2014-09/30/2018.

Highsmith MJ (PI), Kahle JT (Co-PI), **Miro RM** (Research Coordinator). *Comparison of prosthetic socket interface design type: performance, comfort, fit, and preference in the transtibial amputee.* Department of Defense. Solicitation number: W81XWH-14-DMRDP-CRMRP-NMSIRA. Proposal number: MR140126. Project period: 10/01/2014-09/30/2016.

Highsmith MJ (PI), Kahle JT (Co-PI), Kim S (Co-I), Lura DL (Co-I), **Miro RM (Co-I, Coordinator)**. A Comparison of Carbon Fiber Mechanical versus Microprocessor Controlled Foot-Ankle Systems in Measures of Function, Safety and Preference. Endolite. 5% effort. Amount: \$133,972. Project Period: 01/01/2013- 12/31/2013.

## Publications *Journal articles*

Kahle JT, Miro RM, Swanson AE, Ho LT, Porter M, Lura DJ, Carey SL, Lunseth P, Highsmith MJ. The effect of transfemoral prosthetic socket interface design on gait, balance, mobility, and preference: randomized clinical trial. *Pros Orth Int*. Submitted 08/2020.

Kahle JT, **Miro RM**, Ho LT, Gagliardotto A, Swanson AE. Prosthetic Management of Lower Limb Amputees Through Pregnancy: A Case Report. Obstetrics and Gynecology. April 2020, in review.

Kahle JT, Miro RM, Ho LT, Porter M, Lura DJ, Carey SL, Lunseth P, Highsmith JT, Highsmith MJ. The effect of transfemoral prosthetic socket interface designs on skeletal motion and socket comfort. A randomized clinical trial. *Pros Orth Int*. ePub ahead of print. doi: https://doi.org/10.1177/03093646209134.

Kahle JT, Miro RM, Ho LT, Porter M, Lura DJ, Carey SL, Lunseth P, Swanson A, Highsmith MJ. The effect of above the knee prosthetic socket interface design on gait, balance, mobility, and preference: randomized clinical trial. *Pros Orth Int*, Submitted, July 2019

Mohr P, Mabey R, Young J, **Miro R**, Ingram D, Mohr T. Student Physical Therapist Use of Digital Textbooks and Electronic Media. *Journal of Allied Health*. Accepted for publication, June 2019.

Haladay DE, **Miro RM**, Hardwick D, Swisher LL, Klein AB. Doctor of Physical Therapy Student Perceptions of Near-Peer Teaching in an Anatomy Educational Experience. *Journal of Physical Therapy Education* 33(3), 249-256.

Lura DJ, Carey SL, **Miro RM**, Kahle J, Highsmith MJ. Cross Over Study of Kinematic, Kinetic, and Metabolic Performance of 3 Prosthetic Feet. *Journal of Prosthetics & Orthotics*. Submitted, October 2018.

Carey SL, **Miro RM**, Kahle JT, Esparza WO, Dubey RV, Highsmith MJ. Kinematic Comparison of Voluntary Opening and Closing Body-Powered Prostheses. *Clin Biomechanics*. Submitted 2016.

Highsmith MJ, Kahle JT, **Miro RM**, Cress ME, Lura DJ, Quillen WS, Carey SL, Dubey RV, Mengelkoch LJ. Functional Performance Differences Between the Genium and C-Leg Prosthetic Knees and Intact Knees. *J Rehabil Res Dev* 53(6), 753-766, 2016. http://dx.doi.org/10.1682/JRRD.2014.06.0149

Highsmith MJ, Kahle JT, Lewandowski A, Klenow TD, Orriola JJ, **Miro RM**, Hill OT, Raschke SU, Orendurff MS, Highsmith JT, Sutton BS. Economic Evaluations of Interventions for Transtibial Amputees: A Scoping Review of Comparative Studies. *Technology & Innovation* 18(2), 85-98, 2016. http://dx.doi.org/10.21300/18.2-3.2016.85.

Highsmith MJ, Kahle JT, Wernke MM, Carey SL, **Miro RM**, Lura DJ, Sutton BS. Effects of the Genium Knee System on Functional Level, Stair Ambulation, Perceptive and Economic Outcomes in Transfemoral Amputees. *Technology & Innovation* 18(2), 139-150, 2016. http://dx.doi.org/10.21300/18.2-3.2016.139.

Highsmith MJ, Kahle JT, **Miro RM**, Mengelkoch LJ. Bioenergetic Differences During Walking and Running in Transfemoral Amputee Runners Using Articulating and Non-Articulating Knee Prostheses. *Technol Innov*, 18(2), 159-165, 2016. http://dx.doi.org/10.21300/18.2-3.2016.159.

Highsmith MJ, Kahle JT, **Miro RM**, Cress ME, Quillen WS, Carey SL, Dubey RV, Mengelkoch LJ. Concurrent Validity of the Continuous Scale-Physical Functional Performance -10 (CS-PFP-10) Test in Transfemoral Amputees. *Technology & Innovation* 18(2), 185-191, 2016. http://dx.doi.org/10.21300/18.2-3.2016.185.

Highsmith MJ, Kahle JT, Kaluf B, **Miro RM**, Mengelkoch LJ, Klenow TD. Psychometric Evaluation of the Hill Assessment Index (HAI) and Stair Assessment Index (SAI) in High-Functioning Transfemoral Amputees. *Technology & Innovation* 18(2), 193-201, 2016. http://dx.doi.org/10.21300/18.2-3.2016.193. **Miro RM**, Young WH, Dedrick RF, Highsmith MJ. Predictors of Success on the American Board for Certification's Prosthetics Certification Examination. *Pros Orth Int*, 40(3), 1-6, 2016. DOI: 10.1177/0309364616637953.

Highsmith MJ, Kahle JT, Knight M, Boyd M, Olk-Szost A, **Miro RM**. Delivery of Cosmetic Covers to Persons with Transtibial and Transfemoral Amputation in an Outpatient Prosthetic Practice. *Pros Orth Int* 40(3), 343-349, 2016. doi: 0309364614564024; PMID: 25575552.

Highsmith MJ, Lura DJ, Carey SL, Mengelkoch LJ, Kim S, Quillen WS, Kahle JT, **Miro RM**. Correlations between residual limb length and joint moments during sitting and standing movements in transfemoral amputees. *Pros Orth Int*, 40(4), 522-527, 2016. doi: 10.1177/0309364614564024.

Highsmith MJ, Kahle JT, **Miro RM**, Orendurff MS, Lewandowski AL, Orriola JJ, Sutton B, and Ertl JP. Prosthetic Interventions for the Transtibial Amputee: A Systematic Review and Meta-Analysis of High Quality, Prospective Literature and Systematic Reviews from 1997 to 2012. *J Rehabil Res Dev* (53)2, 157-184.

Lura DJ, Wernke MM, Carey SL, Kahle JT, **Miro RM**, Highsmith MJ. Differences in Knee Flexion between the Genium and C-Leg Microprocessor Knees While Walking on Level Ground and Ramps. *Clin Biomech*, 30(2), 175-81, 2015. doi: 10.1016/j.clinbiomech.2014.12.003

Highsmith MJ, Kahle JT, **Miro RM**, Cress ME, Lura DJ, Quillen WS, Carey SL, and Mengelkoch LJ. Effects of the Genium Knee in Persons with Transfemoral Amputation using the Continuous Scale Physical Functional Performance-10 (CS-PFP10) Assessment. *J Rehabil Res Dev.* In press, 2016.

Highsmith MJ, Kahle JT, **Miro RM**, Lura DJ, Dubey RV, Carey SL, Quillen WS, and Mengelkoch LJ. Perceived Differences between the Genium and C-Leg Microprocessor Prosthetic Knees in Prosthetic-Related Function and Quality of Life. *Technology & Innovation*, 15(4), 369-375, 2014.

**Miro RM**, Lewandowski AL, Kahle JT, Mengelkoch LJ, Boone D, and Highsmith MJ. Bibliometric Analysis of Articles Published from 2009 through 2011 in JPO, Journal of the American Academy of Orthotists & Prosthetists. *J Prosthet Orthot*, 25(4), 201-208, 2013.

Highsmith MJ, Kahle, JT, **Miro RM**, Mengelkoch LJ. Ramp descent performance with the C-Leg and Inter-Rater Reliability of the Hill Assessment Index (HAI). *Prosthet Orthot Int.*, 37(5), 362-368, 2013.

Mayer JM, Nuzzo J, Chen R, Quillen WS, Verna JL, **Miro RM**, Dagenais S. Impact of obesity on back and core muscular endurance in firefighters. Journal of Obesity 2012;729283:1-7.

# **Book Chapters**

King KP and **Miro RM**. (2014). Higher Education Finance. In T. Cox (Ed.). Case Studies for the New Professor: Surviving the Jungle of the Academy. Charlotte, NC: Information Age

Publishing. ISBN: 9781623967598 (paperback), 9781623967604 (hard cover), 9781623967611 (Ebook).

## <u>Other</u>

#### Dissertation

**Miro RM**. Predictors of Success on the Prosthetics Certification Examination. Doctoral Dissertation – University of South Florida. Published by UMI ProQuest, Ann Arbor, MI, 120 pages, 2014. Publication number: UMI 3617364.

#### Presentations

**Miro RM**. Predictors of Success on the Prosthetics Certification Examination. Free Paper Presentation. 41<sup>st</sup> American Academy of Orthotists and Prosthetists (AAOP) Annual Meeting and Scientific Symposium, New Orleans, LA, Feb 2015.

#### **Poster Presentations**

Mohr P, Mabey R, Young J, **Miro R**, Ingram D, Mohr T. Student Physical Therapist Use of Digital Textbooks and Electronic Media. Poster Presentation at the International Association of Medical Science Education Annual Meeting. Roanoke, VA, June 8-11, 2019.

**Miro RM**, Lewandowski AL, Kahle JT, Mengelkoch LJ, Boone D, and Highsmith MJ. Bibliometric Analysis of Articles Published from 2009 through 2011 in JPO, Journal of the American Academy of Orthotists & Prosthetists. Poster Presentation. 39<sup>th</sup> American Academy of Orthotists and Prosthetists (AAOP) Annual Meeting and Scientific Symposium. Orlando, FL., Feb 2013.

Lostroscio K, Simmons J, **Miro RM**, Lura DJ, Highsmith MJ, Carey S, and Knight A. An Interim Analysis of Body Powered Prosthetic Terminal Devices. Poster Presentation. University of South Florida undergraduate engineering colloquium. Tampa, FL. April 2014.

# ConferencesNovember 2016HHS SBIR/STTR Conference, Orlando, FLOctober 2017Society of Clinical Research Administrators (SOCRA) Annual Meeting,<br/>Orlando, FLWorkshopsPhD Programs for Research Intensive Physical Therapy Programs,<br/>Clinical Education Summit, American Council of Academic Physical<br/>TherapyOctober 2017Good Clinical Practices 101. Half-day workshop as part of the Society of<br/>Clinical Research Administrators (SOCRA) Annual Meeting, Orlando, FL

#### Webinars (attendee)

September 2019Fabrication Tips and Techniques for Female O&P Practitioners.American Academy of Orthotists & Prosthetists

# **Dissertation Committees**

2018	Dissertation Chair for Sarah L. Taylor. Educating 21 <sup>st</sup> Century Learners: A Phenomenological Study of Middle School Teachers' Understanding and Use of Differentiated Instruction School of Education, Northcentral University, AZ
2018	Dissertation Chair for Dawn Marie Jara Educating American High School Students with Disabilities: A Phenomenological Study of Teachers' Experiences Implementing Universal Design for Learning School of Education, Northcentral University, AZ
2017	Dissertation Chair for Michelle Benson How and Why Undergraduates' Perception of Leadership May affect their Work Readiness Upon Graduation: A Qualitative Case Study School of Education, Northcentral University, AZ
2017	Dissertation Chair for MaryAnn Rush Wallace Qualitative Case Studies on Injury, Class Performance, and Stressors among Collegiate Student-Athletes School of Education, Northcentral University, AZ
2015-16	Dissertation Chair for Juliana Smith The Role of Dual Language Programs in the Development of Ethnic Identity of Bilingual Students – A Quantitative Study School of Education, Northcentral University, AZ
2016-17	Dissertation Chair for April Pierson The Effect of Seeing an Instructor's Face within an Instructional Video on Connectedness, Attention, and Satisfaction School of Education, Northcentral University, AZ
Languages	English and Spanish
<b>Honors</b> 1991-1995	Florida Undergraduate Scholars Fund scholarship