

**Southwestern School of Health Professions (SSHP)
Scholarly Activity Report
FY 2015-2016**

As a responsibility of the **SSHP Research Advisory Committee**, this listing has been developed to recognize the research activities of the UT Southwestern School of Health Professions faculty (included on the SSHP Faculty Roster). The publications and grants listed represent responses from faculty members to a request for this information for the fiscal year 2015-2016. (September 01, 2015 - August 31, 2016). Programs or individuals not listed reported no publications/grants for the time period requested. We apologize in advance for any omissions or inaccuracies.

SSHP Faculty Publications and Grants Summary FYs 2015-16

Department of Clinical Nutrition

Research Grants and Contracts

<i>Grants Submitted, Award Decision Pending</i>	1
<i>Grants Awarded</i>	2
<i>Grants Submitted but Not Funded</i>	
Total Grant Submissions	3

Publications

<i>Refereed Journals</i>	7
<i>Non-refereed Journals</i>	
<i>Book Chapters</i>	
<i>Books</i>	
<i>Other</i>	

- A. Published scientific review
- B. Abstracts (Platform or Poster Presentations) 2
- C. Editorials, position papers, background papers
- D. Original invited lectures and presentations published for distribution

Presentations	5
Membership on Editorial Boards	4

Healthcare Education and Research

Research Grants and Contracts

<i>Grants Submitted, Award Decision Pending</i>	1
<i>Grants Awarded</i>	6
<i>Grants Submitted but Not Funded</i>	4
Total Grant Submissions	11

Publications

<i>Refereed Journals</i>	1
<i>Non-refereed Journals</i>	1
<i>Book Chapters</i>	
<i>Books</i>	
<i>Other</i>	

<u>A. Published scientific review</u>	
<u>B. Abstracts (Platform or Poster Presentations)</u>	2
<u>C. Editorials, position papers, background papers</u>	
<u>D. Original invited lectures and presentations published for distribution</u>	

Presentations

Membership on Editorial Boards

Department of Prosthetics and Orthotics

Research Grants and Contracts

<i>Grants Submitted, Award Decision Pending</i>	
<i>Grants Awarded</i>	2
<i>Grants Submitted but Not Funded</i>	3
Total Grant Submissions	5

Publications

<i>Refereed Journals</i>	11
<i>Non-refereed Journals</i>	
<i>Book Chapters</i>	
<i>Books</i>	
<i>Other</i>	

<u>A. Published scientific review</u>	
<u>B. Abstracts (Platform or Poster Presentations)</u>	9
<u>C. Editorials, position papers, background papers</u>	1
<u>D. Original invited lectures and presentations published for distribution</u>	

Presentations 9

Membership on Editorial Boards 1

Department of Healthcare Sciences

Research Grants and Contracts

<i>Grants Submitted, Award Decision Pending</i>	9
<i>Grants Awarded</i>	8
<i>Grants Submitted but Not Funded</i>	1
Total Grant Submissions	18

Publications

<i>Refereed Journals</i>	10
<i>Non-refereed Journals</i>	15
<i>Book Chapters</i>	
<i>Books</i>	2
<i>Other</i>	
<u>A. Published scientific review</u>	1
<u>B. Abstracts (Platform or Poster Presentations)</u>	9
<u>C. Editorials, position papers, background papers</u>	
<u>D. Original invited lectures and presentations published for distribution</u>	

Presentations	14
Membership on Editorial Boards	4

Department of Physician Assistant Studies

Research Grants and Contracts

<i>Grants Submitted, Award Decision Pending</i>	1
<i>Grants Awarded</i>	7
<i>Grants Submitted but Not Funded</i>	3
Total Grant Submissions	11

Publications

<i>Refereed Journals</i>	16
<i>Non-refereed Journals</i>	
<i>Book Chapters</i>	
<i>Books</i>	
<i>Other</i>	
<u>A. Published scientific review</u>	
<u>B. Abstracts (Platform or Poster Presentations)</u>	6
<u>C. Editorials, position papers, background papers</u>	
<u>D. Original invited lectures and presentations published for distribution</u>	

Presentations	42
Membership on Editorial Boards	

Department of Physical Therapy

Research Grants and Contracts

<i>Grants Submitted, Award Decision Pending</i>	3
<i>Grants Awarded</i>	10
<i>Grants Submitted but Not Funded</i>	3
Total Grant Submissions	16

Publications

<i>Refereed Journals</i>	17
<i>Non-refereed Journals</i>	
<i>Book Chapters</i>	4
<i>Books</i>	
<i>Other</i>	
<u>A. Published scientific review</u>	
<u>B. Abstracts (Platform or Poster Presentations)</u>	11
<u>C. Editorials, position papers, background papers</u>	
<u>D. Original invited lectures and presentations published for distribution</u>	

Presentations	20
Membership on Editorial Boards	4

Department of Rehabilitation Counseling

Research Grants and Contracts

<i>Grants Submitted, Award Decision Pending</i>	
<i>Grants Awarded</i>	
<i>Grants Submitted but Not Funded</i>	
Total Grant Submissions	

Publications

<i>Refereed Journals</i>	
<i>Non-refereed Journals</i>	
<i>Book Chapters</i>	1
<i>Books</i>	
<i>Other</i>	
<u>A. Published scientific review</u>	
<u>B. Abstracts (Platform or Poster Presentations)</u>	1
<u>C. Editorials, position papers, background papers</u>	
<u>D. Original invited lectures and presentations published for distribution</u>	

Presentations	5
Membership on Editorial Boards	

**School of Health Professions Scholarly Activity Report
2015-2016
Department of Clinical Nutrition**

Research Grants and Contracts

Grant Submitted, Award Decision Pending

Title: Evaluation of the Biochemical and Biophysical Properties of Meibomian Lipid Samples Collected From Meibomian Glands of Normal Donors and Dry Eye Patients

Purpose: Subproject “*Determine whether the molecular composition and quality of human meibum can be affected by systemic lipid metabolism disorders and/or pharmaceutical interventions.*”

Funding Agency: National Institute of Health

Funding Dates: Pending

Amount requested: Pending Status: Decision Pending.

Principal Investigator: I. Butovich,

Role: Sub-investigator in specific aim 2: **G.L. Vega**, 5% effort.

Grant Awarded

Title: HRSA grant: Predoctoral Training in General, Pediatric and Public Health Dentistry and Dental

Purpose: Enhance training to support integration of oral health within the broader health care delivery system and promote interdisciplinary education.

Funding Agency: Department of Health and Human Services Public Health Services

Funding Dates: 7/1/15 – 6/30/20

Amount Awarded: \$571,182

Principal Investigator: N. Gimpel, 20% effort

Role: Co-investigator: L. Michalsky, 20% effort

Title: Effect of PCSK9-Antibody (Alirocumab) on Dyslipidemia Secondary to Primary Nephrotic Syndrome

Purpose: This is an investigator-initiated study designed to determine the effect of alirocumab on levels of plasma triglyceride-rich lipoproteins in patients with history of combined hyperlipidemia secondary to nephrotic syndrome. The study will be conducted at the Dallas VA North Texas Health Care System.

Funding Agency: Regeneron Inc. – Sanofi Inc.

Funding Dates: December 2016 through December 2018

Amount Awarded: ~\$377,000

Principal Investigator: Gloria Lena Vega, 10% effort.

Grants Submitted but Not Funded

Publications

Refereed Journals

Tremelling K, **Sandon L, Vega GL**, McAdams C. Orthorexia and eating disorder symptoms in dietitians in the United States. *Acad Nutr Diet*. Submitted August, 2016. Under review.

Kendzor D, Businelle M, Allicock M, Gabrielle K, **Sandon L**, Frank S. Evaluation of a shelter-based diet and physical activity intervention in homeless adults. *J Phys Act Health*. Submitted July, 2016. In-press.

Vega GL, Grundy SM, Barlow CE, Leonard D, Willis BL, DeFina LF, Farrell SW. Association of triglyceride-to HDL cholesterol ratio to cardiorespiratory fitness in men. *Journal of Clinical Lipidology* 2016 (in press).

Neeland IJ, Grundy SM, Li X, Adams-Huet B, **Vega GL**. Comparison of visceral fat mass measurement by dual-X-ray absorptiometry and magnetic resonance imaging in a multiethnic cohort: the Dallas Heart Study. *Nutr Diabetes*. 2016 Jul 18;6(7):e221. PubMed PMID: 27428873; PubMed Central PMCID: PMC4973141.

Srivastava A, Adams-Huet B, **Vega GL**, Toto RD. Effect of losartan and spironolactone on triglyceride-rich lipoproteins in diabetic nephropathy. *J Investig Med*. 2016 Aug;64(6):1102-8. doi: 10.1136/jim-2016-000102. Epub 2016 Jul 7. PubMed PMID: 27388615; PubMed Central PMCID: PMC4975815.

Benjamin B, Wada Y, Grundy SM, Szuszkiewicz-Garcia M, **Vega GL**. Fatty acid oxidation in normotriglyceridemic men. *J Clin Lipidol*. 2016 Mar-Apr;10(2):283-8. Epub 2015 Dec 2. PubMed PMID: 27055958.

Neeland IJ, Turer AT, Ayers CR, Berry JD, Rohatgi A, Das SR, Khera A, **Vega GL**, McGuire DK, Grundy SM, de Lemos JA. Body fat distribution and incident cardiovascular disease in obese adults. *J Am Coll Cardiol*. 2015 May 19;65(19):2150-1. PubMed PMID: 25975481; PubMed Central PMCID: PMC4890465.

Refereed Journals

Non-refereed Journals

Book Chapters

Books

Other

A. Published scientific review

B. Abstracts (Platform or Poster Presentations)

Sandon L, Crosslin K. Pilot study: Effect of a worksite weight-loss intervention and social influence on self-efficacy and self-regulation for eating and exercise. Poster session presented at: Sports, Cardiovascular, and Wellness Nutritionists 32nd Annual Symposium; 2016 Apr 8-10; Portland, OR.

Lopez E, **Carson JS**, Zhang Q, Kitzman-Ulrich H. Effect on Diet Quality of a Community-Based Weight Management Program for Hispanic Families. J Acad Nutr Dietet. 2015; (9Suppl), A-71. Poster presented at: Academy of Nutrition and Dietetics Food and Nutrition Conference and Exhibition, Nashville, October, 2015.

C. Editorials, position papers, background papers

D. Original invited lectures and presentations published for distribution

Presentations

Day, L. Incorporating Subjective Global Assessment and Nutrition-Focused Physical Exam in Clinical Nutrition Practice. HCA Healthcare: North Texas Area Clinical Nutrition Staff Educational Meeting, Dallas. August 2016. Invited Presentation.

Day, L. Nutrition Focused Physical Exam: From Primer to Practice. Texas Academy of Nutrition and Dietetics 2016 Annual Conference & Exhibition, Arlington, TX. April 2016. Invited Pre-Conference Skills Workshop Presentation.

Sandon, L. Nutrition Focused Physical Exam: From Primer to Practice. Texas Academy of Nutrition and Dietetics 2016 Annual Conference & Exhibition, Arlington, TX. April 2016. Invited Pre-Conference Skills Workshop Presentation.

Day, L. Subjective Global Assessment and Nutrition-Focused Physical Exam in Nutrition Assessment. Clinical Nutrition Staff Educational Meeting. Texas Health Harris Methodist Hospital, Fort Worth. January 2016. Invited Staff CE Presentation.

Carson, JS. Coconut Oil for Lowering Cardiovascular Risk. American Heart Association Scientific Sessions, Orlando, FL, November, 2015. Invited Platform Presentation.

Membership on Editorial Boards

1. **Vega, GL.** 2014 – present. Deputy Editor: Journal of Investigative Medicine, BMJ
2. **Vega, GL.** 2013 – present. Associate Editor. Journal of Clinical Lipidology.
3. **Vega, GL.** 2012 – present. Associate Editor. Cholesterol
4. **Vega, GL.** 2010 – present. Associate Editor. Metabolic Syndrome and Related Disorders.

Heath Care Sciences Education and Research 2015-2016

Research Grants and Contracts

Grants Submitted, Award Decision Pending

Title: Investigating the Validity of Clinical Reasoning Rubrics in Assessment of Medical Student SOAP Notes

Purpose: To enhance clinical reasoning for the pre-clerkship student population

Funding Agency: UT System Health Science Education Small Grants Program

Funding Dates: 01/01/17-12/30/17.

Amount requested: \$1045. Status: Submitted, Decision Pending.

Co-Principal Investigator: PJ Longo, 10% effort.

Grant Awarded

Title: Deconstruction of Clinical Reasoning into Three Competency Components: A Pilot Investigating Methodology

Purpose: To enhance clinical reasoning competency for our physician assistance student population

Funding Agency: Southwestern Academy of Teachers (SWAT)

Funding Dates: 07/1/16-06/30/17

Amount Awarded: \$2,675.

Co-Principal Investigator: PJ Longo, 10% effort.

Title: Community Health Worker and HIV Interprofessional Experience Development

Purpose: To develop continuing education curriculum on HIV/AIDS for community health workers and present it to CHWs in Texas and New Mexico; and to facilitate planning of an HIV-focused interprofessional education project.

Funding Agency: Health Resources & Services Administration through a subcontract with the South Central AIDS Education Training Center at Parkland

Funding Dates: 4/1/16-6/30/16

Amounts Awarded: \$27,085

Role: Project Director on subcontract: **Lori Millner**

Title: Model State Supported Area Health Education Centers

Purpose: To implement core AHEC programs to improve the health of our communities.

Funding Agency: Department of Health and Human Services, Subcontract through University of Texas Medical Branch, Texas AHEC East Division

Funding Dates: 9/1/2015-8/31/2016

Amounts Awarded: \$92,500

Principal Investigator: Steve Shelton

Role: Project Director on subcontract: **Lori Millner**

Title: Support for DFW AHEC programs
Purpose: To implement core AHEC programs to improve the health of our communities.
Funding Agency: State of Texas, Interagency contract with the University of Texas Medical Branch, Department of Legal Affairs, Texas AHEC East Division
Funding Dates: 9/1/2015-8/31/2016
Amounts Awarded: \$110,500
Principal Investigator: Steve Shelton
Role: Project Director on subcontract: **Lori Millner**

Title: Applicant Awareness and Enrichment Program
Purpose: Increase the number of African American and Hispanic Applicants to Physician Assistant, Prosthetics Orthotics and Physical Therapy programs at UT Southwestern
Funding Agency: Texas Higher Education Coordinating Board
Funding Dates: 9/1/2015-8/31/2016 (second year of two year award)
Amounts Awarded: \$74,858
Role: Project Co-director: **Lori Millner**

Title: "Reynold's Foundation Next Steps"
Purpose: Interprofessional education collaboration between the Division of Geriatric and School of Health Professions
Funding Agency: Reynold's Foundation
Funding Dates: 07/01/13 – 07/01/17
Amount Awarded: \$1,000,000
Principal Investigator: C. Rubin & L. Kirk
Role: **K Hoggatt Krumwiede**, Coordinate efforts in School of Health Professions. 20%, 25% following three years.

Grant Submitted but Not Funded

Title: Assisting HIV Medical Providers to Integrate Community Health Workers into Multidisciplinary Team Models through Training, Direct Technical Assistance, and Learning Collaboratives.
Purpose: To improve outcomes for people living with HIV by assisting HIV clinics to successfully integrate a community health worker in a multidisciplinary healthcare team.
Funding Agency: Health Resources and Services Administration
Funding Dates: 9/1/2016-8/31/2019
Amounts Awarded: \$4,799,037
Principal Investigator: **Lori Millner**
Role: Project Director, **Lori Millner**

Title: Improving Access to Care: Using Community Health Workers to Improve Linkage and Retention in HIV Care - HRSA-16-185
Purpose: Improving Access to Care: Using Community Health Workers to Improve Linkage and Retention in HIV Care
Funding Agency: HRSA
Funding Dates: 09/01/2016 – 08/31/2017
Amount Requested: \$1,603,362 Status: Submitted but not funded
Principal Investigator: **Lori Milner**, 20% effort

Title: Developing Physician Assistant Students' Knowledge Organization and Clinical Reasoning Utilizing Visual Thinking Networking Learning Strategy
Purpose: To enhance clinical reasoning competency for our physician assistance student population
Funding Agency: AMEE Research Grant Awards Programme
Funding Dates: 07/01/16-06/30/17.
Amount requested: \$4972.00 Status: Submitted but not funded.
Principal Investigator: **PJ Longo**, 10% effort.

Title: Scrubbing the SOAP note: Study of Clinical Decision Making among Medical Students
Purpose: To enhance clinical reasoning for the pre-clerkship student population
Funding Agency: AAMC Group on Educational Affairs: Educational Research
Funding Dates: 06/01/15-06/30/16.
Amount requested: \$3,500. Status: Submitted but not funded.
Co-Principal Investigator: **PJ Longo**, 10% effort.

Publications

Refereed Journals

Williamson J, **Hoggatt Krumwiede K**, Berhendt W, Farmer S. *Does Behavioral Style Influence learning Strategies in Health Profession Students?* Journal of Allied Health, 2015; 44(3): 149-154.

Non-refereed journals

Rideaux K. Diffusion of Telemedicine: Connecting Veterans to Healthcare. Distance Learning Information Age Publishing, Inc. 2015. <http://www.infoagepub.com/dl-issue.html?i=p56454ac99bc9b>. *HighBeam Research*. September 29, 2016; Vol 12, No 3.

Book Chapters

Books

Other

A. Published scientific review

B. Abstracts (Platform or Poster Presentations)

Bradley-Guidry C, **Millner L**, Beck T, Wesley C, Morrissey K, Kindratt T. Screening Our Sisters: Faith-based breast cancer education and navigation. Published abstract for the American Public Health Association Annual Meeting & Expo. 2016. <https://apha.confex.com/apha/144am/meetingapp.cgi/Paper/358275>

Hoggatt Krumwiede K, Kamm K., Mihalic A. CONVERGENCE: An IPE model for sustainability, institutional integration, and inter-institution collaboration. Poster session presented at Collaboration Across Borders V - The Interprofessional Journey: Advancing Integration and Impact 2015 October, Roanoke, VA.

C. Editorials, position papers, background papers

D. Original invited lectures and presentations published for distribution

Presentations

Membership on Editorial Boards

Prosthetics-Orthotics 2015-2016

Research Grants and Contracts

Grants Submitted, Award Decision Pending

Grants Awarded

Title: Smart Sensing and Dynamic Fitting for Enhanced Comfort and Performance of Prosthetics

Purpose: To enhance the long-term socket performance/fit of prosthetic devices through smart sensing, adaptive prosthetic interface, and shear-based dynamic fitting strategy

Funding Agency: DOD-CDMRP Peer Reviewed Orthopaedic Research Program

Funding Dates: 10/01/2015-9/31/2017

Amount awarded: \$29,326.

Principal Investigator: H. Huang (UTA); UTSW Site PI: **F. Gao** (3.5% effort);

Title: Does Vacuum Assisted Socket System Improve Knee Proprioception and Dynamic Balance in Transtibial Amputees?

Purpose: To investigate the effects of VASS on knee proprioception and dynamic balance in transtibial amputees

Funding Agency: American Orthotic and Prosthetic Association – Small research grants

Funding Dates: 9/01/2015-8/31/2016

Amount awarded: \$15,000.

Principal Investigator: **F. Gao**, 10% effort.

Grants Submitted but Not Funded

Title: Effectiveness of Repositioning Efforts in Infants with Cranial Deformation.

Purpose: To evaluate effectiveness of conservative repositioning management of infants with deformational plagiocephaly.

Funding Agency: UT Southwestern 2016 Community-Based Research Pilot Awards

Funding Dates: 1-2 years, submission deadline 5/26/16

Amount requested: \$73,828. Status: Submitted but not funded.

Principal Investigator: T. Graham

Title: The Effects of Strut Lay-up and Width on Carbon Fiber AFO Stiffness and Energy Return

Purpose: To explore the effects of strut lay-up and width reductions of a carbon ankle foot orthosis (AFO) on device stiffness and energy return.

Funding Agency: The American Orthotic & Prosthetic Association

Funding Dates: 07/01/2016 – 06/30/2017

Amount requested: \$15,000. Status: Submitted but not funded.

Principal Investigator: D. Wilson, 5% effort.

Title: Robotic gait training in unilateral transfemoral amputees

Purpose: To implement a robotic gait training system on unilateral TF amputees and compare its performance with respect to traditional supervised treadmill gait training.

Funding Agency: National Institutes of Health – Eunice Kennedy Shriver National Institute of Child Health and Human Development

Funding Dates: 09/01/2016-08/30/2019

Amount requested: \$484,300. Status: Submitted but not funded.

Principal Investigator: F. Gao, 20% Effort.

Publications

Refereed Journals

Ayub R, Villarreal D, Gregg R, **Gao F**. Evaluation of Transradial Body-Powered Prostheses Using a Robotic Simulator. *Prosthet Orthot Int*. 2016. (in press).

Wu YN, Ren Y, Tsai LC, **Gao F**, Zhang LQ. In vivo simultaneous evaluations of sarcomere imaging and muscle fiber tension. *J Biomech*. 2016;49(5):797-801.

Kobayashi T, Orendurff MS, Singer ML, **Gao F**, Daly WK, Foreman KB. Reduction of genu recurvatum through adjustment of plantarflexion resistance of an articulated ankle-foot orthosis in individuals post-stroke. *Clin Biomech* (Bristol, Avon). 2016;35:81-85.

Kobayashi T, Orendurff MS, Singer ML, Daly WK, Lincoln LS, **Gao F**, Foreman KB. Direct measurement of plantarflexion resistive moments and angular positions of an articulated ankle-foot orthosis while walking in individuals post stroke: A preliminary study. *Journal of Rehabilitation and Assistive Technologies Engineering*. 2016;3:1-6.

Gao F, Rodriguez J, **Kapp S**. Technical note: An experimental apparatus to simulate body-powered prosthetic usage: Development and preliminary evaluation. *Prosthet Orthot Int*. 2016;40(3):404-408.

Gao F, Carlton B. Innovative Apparatus for Quantitatively Evaluating Effectiveness of Cervical Orthosis and Cervical Thoracic Orthosis. *Journal of Medical and Biological Engineering*. 2016;36(1):105-109.

Bedard GG, Motylinski J, Call B, **Gao F**, **Gray L**. Bench Test Validation of a Dynamic Posterior Leaf Spring Ankle-Foot Orthosis. *J Prosthe Ortho*. 2016;28(1):30-37.

Zhou Z, Zhou Y, Wang N, **Gao F**, Wei K, Wang Q. A proprioceptive neuromuscular facilitation integrated robotic ankle-foot system for post stroke rehabilitation. *Robotics and Autonomous Systems*. 2015;73:111-122.

Kobayashi T, Singer ML, Orendurff MS, **Gao F**, Daly WK, Foreman KB. The effect of changing plantarflexion resistive moment of an articulated ankle-foot orthosis on ankle and knee joint angles and moments while walking in patients post stroke. *Clin Biomech (Bristol, Avon)*. 2015;30(8):775-780.

Gao F. Effectiveness of Adjustable Cervical Orthoses and Modular Cervical Thoracic Orthoses in Restricting Neck Motion: A Comparative In vivo Biomechanical Study. *Spine (Phila Pa 1976)*. 2015;40(19):E1046-1051.

Bhadane MY, **Gao F**, Francisco GE, Zhou P, Li S. Correlation of Resting Elbow Angle with Spasticity in Chronic Stroke Survivors. *Front Neurol*. 2015;6:183.

Non-refereed Journals

Book Chapters

Books

Other

A. Published scientific review

B. Abstracts (Platform or Poster Presentations)

Graham T. Effectiveness of Cranial Remolding Orthoses in Reducing Asymmetry in Patients with Plagiocephaly in Relation to Start Age and Severity: A Preliminary Study. Invited platform presentation at: Texas Chapter of the American Academy of Orthotists & Prosthetists Annual Meeting, Grand Hyatt Hotel, San Antonio, Texas. August 2016.

Gao F, **Kapp S** (2016) Effects of Prosthetic Socket Suspension Types and Alignment on Socket Interface Pressure and Gait in Transtibial Amputees. Platform presentation at: 42nd American Academy of Orthotists and Prosthetists Annual Meeting & Scientific Symposium, Mar. 9-12 2016, Orlando, FL

Wilson DG, Lenners N, Burford I. The Effects of AFO PLS on Muscle Activity: A Comparison of Thermoplastic and Carbon. Poster session presented at: 42nd American

Academy of Orthotists and Prosthetists Annual Meeting & Scientific Symposium; 2016 March 9-12; Orlando, FL.

Adolph J, Gao F. Impact Comparison of Medical Grade Helmets. Poster session presented at: 42nd American Academy of Orthotists and Prosthetists Annual Meeting & Scientific Symposium; 2016 Mar 9-12; Orlando, FL.

Gray L, Marsh B, Keith C, Gao F. Quantifying PLS Stiffness: Effects of Trimlines, Materials and Height. Poster session presented at: 42nd American Academy of Orthotists and Prosthetists Annual Meeting & Scientific Symposium, March 9-12, 2016, Orlando, FL

Kapp S., Stone A., Everatt A., Isensee E., Does Sock Management Education Reduce the Incidence of Skin Problems in Persons with Transtibial Amputation? Poster session presented at: 42nd American Academy of Orthotists and Prosthetists Annual Meeting & Scientific Symposium; 2016 Mar 9-12; Orlando, FL.

Kapp S, Concannon D, Inserra D, Winters M, **Gao F,** Effects of Articulated vs. Non-Articulated Prosthetic Feet on Knee Extensor Muscle Activity and Socket Interface Pressure During Loading Response in Transtibial Amputees, Phase 3, Poster session presented at: 42nd American Academy of Orthotists and Prosthetists Annual Meeting & Scientific Symposium; 2016 Mar 9-12; Orlando, FL.

Lau V, Thurman R, **Kapp S, Gao F,** Effects of Feedback on Grip Force Control in Body-Powered Transradial Prostheses. Poster session presented at: 42nd American Academy of Orthotists and Prosthetists Annual Meeting & Scientific Symposium; 2016 Mar 9-12; Orlando, FL.

Adolph J. Lower Limb Prosthetic Management and Burn Injury. Invited platform presentation at: SMA Southern Region Burn Conference Therapist Workshop, Dallas TX, November 2015.

C. Editorials, position papers, background papers

Gao F, Li G, Wu H, Wang Q, Liu J, Keogh J. Advances in Rehabilitation and Assistive Robots for Restoring Limb Function in Persons with Movement Disorders. Journal of Applied Bionics and Biomechanics. 2016;2:1-2.

D. Original invited lectures and presentations published for distribution

Presentations

Graham T. Effectiveness of Cranial Remolding Orthoses in Reducing Asymmetry in Patients with Plagiocephaly in Relation to Start Age and Severity: A Preliminary Study. Invited platform presentation at: Texas Chapter of the American Academy of Orthotists & Prosthetists Annual Meeting, Grand Hyatt Hotel, San Antonio, Texas. August 2016.

Gao F, Kapp S (2016) Effects of Prosthetic Socket Suspension Types and Alignment on Socket Interface Pressure and Gait in Transtibial Amputees. Platform presentation at: 42nd American Academy of Orthotists and Prosthetists Annual Meeting & Scientific Symposium, Mar. 9-12 2016, Orlando, FL

Wilson DG, Lenners N, Burford I. The Effects of AFO PLS on Muscle Activity: A Comparison of Thermoplastic and Carbon. Poster session presented at: 42nd American Academy of Orthotists and Prosthetists Annual Meeting & Scientific Symposium; 2016 March 9-12; Orlando, FL.

Adolph J, Gao F. Impact Comparison of Medical Grade Helmets. Poster session presented at: 42nd American Academy of Orthotists and Prosthetists Annual Meeting & Scientific Symposium; 2016 Mar 9-12; Orlando, FL.

Gray L., Marsh B., Keith C., **Gao F.** Quantifying PLS Stiffness: Effects of Trilines, Materials and Height. Poster session presented at: 42nd American Academy of Orthotists and Prosthetists Annual Meeting & Scientific Symposium, March 9-12, 2016, Orlando, FL

Kapp S., Stone A., Everatt A., Isensee E., Does Sock Management Education Reduce the Incidence of Skin Problems in Persons with Transtibial Amputation? Poster session presented at: 42nd American Academy of Orthotists and Prosthetists Annual Meeting & Scientific Symposium; 2016 Mar 9-12; Orlando, FL.

Kapp S., Concannon D., Inserra D., Winters M., **Gao F.**, Effects of Articulated vs. Non-Articulated Prosthetic Feet on Knee Extensor Muscle Activity and Socket Interface Pressure During Loading Response in Transtibial Amputees, Phase 3, Poster session presented at: 42nd American Academy of Orthotists and Prosthetists Annual Meeting & Scientific Symposium; 2016 Mar 9-12; Orlando, FL.

Lau V, Thurman R. **Kapp S, Gao F**, Effects of Feedback on Grip Force Control in Body-Powered Transradial Prostheses. Poster session presented at: 42nd American Academy of Orthotists and Prosthetists Annual Meeting & Scientific Symposium; 2016 Mar 9-12; Orlando, FL.

Adolph J. Lower Limb Prosthetic Management and Burn Injury. Invited platform presentation at: SMA Southern Region Burn Conference Therapist Workshop, Dallas TX, November 2015.

Membership on Editorial Boards

Gao F. 2015-2016. Lead Guest Editor on special issue: Advances in Rehabilitation and Assistive Robots for Restoring Limb Function in Persons with Movement Disorders, Journal of Applied Bionics and Biomechanics

**Health Care Sciences
2015-2016**

Research Grants and Contracts

Grants Submitted, Award Decision Pending

Title: Preventing Hypertension and Sympathetic Overactivation by Targeting Phosphate

Purpose: To determine the contributions of phosphate in the development of hypertension and sympathetic overactivation

Funding Agency: NIH-NATIONAL HEART, LUNG AND BLOOD INSTITUTE

Funding Dates: 04/01/17-03/31/18

Amount Awarded: \$ 489,169. Status: Submitted, Decision Pending.

Principal Investigator: W. Vongpatanasin

Role: Co-Investigator, **M. Mizuno**, 10% effort

Title: The Role of Klotho in abnormal exercise pressor reflex in hypertension

Purpose: To determine the role of Klotho in the development of abnormal autonomic function

during physical exercise in hypertensive rats.

Funding Agency: Meiji Yasuda Life Foundation of Health and Welfare (Japan)

Funding Dates: 01/01/17-12/31/18

Amount Awarded: \$ 5,000. Status: Submitted, Decision Pending.

Principal Investigator: **M. Mizuno**, 10% effort.

Title: Abnormal exercise pressor reflex in Type II diabetes

Purpose: To determine mechanisms underlying abnormal exercise pressor reflex in type II diabetic rats

Funding Agency: Meiji Yasuda Life Foundation of Health and Welfare (Japan)

Funding Dates: 01/01/17-12/31/18

Amount Awarded: \$ 5,000. Status: Submitted, Decision Pending.

Principal Investigator: N. Hotta

Role: Co-Investigator, **M. Mizuno**, 10% effort

Title: Project Ntarupt – Dallas Teenage Pregnancy Prevention Program (Tier 1B) in Dallas, TX.

Purpose: Provide behavioral interventions with teenagers ages 13 – 19 and parents/guardians of teens in this age group in four five zip codes, 75203, 75212, 75216, 75216, 75220.

Funding Agency: The Dallas Foundation

Funding Dates: 07/01/2016 – 06/30/2017

Amount Requested: \$161,554.02 Status: pending SPA approval

Principal Investigator: **Jon Williamson**, In-kind

Title: HIV Prevention in Dallas, TX.

Purpose: Provide targeted testing, linkage to care, and behavioral interventions with people at high risk for HIV and people living with HIV/AIDS in Dallas.

Funding Agency: Department of State Health Services

Funding Dates: 01/01/2017 – 12/31/2017

Amount Requested: \$766,662 Status: pending DSHS approval

Principal Investigator: Jon Williamson, In-kind

Title: Molecular HIV Surveillance (Incidence) in Texas.

Purpose: Provide training and technical assistance, as approved by DSHS, to local Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) surveillance sites, health care providers, and Disease Intervention Specialists within the State of Texas, and laboratory staff on collection of HIV Incidence Surveillance data elements and incidence surveillance activities.

Funding Agency: Department of State Health Services

Funding Dates: 01/01/2017 – 12/31/2017

Amount Requested: \$362,960 Status: pending DSHS approval

Principal Investigator: Jon Williamson, In-kind

Title: Development of a Novel Animal Model of Comprehensive Assessment of Sympathetic and Hemodynamic Dysregulation Underlying Hypotensive Crisis Following Spinal Cord Injury

Purpose: To develop multi-purpose animal model for study of spinal cord injury

Funding Agency: National Institutes of Health, National Institute of Neurological Disorders and Stroke

Funding Dates: 2017-2019

Amount Awarded: \$294,000 Status: Submitted, Decision Pending

Principal Investigator: Zeljka Minic

Role: Co-Investigator, S. A. Smith, 20% effort

Title: Applicant Awareness and Enrichment Program 2.0

Purpose: These studies are designed to determine whether providing clinical experiences for undergraduate African-American and Hispanic students increases their matriculation in health professional programs.

Funding Agency: Texas Higher Education Coordinating Board

Funding Dates: 2016-2018

Amount Awarded: \$150,000 Status: Submitted, Decision Pending

Principal Investigator: Lori Millner

Role: Co-Principal Investigator, S. A. Smith, 5% effort

Title: Preventing Hypertension and Sympathetic Overactivation by Targeting Phosphate
Purpose: These studies are designed to determine the mechanisms underlying the development of hypertension after excess phosphate consumption.
Funding Agency: National Institutes of Health, National Heart, Lung and Blood Institute
Funding Dates: 2016-2021
Amount Awarded: \$1,956,000 Status: Submitted, Decision Pending.
Principal Investigator: Wanpen Vongpatanasin
Role: Co-Principal Investigator, **S. A. Smith**, 15% effort

Grants Awarded

Title: The Role of Aldosterone in Augmenting Exercise Pressor Reflex Function in Hypertension
Purpose: To determine the contributions of hyperaldosteronism to the development of exercise pressor reflex dysfunction in hypertension.
Funding Agency: NIH RO1 #HL113738
Funding Dates: 02/01/16-01/31/17
Amount Awarded: \$ 550,995.
Principal Investigator: W. Vongpatanasin
Role: Co-Investigator, **M. Mizuno**, 30% effort

Title: The Role of Klotho in Sympathetic Regulation in Hypertension
Purpose: To determine the role of Klotho in the development of abnormal autonomic function during physical exercise in hypertensive rats.
Funding Agency: UT Southwestern O'Brien Kidney Research Core Center P&F Grant
Funding Dates: 06/01/15-05/31/16
Amount Awarded: \$35,000.
Principal Investigator: **M. Mizuno**, 30% effort.
Role: Collaborator, **S. A. Smith**, 5% effort

Title: The Role of Aldosterone in Augmenting Exercise Pressor Reflex Function in Hypertension
Purpose: These studies are designed to determine the contributions of hyperaldosteronism to the development of exercise pressor reflex dysfunction in hypertension.
Funding Agency: National Institutes of Health, National Heart, Lung and Blood Institute
Funding Dates: 2013-2017
Amount Awarded: \$1,400,000
Principal Investigator: Wanpen Vongpatanasin
Role: Co-Investigator, **S. A. Smith**, 20% effort

Title: The Impact of Gait Training on the Metabolic Cost of Walking and Cardiorespiratory Capacity in Persons Post-Stroke

Purpose: These studies are designed to determine whether the use of an early task-specific training program in patients post-stroke will improve walking efficiency and enhance cardiorespiratory health.

Funding Agency: American Heart Association

Funding Dates: 2014-2016

Amount Awarded: \$150,000

Principal Investigator: Karen McCain

Role: Mentor, **S. A. Smith**, 5% effort

Title: Applicant Awareness and Enrichment Program

Purpose: These studies are designed to determine whether providing clinical experiences for undergraduate African-American and Hispanic students increases their matriculation in health professional programs.

Funding Agency: Texas Higher Education Coordinating Board

Funding Dates: 2014-2016

Amount Awarded: \$150,000

Principal Investigator: Lori Millner

Role: Co-Principal Investigator, **S. A. Smith**, 5% effort

Title: HIV Prevention in Dallas, TX.

Purpose: Provide targeted testing, linkage to care, and behavioral interventions with people at high risk for HIV and people living with HIV/AIDS in Dallas.

Funding Agency: Department of State Health Services

Funding Dates: 01/01/2016 – 12/31/2016

Amount Requested: \$766,662 Status: awarded

Principal Investigator: **Jon Williamson**, In-kind

Title: HIV Medical Monitoring Project in the state of Texas.

Purpose: Conduct qualitative data collection, including medical charts extractions to look at access and retention in care for people living with HIV/AIDS in Texas.

Funding Agency: Department of State Health Services, through a grant with the Center for Disease Control.

Funding Dates: 07/01/2016 – 05/31/2017

Amount Requested: \$234,349 Status: awarded

Principal Investigator: **Jon Williamson**, In-kind

Title: Molecular HIV Surveillance (Incidence) in Texas.

Purpose: Provide training and technical assistance, as approved by DSHS, to local Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) surveillance sites, health care providers, and Disease Intervention Specialists within the State of Texas, and laboratory staff on collection of HIV Incidence Surveillance data elements and incidence surveillance activities.

Funding Agency: Department of State Health Services

Funding Dates: 01/01/2016 – 12/31/2016

Amount Requested: \$362,960 Status: awarded

Principal Investigator: **Jon Williamson**, In-kind

Grants Submitted but Not Funded

Title: Effect of Prenatal Programming on Renal Tubular Transport

Purpose: To determine mechanisms underlying prenatal programming of hypertension
Funding Agency: National Institutes of Health, National Institute of Diabetes, Digestive and Kidney Diseases

Funding Dates: 2016-2021

Amount Awarded: \$1,250,000 Status: Submitted, but not funded

Principal Investigator: Michael Baun

Role: Collaborator, **S. A. Smith**, 20% effort

Publications

Refereed Journals

Liu MM, **Smith S**, Diaz-Arrastia R, Minei JP, Wolf SE, Gatson JW. Administration of resveratrol after mild TBI reduces beta-amyloid plaque load and inflammation in the brain of 5xFAD mice. *Brain Research*. 2016. (under revision).

Mizuno M, Mitchell JH, Crawford S, Huang CL, Maalouf N, Hu MC, Moe OW, **Smith SA**, Vongpatanasin W. High Dietary Phosphate Intake Induces Hypertension and Augments Exercise Pressor Reflex Function in Rats. *American Journal of Physiology Regulatory, Integrative and Comparative Physiology*. 2016; Vol. 311, No.1: R39-48.

Wang H, Case AJ, Wang WZ, Mueller PJ, **Smith SA**. Redox signaling and neural control of cardiovascular function. *Oxidative Medicine & Cellular Longevity*. 2016; 1-2.

Spranger MD, Krishnan AC, O'Leary DS, **Smith SA**. Reply to "Letter to the editor: Applying the blood flow restriction pressure: the elephant in the room". *American Journal of Physiology*. 2016; 310: H134-H135.

Liang N, Mitchell JH, **Smith SA**, **Mizuno M** (corresponding author). Exaggerated sympathetic and cardiovascular responses to stimulation of the mesencephalic locomotor region in spontaneously hypertensive rats. *American Journal of Physiology Heart and Circulatory Physiology*. 2016; Vol. 310, No.1: H123-131.

Kim YT, Kanneganti A, Nothnagle C, Landrith R, **Mizuno M**, Wijesundara M, **Smith SA**, Romero-Ortega MI. Microchannel Electrode Stimulation of Deep Peroneal Nerve Fascicles Induced Mean Arterial Depressor Response in Hypertensive Rats. *Bioelectronic Medicine*. 2015; Vol.2: 55-62.

Mizuno M (Corresponding author), Iwamoto GA, Vongpatanasin W, Mitchell JH, **Smith SA**. Dynamic exercise training prevents exercise pressor reflex overactivity in spontaneously hypertensive rats. *American Journal of Physiology Heart and Circulatory Physiology*. 2015; Vol.309, No.5: 762-770.

Mizuno M, Downey RM, Mitchell JH, Auchus RJ, **Smith SA**, Vongpatanasin W. Aldosterone and Salt Loading Independently Exacerbate the Exercise Pressor Reflex in Rats. *Hypertension*. 2015; Vol.66, No.3: 627–633.

Smith SA, Leal AK, Murphy MN, Downey RM, **Mizuno M**. Muscle mechanoreflex overactivity in hypertension: a role for centrally-derived nitric oxide. *Autonomic Neuroscience: Basic and Clinical*. 2015; 188: 58-63.

Spranger MD, Krishnan AC, O’Leary DS, **Smith SA**. Blood flow restriction training and the exercise pressor reflex: a call for concern. *American Journal of Physiology*. 2015; 309: H1440-H1452.

Non-refereed Journals

Navarro K. Prove It: Real-time feedback devices improve CPR training. EMS1.com. 2016, August. Available at <http://www.ems1.com/ems-products/cpr-resuscitation/articles/118770048-Prove-It-Real-time-feedback-devices-improve-CPR-training/>

Navarro K. Prove it: Is it asthma or COPD? EMS1.com. 2016, July. Available at <http://www.ems1.com/ems-products/medical-equipment/airway-management/articles/106974048-Prove-it-Is-it-asthma-or-COPD/>

Navarro K. Public use of tourniquets, bleeding control kits. EMS1.com. 2016, May. Available at <http://www.ems1.com/ems-products/Bleeding-Control/articles/95472048-Public-use-of-tourniquets-bleeding-control-kits/>

Navarro K. Prove It: Antiarrhythmics improve survival following out-of-hospital cardiac arrest. EMS1.com. 2016, April. <http://www.ems1.com/cardiac-care/articles/80649048-Prove-It-Antiarrhythmics-improve-survival-following-out-of-hospital-cardiac-arrest/>

Navarro K. Prove It: Mechanical chest compression devices vs. manual compressions. EMS1.com. 2016, March. Available at <http://www.ems1.com/ems-products/cpr-resuscitation/articles/75409048-Prove-It-Mechanical-chest-compression-devices-vs-manual-compressions/>

Navarro K. Prove It: Oxygen therapy improves outcomes following AMI. EMS1.com. 2016, February. Available at <http://www.ems1.com/research-reviews/articles/57494048-Prove-It-Oxygen-therapy-improves-outcomes-following-AMI/>

Navarro K. Prove It: Are continuous chest compressions more effective? EMS1.com. 2016, January. Available at <http://www.ems1.com/ems-products/cpr-resuscitation/articles/46478048-Prove-It-Are-continuous-chest-compressions-more-effective/>

Navarro K. Sepsis detection and monitoring in EMS. EMS1.com. 2016, January. Available at <http://www.ems1.com/ems-products/Capnography/articles/44868048-Sepsis-detection-and-monitoring-in-EMS/>

Navarro K. AHA CPR guidelines: Get in step with the 2015 updates. EMS1.com. 2015, November. Available at <http://www.ems1.com/ems-products/aeds/articles/33201048-AHA-CPR-guidelines-Get-in-step-with-the-2015-updates/>

Navarro K. AHA CPR guidelines: What the 2015 PALS updates mean for EMS providers. EMS1.com. 2015, October. Available at <http://www.ems1.com/ems-products/cpr-resuscitation/articles/22546048-AHA-CPR-guidelines-What-the-2015-PALS-updates-mean-for-EMS-providers/>

Navarro K. Increasing EMS provider influenza vaccination will decrease transmission. EMS1.com. 2015, October. Available at <http://www.ems1.com/ems-products/patient-handling/articles/22327048-Increasing-EMS-provider-influenza-vaccination-will-decrease-transmission/>

Navarro K. AHA CPR guidelines: What the 2015 ACLS updates mean for EMS providers. EMS1.com. 2015, October. Available at <http://www.ems1.com/ems-products/cpr-resuscitation/articles/20376048-AHA-CPR-guidelines-What-the-2015-ACLS-updates-mean-for-EMS-providers/>

Navarro K. AHA CPR guidelines: What the 2015 BLS updates mean for EMS providers. EMS1.com. 2015, October. Available at <http://www.ems1.com/ems-products/cpr-resuscitation/articles/17337048-AHA-CPR-guidelines-What-the-2015-BLS-updates-mean-for-EMS-providers/>

Navarro K. Public access hemorrhage control devices. EMS1.com. 2015, September. Available at <http://www.ems1.com/ems-products/wound-care/articles/9369048-Public-access-hemorrhage-control-devices/>

Navarro K. Prove It: Pushing hard improves cardiac arrest outcome for pediatric patients. EMS1.com. 2015, September. Available at <http://www.ems1.com/ems-products/cpr-resuscitation/articles/3220831-Prove-It-Pushing-hard-improves-cardiac-arrest-outcome-for-pediatric-patients/>

Book Chapters
Books

Donnino M, **Navarro K**, and Soderberg ES (Eds). (2016). Advanced cardiovascular life support (ACLS) instructor manual. Dallas, TX: American Heart Association.

Donnino M, **Navarro K**, and Soderberg ES (Eds). (2016). Advanced cardiovascular life support (ACLS) provider manual 2015 guidelines [ISBN-13: 978-1616694005]. Dallas, TX: American Heart Association.

Other

A. Published scientific review

Mizuno M, Mitchell JH, **Smith SA**. *Invited Review*: The exercise pressor reflex in hypertension. *The Journal of Physical Fitness and Sports Medicine*. 2016. (in review)

B. Abstracts (Platform or Poster Presentations)

Mizuno M, Crawford S, Rosengarden S, Mitchell JH, **Smith SA**, Vongpatanasin V. Excess phosphorous intake potentiates the skeletal muscle mechanoreflex and metaboreflex in rats. *Medicine and Science in Sports Exercise*; 2016; Vol. 48, No. 5 (Supplement 1): 201.

Mizuno M, Holwerda SH, Mitchell JH, **Smith SA**, Fadel PJH. Enhanced skeletal muscle metaboreflex activation in type 2 diabetes. *The FASEB Journal*; 2016; Vol. 30, No. 1 (Supplement) 1004.30.

Mizuno M, Crawford S, Carnahan C, Mitchell JH, **Smith SA**, Vongpatanasin W. High inorganic phosphate diet augments the sympathetic response to exercise pressor reflex activation in rats. *The FASEB Journal*; 2016; Vol. 30, No. 1 (Supplement) 1006.1.

Downey M, **Mizuno M**, Mitchell JH, **Smith SA**. Blockade of Gamma-Aminobutyric Acid Synthesis within the Nucleus Tractus Solitarius Reduces the Pressor Response to Muscle Mechanoreflex Activation in Normotensive but not Hypertensive Rats. *The FASEB Journal*; 2016; Vol. 30, No. 1 (Supplement) 1289.8.

Mizuno M, Iwamoto GA, Vongpatanasin W, Mitchell JH, **Smith SA**. Exercise training ameliorates sympathetic overactivity in response to muscle metaboreflex stimulation in spontaneously hypertensive rats. *Medicine and Science in Sports and Exercise*; 2015; 47 (5).

Downey RM, **Mizuno M**, Brown P, Mitchell JH, Vongpatanasin W, **Smith SA**. Spironolactone or eplerenone treatment reduces the exaggerated pressor response to muscle reflex activation in spontaneously hypertensive rats. *FASEB Journal*; 2015; 29.

Velasco A, Wang Z, Arbique D, **Smith S**, Mitchell J, Vongpatanasin W. Overactivation of muscle mechanoreflex in human hypertension. *FASEB Journal*; 2015; 29.

Mizuno M, Iwamoto GA, Vongpatanasin W, Mitchell JH, **Smith SA**. Voluntary exercise training attenuates the enhanced sympathetic responses to muscle mechanoreflex activation in spontaneously hypertensive rats. *FASEB Journal*; 2015; 29.

Loken N, Lord B, Studnek J, Bowen LB, Davis H, **Navarro KW**. Sick enough to pass? The effect of paramedic student exposure to high acuity patients on summative exams. Oral and poster presentation at 2015 National Association of Emergency Medical Service Educators Symposium; 2015 August; August 4-9; Nashville, TN.

C. Editorials, position papers, background papers

D. Original invited lectures and presentations published for distribution

Presentations

Mizuno M, Crawford S, Rosengarden S, Mitchell JH, **Smith SA**, Vongpatanasin V. Excess phosphorus intake potentiates the skeletal muscle mechanoreflex and metaboreflex in rats. 63th Annual Congress of the American College of Sports Medicine, Boston, USA, May-June, 2016. National; Poster presentation.

Smith S, Animal Models for the Study of Autonomic Cardiovascular Control, Visiting Professor, Danish Cardiovascular Research Academy; Copenhagen, Denmark, May 2016.

Mizuno M, Holwerda SH, Mitchell JH, **Smith SA**, Fadel PJ. Enhanced skeletal muscle metaboreflex activation in type 2 diabetes. *Experimental Biology 2016*, San Diego, USA, April, 2016. National; Poster presentation.

Mizuno M, Crawford S, Carnahan C, Mitchell JH, **Smith SA**, Vongpatanasin W. High inorganic phosphate diet augments the sympathetic response to exercise pressor reflex activation in rats. *Experimental Biology 2016*, San Diego, USA, April, 2016. National; Poster presentation.

Downey M, **Mizuno M**, Mitchell JH, **Smith SA**. Blockade of Gamma-Aminobutyric Acid Synthesis within the Nucleus Tractus Solitarius Reduces the Pressor Response to Muscle Mechanoreflex Activation in Normotensive but not Hypertensive Rats. *Experimental Biology 2016*, San Diego, USA, April, 2016. National; Poster presentation.

Smith S, Hypertension and Exercise-Induced Sympathetic Overactivity: Causes for Concern, Wayne State University School of Medicine, Department of Physiology Winter Seminar Series, Detroit, MI, April 2016.

Navarro K. AHA Educational Methodology. AHA Regional Emergency Cardiovascular Care Conference, Providence, RI: May, 2016. Invited Presentation.

Navarro K. AHA Educational Methodology. AHA Regional Emergency Cardiovascular Care Conference. Denver, CO: April, 2016. Invited Presentation.

Navarro K. Sudden Death in Young Athletes. National Collegiate EMS Foundation Conference, Philadelphia, PA: February, 2016. Invited Presentation.

Navarro K. Calloway, C. ACLS Instructor Update Workshop. Emergency Cardiovascular Care Update. San Diego, CA: December, 2015. Invited Presentation.

Navarro K. Pit Crew Approach to Cardiac Arrest Management. Texas EMS Conference. Dallas, TX: November, 2015. Invited Presentation.

Navarro K. Tranexamic Acid: A Blood Clot Stabilizer for the Future?. Texas EMS Conference. Dallas, TX: November, 2015. Invited Presentation.

Navarro K. Therapeutic Hypothermia: Should EMS Just Chill Out?. Texas EMS Conference. Dallas, TX: November, 2015. Invited Presentation.

Navarro K. 2015 CPR and ACLS Guidelines Update. Martha's Vineyard EMS Conference. Martha's Vineyard, MA: November, 2015. Invited Presentation.

Membership on Editorial Boards

Mizuno M. 2016-present. Associate Editor, *BMC Cardiovascular Disorder*

Mizuno M. 2011-present. Review Editor, *Frontiers in Physiology*

Smith S. 2015. Oxidative Medicine and Cellular Longevity

Smith S. 2011 – present. *Frontiers in Integrative Physiology*

Department of Physician Assistant Studies 2015-2016

Research Grants and Contracts

Grants Submitted, Award Decision Pending

Title: Utilization of Multiple Mini-Interviews (MMI) within Admission Processes of Physician Assistant Programs in the United States

Purpose: To characterize U.S. PA programs utilization the multiple-mini interview (MMI) in the admissions process

Funding Agency: Physician Assistant Education Association

Funding Dates: October 2016 – September 2017

Amount requested: \$5340 Status: Submitted. Decision Pending

Mentor: Orcutt VL, in kind contribution

Grants Awarded

Title: Suture Skills Workshop.

Purpose: Obtain equipment and supplies to teach Physician Assistant students basic wound closure techniques including suturing, skin stapling, and Dermabond usage.

Funding Agency: Ethicon.

Funding Dates: 07/08/16-07/19/16.

Amount Awarded: \$50,037.60.

Principal Investigator: V. Coleman and J. Kane

Title: Deconstruction of Clinical Reasoning into Three Competency Components: A Pilot Investigating Methodology

Purpose: To investigate and establish concurrent validity among methodologies used to examine clinical reasoning and knowledge network organization.

Funding Agency: Southwestern Academy of Teachers (SWAT)

Funding Dates: July 1, 2016 – June 30, 2017

Amount Awarded: \$2180 Status: Ongoing

Principal Investigator: Orcutt VL, 10% effort

Title: Teaching Smartphone Applications to Physician Assistant and Clinical Nutrition Students.

Purpose: Develop, implement and evaluate curriculum to train physician assistant and nutrition students how to educate patients to use smartphone technology for health management.

Funding Agency: The University of Texas Kenneth I Shine, M.D., Academy of Health Science Education

Funding Dates: 12/30/15-03/31/17.

Amount Awarded: \$5,000.

Principal Investigator: S. Rodder

Role: Co-Investigator, T Kindratt. 3% effort.

Title: Training Future Primary Care Providers while Enhancing Pediatric Literacy among Homeless Women and their Children in Dallas, TX.

Purpose: Develop, implement and evaluate interprofessional curriculum to improve pediatric literacy knowledge, attitudes and practices among future primary care providers and determine impact on reading behaviors among mothers and their children living at homeless shelters.

Funding Agency: Southwestern Academy of Teachers (SWAT) Junior Faculty Development Fund.

Funding Dates: 08/01/15-07/31/16.

Amount Awarded: \$1,000.

Principal Investigator: T. Kindratt, 3% effort.

Title: Development and Evaluation of a Research Extension Experience in Directed Studies

(REEDS) for Physician Assistant Students.

Purpose: Develop an online program to train PA students how to conduct research.

Funding Agency: Texas Society of Allied Health Professionals (TSAHP).

Funding Dates: 09/16/15-08/31/17.

Amount Awarded: \$1,500.

Principal Investigator: T. Kindratt, 3% effort.

Title: Teaching Smartphone Applications to Physician Assistant and Clinical Nutrition Students

Purpose: Develop and evaluate inter professional nutrition curriculum utilizing smartphone applications.

Funding Agency: Health Science Education Small Grants Program University of Texas System

Funding Dates: December 2015 – May 2017

Amount Awarded: \$5000 Status: Ongoing

Co-Investigator: Orcutt, VL, in kind contribution

Title: Factors Influencing Selection and Retention of Primary Care Practice by Physician Assistants: A Mixed Methods Approach.

Purpose: To characterize influencing factors in selection and retention of PAs in primary care practice.

Funding Agency: PAEA Pedersen Small Grants Program.

Funding Dates: 10/01/2014–05/31/2016; extension granted 06/01/2016–12/31/2016.

Amount Awarded: \$5790.

Principal Investigator: JM Williams.

Grants Submitted but Not Funded

Title: Minority Physician Assistant Faculty: A phenomenological Assessment of Factors Leading to Retention in the Faculty Role.

Purpose: To determine what factors influence minority the persistence of minority PA faculty. **Funding Agency:** Physician Assistant Education Association.

Funding Dates: 10/16/16-10/16/17.

Amount requested: \$6,760. Status: Submitted but not funded.

Faculty Project Member: C. Bradley-Guidry, 3% effort.

Title: Visual Thinking Networking, Knowledge Organization, Neurocognitive Science Implications to Teaching and Learning

Purpose: To develop and evaluate a Visual Thinking Network strategy to improve knowledge organization and clinical reasoning

Funding Agency: Association of Medical Education Europe

Funding Dates: February 2016 – January 2017

Amount Requested: \$4972. Submitted but not funded

Co-investigator: Orcutt VL, in kind contribution

Title: EQUATE: Emphasizing Quality Across Training Environments

Purpose: Develop and evaluate patient safety and quality improvement curriculum within physician assistant education training program.

Funding Agency: Health Resources and Services Organization. Primary Care Training and Enhancement (PCTE). HRSA 15-054

Funding Dates: July 2016 – June 2020

Amount Requested: \$ 819,475 Submitted but not funded

Principal Investigator: Orcutt, VL, 10% effort

Publications

Refereed Journals

Cawley JF, **Orcutt VL**, **Jones PE**, Miller AA. The expansion of physician assistant education. *J Physician Assist Educ.* (In press).

Jones PE, Houchins JC. Physician assistant contributions to medical and higher education. *J Physician Assist Educ.* (In press).

Orcutt VL, James K, **Bradley-Guidry C**, **Jones PE**. Similarities and Differences Between Physician Assistant Program and Medical School Mission Statement Themes. *Acad Med.* (Under review).

Kindratt T, Pagels P, Chung K, Moehlman M. Evaluating and Improving the Reach Out and Read Program at a Student-Run Free Clinic for Homeless Women and Children. *J Community Health.* Submitted August, 2016. Under review.

Kindratt T, Gonzalez JR. Perceived maternal relationship as a predictor of pap test utilization: Results from The Longitudinal Study of Adolescent to Adult Health. *Women's Health Issues.* Submitted August, 2016. Under review.

Rodder SG, **Kindratt T**, **Orcutt VL**, Mulfinger K, Neville MA. Teaching smartphone applications to physician assistant and clinical nutrition students. *Med Teach.* 2016. (Under review).

Kindratt T, **Orcutt VL**. Development of a quality improvement curriculum in physician assistant studies. *J Physician Assist Educ.* 2016. Under review.

Langston, JP, **Orcutt VL**, Schultz H, Hornberger B, Deal A, Doran, TJ et al. Advanced practice providers in U.S. urology: A national survey of demographics and clinical roles. *Urology Practice.* 2016. (Accepted for publication).

Bradley-Guidry C, Garner W. What really ails diversity efforts in healthcare?. *Journal of Leadership Studies.* 2016:10(1):85-86.

Sales S, Sanghera MK, **Klocko D**, Stewart M. Diagnosis and treatment of restless legs syndrome. *Journal of the Academy of Physician Assistants*. 2016; 29(7): 15-20.

Klocko DJ. Are Cognitive Biases Influencing Your Clinical Decisions? *Clinician Reviews*. 2016; 26 (3):32-39.

Cahn PS, Bzowychyj A, Collins L, Dow A, Goodell K, Johnson AF, **Klocko D**, Knab M, Parker K, Reeves S, Zierler BK. A Design Thinking Approach to Evaluating Interprofessional Education. *Journal of Interprofessional Care*. 2016; 30(3): 1-3.

Hernandez, S, Bachman, M., Bailey, A., Banks, H., Hartos, J., **Kane, J**. Does Chewing Tobacco Impact the Number of Chronic Health Problems in Adult Males Under Age 45 Years? *Journal of Primary Prevention*. Submitted February 2016. Under review.

Shakil A, Reingle J, DeCrescenzo A, Day PG, **Kindratt T**, Krepcho M. Expansion of the HITS screening tool to detect child abuse. *Child Abuse and Neglect*. Submitted December, 2015. Under review.

Dallo F, **Kindratt T**. Chronic disease prevalence varies by nativity status and region of birth among non-Hispanic whites. *J Racial and Ethnic Health Disparities*, 2015; Nov: 1-9. Epub 2015 Nov 4.

Pagels P, **Kindratt T**, Arnold D, Brandt J, Woodfin G, Gimpel, N. Improving public health through health literacy training for family medicine residents. *Int J Family Med*. 2015; Article ID 129187. Epub 2015 Sep 29.

Book Chapters

Books

Other

A. Published scientific review

B. Abstracts (Platform or Poster Presentations)

Bradley-Guidry C, Milner L, Beck T, Wesley C. Morrissey K, **Kindratt T**. Screening Our Sisters: Faith-Based Breast Cancer Education and Navigation. American Public Health Association Annual Meeting & Expo. May 2016 (Abstract Accepted for Platform Presentation)

Orcutt VL, **Williams JM**. Test Item Writing Workshop. Invited Presentation. Southwestern Academy of Teachers, Dallas, TX. April 2016.

Sturges D, **Coleman V**. Pop Culture and Physician Assistant Education. Poster presented at UT Southwestern Academy of Teachers, Dallas, TX. April 2016.

Sturges D, **Coleman V**. Pop Culture and Physician Assistant Education. Poster Finalist presented at University of Texas Kenneth I. Shine Academy of Health Science Education, Austin, TX. February 2016.

Tshuma L, DiBaise M, Dao-Tran A. **Bradley-Guidry C.** Diversity in PA Education: Mission Possible. Physician Assistant Education Association Annual Education Forum, Washington, DC. November 2015.

Kindratt T, Orcutt V, Williams J. Development of a Quality Improvement Curriculum in Physician Assistant Studies. Presented at the Physician Assistant Education Association annual forum in Washington, DC. Nov 13, 2015.

C. Editorials, position papers, background papers

D. Original invited lectures and presentations published for distribution

Presentations

Bradley-Guidry C. Association of Light-Intensity Physical Activity with Lower Cardiovascular Disease Risk Burden in Rheumatoid Arthritis. University of North Texas Health Science Center. Fort Worth, TX. August 2016. Accepted Platform Presentation.

Coleman, V. Creation and Implementation of a Leadership Curriculum for the UTSW Department of Physician Assistant Studies. UT Southwestern Leadership Emerging in Academic Departments (LEAD) Program for Junior Faculty, Physicians, and Scientists. Dallas, TX. August 2016. Accepted Platform Presentation.

Coleman V, James K, **Kane J.** Introduction to the PA Profession and Suture Skills Workshop Presentation. Town View School of Health Professions Summer Camp. Dallas, TX. August 2016. Accepted Platform Presentation.

Sturges D. Cultural Sensitivity and Diversity. El Centro College – Dept. of Emergency Medical Services. Dallas, TX. July 2016. Accepted Platform Presentation.

Sturges D. The Physician Assistant Profession. UT Southwestern 3rd Annual Student Intern Mixer. Dallas, TX. July 2016. Accepted Platform Presentation

Bradley-Guidry C. Implementing Interprofessional Approaches to the Management of Hypertension. Texas Family Medicine Symposium, San Antonio, TX. June 2016. Invited Platform Presentation

Sturges D. Cultural Awareness. LSU Health School of Allied Health – Dept. of Physician Assistant Studies. Shreveport, La. June 2016. Accepted Platform Presentation.

Orcutt VL, Hornberger B, Schultz H, Langston J. Advanced practice providers in US urology: Demographics and clinical roles. AcademyHealth, June 2016. Boston, MA. Accepted poster presentation.

Orcutt VL, Williams J. Test Item Writing Workshop. Southwestern Academy of Teachers, Dallas, TX, April 2016. Invited platform presentation.

Kindratt T, Pagels, P. Training Future Providers & Enhancing Pediatric Literacy among Homeless Women & Children. 2016 Southwestern Academy of Teachers (SWAT) Educational Symposium, Dallas, TX. April 2016. Accepted Poster Presentation.

Kindratt T, Orcutt V, Williams J. Development of a Quality Improvement Curriculum in Physician Assistant Studies. 2016 Southwestern Academy of Teachers (SWAT) Educational Symposium, April 2016. Accepted Poster Presentation.

Sturges D, Kindratt T, Coleman V. Pop Culture and Physician Assistant Education. 2016 Southwestern Academy of Teachers (SWAT) Educational Symposium, April 2016. Accepted Poster Presentation.

Dekat L, Orcutt VL, Kindratt T. Enhancing Empathy and Competence through an Integrated Diabetic Management Curriculum. Poster session presented at: 6th Annual Education Week at UT Southwestern, sponsored by the Southwestern Academy of Teachers; 2016 Apr 5-8; Dallas, TX.

Klocko DJ. Basic Faculty Skills Pando® Workshop: Workshop Facilitator. Lectures: Active Learning, Developing an Effective Syllabus, Thriving in the Academic Environment, Speed Mentoring. Physician Assistant Education Association Spring Workshops, Washington, DC. March 17-19, 2016. Invited workshop presentations.

Kindratt T, Orcutt V, Williams J. Development of a Quality Improvement Curriculum in Physician Assistant Studies. 2016 The University of Texas Kenneth I Shine, M.D., Academy of Health Science Education Innovations Conference. Austin, TX. February 2016. Accepted Poster Presentation.

Sturges D, Kindratt T, Coleman V. Pop Culture and Physician Assistant Education. 2016 The University of Texas Kenneth I Shine, M.D., Academy of Health Science Education Innovations Conference. Austin, TX. February 2016. Accepted Poster Presentation.

Klocko DJ. Interprofessional Aging Case: Southwestern School of Health Professions, IDEAL Lecture Series. January 15, 2016. Invited platform presentation.

Sturges D. Food: Friend or Foe?. Prairie View 4-H Dallas County Camp. Dallas, TX. December 2015. Accepted Platform Presentation

Coleman V, Sturges D. The Biography of Food. Prairie View 4-H Dallas County Camp. Dallas, TX. December 2015. Accepted Platform Presentation.

Bradley-Guidry C. Admission Best Practices: Recruitment of Diverse Populations. Physician Assistant Education Association Annual Education Forum, Washington, DC. November 2015. Invited Platform Presentation

Collett D, **Bradley-Guidry C,** LeLacheur S. Leadership 101: Developing Minority Faculty Leaders, Difficult Conversation. Physician Assistant Education Association

Annual Education Forum, Washington, DC. November 2015. Accepted Platform Presentation

Klocko DJ. Clinical Coordinators Pando® 101: Workshop Facilitator. Lectures: Putting the Pieces Together: Learning Goals and Instructional Objectives. Can Students Do That? Physician Assistant Education Association, Annual Education Forum, Arlington, VA. Nov. 8-13, 2015. Invited workshop presentations.

Orcutt VL, Jones PE. A Comparison of Medical Licensure Infractions in Texas, 2010-2014. Physician Assistant Education Association Annual Education Forum, Washington, DC, November 2015. Accepted poster presentation.

Orcutt VL, Hornberger B, Schultz H, Langston J. Advanced practice providers in US urology: Demographics and clinical roles. PAEA Annual Conference, Nov 2015. Washington DC. Accepted poster presentation.

Kindratt T, Orcutt VL, Williams J. Development of a quality improvement curriculum in physician assistant studies. PAEA Annual Conference, Nov 2015, Washington DC. Accepted poster presentation.

Dekat L, Orcutt VL. Enhancing Empathy and Competence through an Integrated Diabetes Management Curriculum. Physician Assistant Education Association, Washington DC, November 2015, Accepted platform presentation.

Orcutt VL, Kindratt T. Development of a Quality Improvement Curriculum in Physician Assistant Studies. 2015 North American Primary Care Research Group Annual Meeting, Cancun, Mexico. October 2015. Accepted oral presentation

Coleman V, Sturges D. Physician Assistants: What? How? Me? UT Southwestern Pre-Medical Program. Dallas, TX. October 2015. Accepted Platform Presentation.

Orcutt VL, Kindratt T. Physician Assistant Students and Family Medicine Residents: Knowledge, Skills, and Attitudes for Research and Quality Improvement. 2015 North American Primary Care Research Group Annual Meeting, Cancun, Mexico. October 2015. Accepted oral presentation

Kindratt, T. Development of a Quality Improvement Curriculum in Physician Assistant Studies. 2015 North American Primary Care Research Group Annual Meeting, Cancun, Mexico. October 2015. Accepted Platform Presentation.

Kindratt T, Orcutt V, Pagels P, Gimpel N. Physician Assistant Students' and Family Medicine Residents' Knowledge, Skills, and Attitudes for Research and QI. 2015 North American Primary Care Research Group's 43rd Annual Meeting. Cancun, Mexico. October 2015. Accepted Platform Presentation.

Gimpel N, **Kindratt T**, Pagels P, Murthy B, Murthy N, Silver M. Evaluating Faculty Interest in Incorporating Public Health Education in Medical School Curricula– Barriers and Facilitators to Building Public Health Educational Capacity. 2015 North American Primary Care Research Group's 43rd Annual Meeting. Cancun, Mexico. October 2015. Accepted Platform Presentation.

Kindratt T, Pagels P, Koch C, Salinas H, Laws V, Yeh N. Evaluating Tobacco Use and Increasing Smoking Cessation Attempts by Adults at a Men's Homeless Shelter Clinic. 2015 North American Primary Care Research Group's 43rd Annual Meeting. Cancun, Mexico. October 2015. Accepted Poster Presentation.

Abraham P, Pagels P, **Kindratt T**, Dawson A, Gimpel N. Implementation and assessment of a smoking cessation intervention at a men's homeless shelter. 2015 North American Primary Care Research Group's 43rd Annual Meeting. Cancun, Mexico. October 2015. Accepted Poster Presentation.

Kindratt T, Orcutt V, Williams J. Development of a Quality Improvement Curriculum in Physician Assistant Studies. 2015 University of Texas Southwestern Medical Center National Healthcare Quality Week, Dallas, TX. October 2015. Accepted Poster Presentation.

Kindratt T, Pagels P, Koch C, Salinas H, Laws V, Yeh N. Evaluating Tobacco Use and Increasing Smoking Cessation Attempts by Adults at a Men's Homeless Shelter Clinic. 2015 University of Texas Southwestern Medical Center National Healthcare Quality Week, Dallas, TX. October 2015. Accepted Poster Presentation.

Kindratt T, Pagels P, Chung K, Park C, Corder TM, Kim J, Walls K, Salinas H. Evaluating the Reach Out and Read program to promote pediatric literacy in a student-run homeless shelter clinic. 2015 University of Texas Southwestern Medical Center National Healthcare Quality Week, Dallas, TX. October 2015. Accepted Poster Presentation.

Kindratt T, Orcutt V, Williams J, Klocko D. Development of a Quality Improvement Curriculum in Physician Assistant Studies. 2015 Texas Society of Allied Health Professionals Conference, San Antonio, TX. September 2015. Accepted Platform Presentation.

Dekat L, Orcutt V, Kindratt T. Enhancing competence through and integrated diabetes management curriculum. 2015 Texas Society of Allied Health Professional Annual Conference, San Antonio, TX. September 2015. Accepted Platform Presentation.

Kindratt T, Orcutt V, Pagels P, Gimpel N. Physician Assistant Students' and Family Medicine Residents' Knowledge, Skills, and Attitudes for Research and QI. 2015 Texas Society of Allied Health Professional Annual Conference, San Antonio, TX. September 2015. Accepted Poster Presentation.

Klocko DJ. Creating Awareness of How Bias Contributes to Clinical Decision Errors. Texas Society of Allied Health Professions, Innovations and Best Practices in Health Professions Education. UT Health Science Center at San Antonio. September 25, 2015. Accepted platform presentation.

Klocko DJ. Development of a Quality Improvement Curriculum in Physician Assistant Studies. Texas Society of Allied Health Professions, Innovations and Best Practices in Health Professions Education. UT Health Science Center at San Antonio. September 25, 2015. Accepted platform presentation.

Membership on Editorial Boards

Department of Physical Therapy 2015-2016

Research Grants and Contracts

Grant Submitted, Award Decision Pending

Title: Validation of fixed distance walk/run tests as outcome measures in Duchenne Muscular Dystrophy

Purpose: To validate walk run tests that are used as outcome measures in Duchene Muscular Dystrophy patients

Funding Agency: NIH U01 Research Grant submitted with Nationwide Children's, Columbus Ohio

Funding Dates: 4/1/2017-3/31/2021

Amount Requested: \$77,658

Principle Investigator: **Leslie Nelson**, 20% effort

Title: A Transdisciplinary Model for Chronic Pain Management

Purpose: To compare two models of interdisciplinary treatment in patients with chronic pain.

Funding Agency: UT Southwestern Center for Translational Medicine, Translational Pilot Program Grant

Funding Dates: 05/01/17-05/01/18

Amount requested: \$50,000

Co-Principal Investigator: **J. Zafereo**, 20% effort

Title: The Effectiveness of Manual Therapy and Supervised Physical Therapy vs. Home Exercise Instruction in the Management of Femoroacetabular Impingement Syndrome

Purpose: To investigate the effectiveness of therapeutic exercise and manual therapy in patients with non-arthritis hip pain

Funding Agency: Texas Physical Therapy Foundation Grant

Funding Dates: 11/01/16-07/01/18

Amount requested: \$3,300.

Principal Investigator: **E. Mulligan** 4% effort

Grants Awarded

Title: The Impact of Clinical Teaching on Clinician Productivity across the UTSW Campus

Purpose: To strengthen UTSW's clinical teaching capacity and improve patient care by demonstrating that student involvement in patient care has benefit not only to productivity but to the university's teaching mission.

Funding Agency: Southwestern Academy of Teachers (SWAT) Junior Faculty Development Fund.

Funding Dates: 07/01/16-06/30/17

Amount Awarded: \$1475

Principal Investigator: T. Dickson

Co-investigator: J.DeVahl

Title: Impact of carbon fiber AFOs on gait and resulting changes in quality of life across time in persons with PD

Purpose: To examine the impact of bracing on gait and quality of life in individuals with PD

Funding Agency: Academy of Orthotics and Prosthetics

Funding Dates: 07/31/16-08/31/17

Amount Awarded: \$15,000

Principal Investigator: S. Shearin, 10% effort.

Title: Sports Physical Therapy Residency Development

Purpose: To fund development of residency training sites for clinicians aspiring to become board certified as sports physical therapists.

Funding Agency: Sports Physical Therapy Section of the American Physical Therapy Association

Funding Dates: 02/01/16-02/01/17

Amount Awarded: \$1750

Principal Investigator: E. Mulligan 2% effort

Title: Effects of selective percutaneous myofascial release on gait, activity and participation in children with spasticity.

Purpose: The aim of this study is to identify the specific changes in secondary musculoskeletal impairments, activity limitations, and gait kinematics and kinetics in children with spasticity after a selective percutaneous myofascial release procedure.

Funding Agency: UTSW Mobility Center Foundation

Funding Dates: 2/15/16-2/15/17

Amount Awarded: \$50,000.00

Principle Investigator: S. Simpkins 10% effort

Title: The Use of High-Frequency Vibration for the Rehabilitation in Individuals with Shoulder Pain and Limited Range of Motion

Purpose: The purpose is to use a randomized control trial design to investigate the use of a novel technology that utilizes specific high-frequency oscillations (Rapid Release Technology, RRT) in conjunction with standard therapeutic exercise and manual therapy (RRT + EX vs. EX only) to accelerate the resolution of pain, increase restoration of normal shoulder range of motion, and improve functional shoulder outcome measures in individuals with non-operative shoulder pathologies.

Funding Agency: Rapid Release Technology, corporate collaboration

Funding Dates: 10/2015-10/2017

Amount Awarded: \$19,600

Principal Investigator: R. Querry, 10% effort.

Title: Design and Pilot Testing of an Interprofessional Student Evaluation of Teaching for Clinical Instructors

Purpose: To design a student evaluation of teaching that is inclusive of all content needed to judge clinical teaching effectiveness and with broad applicability to all health professions.

Funding Agency: Southwestern Academy of Teachers (SWAT) Junior Faculty Development Fund.

Funding Dates: 07/01/15-06/30/16

Amount Awarded: \$2160

Principal Investigator: T. Dickson

Co-investigator: J. DeVahl

Title: The Impact of Clinical Teaching on Clinician Productivity across the UTSW Campus

Purpose: To assess the impacts of clinical teaching on physical therapist productivity with physical therapy departments at UT Southwestern.

Funding Agency: UT Southwestern Academy of Teachers

Funding Dates: 07/01/15-06/30/16

Amount Awarded: \$1450.

Principal Investigator: T. Dickson

Title: Physical Therapists' Perspectives on Lifelong Learning

Purpose: to determine the psychometric properties of an adapted survey tool and measure lifelong learning aptitudes and beliefs of licensed physical therapists (PTs).

Funding Agency: Texas Society of Allied Health Professions

Funding Dates: 10/02/14-09/30/15

Amount Awarded: \$1500

Principal Investigator: J. DeVahl

Title: Cardiorespiratory Benefits of Early Standardized Task -specific Training (ESTT) and a Home Based Progressive Conditioning Program for Individuals Post Stroke

Purpose: This stratified randomized controlled trial compares the metabolic energy efficiency, quality of life and cardiorespiratory training capacity of individuals recovering from a stroke. Impact of inpatient rehabilitation environment (typical standard of care rehabilitation or ESTT) will be randomized for 8-weeks of continuous outpatient rehabilitation (randomized to typical care or ESTT principles). Following outpatient rehabilitation, individuals will be given progressive home based conditioning program. Outcome measures are collected across time span of outpatient rehabilitation and home program.

Funding Agency: National American Heart Association and the Texas Affiliate

Funding Dates: 6/2014-06/2016

Amount Awarded: \$150,000

Principal Investigator: K. McCain, 10% effort.

Title: Parkinson Disease Biomarker Program (PDBP)

Purpose: The primary objective of this study is to obtain detailed clinical information including clinical measures and biologic specimens from subjects with PD toward the ultimate end of identifying clinical and biological biomarkers of PD. Because of the inherent difficulties of using current clinical outcome measures to assess disease modification, the identification of more sensitive diagnostic and prognostic biomarkers of PD is of paramount importance.

Funding Agency: National Institute of Neurological Disorders and Stroke (NINDS) NIH number 4040-0001

Funding Dates: 11/2012-11/2017

Amount Awarded: \$4,021,829

Principal Investigator: R. Dewey

Co-investigator: R. Query 3% effort

Grant Submitted but Not Funded

Title: The Impact of Exercise Intensity on Production of BDNF and Other Functional Measures for Persons Living with Parkinson's Disease

Purpose: To investigate the impact of exercise intensity on production of BDNF and functional measures for persons living with Parkinson's Disease.

Funding Agency: UT Southwestern Mobility Foundation

Funding Dates: September 2016 – August 2017

Amount Requested: \$75,000.00

Principle Investigator: S. Shearin 10% effort

Title: Expansion of Applicability of the Clinical Instructor Effectiveness Tool for the Health Professions

Purpose: To add physician assistant students to the pool of physical therapy students using the Clinical Instructor Effectiveness Tool for the Health Professions (CIETHP) in order to reduce the number of items, and to test its reliability and validity.

Funding Agency: Southwestern Academy of Teachers (SWAT) Junior Faculty Development Fund.

Funding Dates: 07/01/16-06/30/17

Amount requested: \$3620.00

Principal Investigator: T. Dickson

Co-investigator: J. DeVahl

Title: The Effect of Manual Therapy and Exercise on the Management of Glenohumeral Osteoarthritis.

Purpose: To investigate the effectiveness of non-operative management strategy in patients with osteoarthritis of the glenohumeral joint.

Funding Agency: Orthopedic Section of the American Physical Therapy Association. New Investigator Award

Funding Dates: 11/01/15-11/01/18

Amount requested: \$15,000

Principal Investigator: E. Mulligan 4% effort

Publications

Refereed Journals

Zafereo, J, Wang-Price, S. Differences in spinal posture and range of motion impairment in lumbar flexion- and extension-based movement syndromes. *Physiotherapy Theory and Practice*. Submitted August 2016. Under review.

Van Pelt M, **Mulligan EP**. Retrospective review of resubluxation of fixation and resubluxation of Lis Franc fracture dislocations treated with open reduction internal fixation. *Foot Ankle International*. Submitted August, 2016. Under review

Deschenes B, Williamson J. Awareness of Physical Activity Health Related Benefits: Physical Activity Participation and Dose. *Sportsmedicine and Rehabilitation Journal*. Submitted August 2016. Under review.

Black S, Cline K, **Mulligan E**, Heydrick J, **Middleton E**, Coyner K, Robertson WJ. Baseline Evaluation of the Hip in Asymptomatic Elite Hockey Players using the Non-Arthritic Hip Score and Hip Outcome Score. *Amer J Ortho Sports Med*. Submitted July 2016. Under review.

Robertson WJ, Black, SR, Cline KE, Madhavapeddi MS, **Middleton E**, **Mulligan EP**. Balance testing in the elite hockey player: An assessment of foot dominance versus shooting. *Amer J Ortho Sports Med*. Submitted July, 2016. Under review

McCain KJ, Shearin SM. A clinical framework for functional recovery in a person with chronic traumatic brain injury: a case report. *Journal of Neurologic Physical Therapy*. Submitted April 2016. Under review.

Wang-Price, S, **Zafereo, J**, Brizzolara, K, Sokolowski, L, Turner, D. Effects of different verbal instructions on muscle thickness changes of lumbar multifidus in healthy adults and in patients with low back pain. *Journal of Manual and Manipulative Therapy*. 2016. (In press)

Zafereo, J, Wang-Price, S, Brown, J, Carson, E. Reliability and comparison of spinal end-range motion assessment using a skin-surface device in participants with and without low back pain. *Journal of Manipulative and Physiological Therapeutics*. 2016; 39(6): 434-42.

Mulligan EP, Huang M, **Dickson T**, Khazzam M. The effect of ordering and timing of scapular stabilization and rotator cuff exercise in Neer stage I and II subacromial impingement syndrome: A randomized crossover trial. *Int J Sport Phys Therapy*. 2016;11(1):94-107.

Deschenes B, Zafereo J. Immediate and Lasting Effects of a Thoracic Spine Manipulation in Patient with Signs of Cervical Radiculopathy and Upper Extremity Hyperalgesia: A Case Report. *Physiotherapy Theory and Practice*. Accepted November 2015. In press.

Mulligan EP, Brunette M, Shirley Z, Khazzam M. Sleep quality and nocturnal pain in patients with shoulder disorders. *J Shoulder Elbow Surg*. 2015; 24(9):1452-7.

Khazzam M, **Mulligan EP**, Shirley Z, Brunette M. Sleep quality in patients with rotator cuff disease. *Orthop J Sports Med*. 2015; 3(3).

Mulligan EP, Middleton E, Brunette M. Evaluation and management of greater trochanter pain syndrome. *Phys Ther Sport*. 2015; 16(3):205-14

Rozen, S, Barnett S, **Blau P**, Kutz W, Mickey B, Isaacson B, Roland P, Harrison B. Intracranial Facial Nerve Grafting in the Setting of Skull Base Tumors: Global and Regional Facial Function Analysis and Possible Implications for Facial Reanimation Surgery. *Plastic & Reconstructive Surgery* 2015; 137(1):267-278.

Cleveland S, Driver S, Swank C, **Macklin (Shearin) S.** Classifying Physical Activity Research Following Stroke Using the Behavioral Epidemiologic Framework. *Topics in Stroke Rehabilitation*. 2015; 22(4) 289-298.

Shearin SM, Smith PS, McCain KJ. Bracing for persons with Parkinson's disease: A case series with clinical reasoning. *Journal of Prosthetics and Orthotics*. 2015; 27(3): 95-102.

Zafereo J, Deschenes B. Spinal Manipulation in Central Sensitization. *Journal of Applied Biobehavioral Research*. 2015; 20(2): 84-99.

*Non-refereed Journals
Book Chapters*

Zipp G, **Simpkins S**, Fell D. Making Clinical Decisions: The Process that Leads to Optimal Therapeutic Plan of Care and Outcomes. *Lifespan Neurorehabilitation*. FA Davis Plus (chapter in final phase of processing for publication)

Nelson L; Spinal Muscular Atrophy Clinical Trials: Lessons Learned
Spinal Muscular Atrophy. 10026-Summer-9780128036853. Accepted for publication
August 2016

Simpkins S, Zipp G, Fell D. Functional Activity Intervention: Upright Mobility. *Lifespan Neurorehabilitation*. FA Davis Plus (chapter in final phase of processing for publication)

Dillon, L., Gleeson, P., Burgess, N., Csiza, L., Galloway, R., Spivey, S., Anderlie, D., Boas, L., **DeVahl, J., Dickson, T.**, Garrett, M., Geelhoed, M., O'Donnell, A., Pickle, J., Schwartz, B., Sneary, M., Williams, S. (2015). Physical Therapist Manual for the Assessment of Clinical Skills, 2nd Ed. Texas Consortium for Physical Therapy Clinical Education, Inc.

*Books
Other*

A. Published scientific review

B. Abstracts (Platform or Poster Presentations)

Dickson, T., DeVahl, J. Pilot testing of the Clinical Instructor Effectiveness Tool for the Health Professions. Poster session presented at SWAT Annual Research Symposium, UT Southwestern Medical Center; 2016 April; Dallas, TX.

Robertson W, **Mulligan EP.** Baseline Evaluation of the Hip in Elite Ice Hockey Players using the Non-Arthritic Hip Score and Hip Outcome Score. Poster session presented at American Academy of Orthopaedic Surgeons Annual Meeting. 2016 March, Orlando, FL.

Dickson T, Mulligan EP. Demographic Factors of Classifying Scapular Dyskinesis in Symptomatic Shoulders. Poster session presented at APTA Combined Sections Meeting. 2016 February, Anaheim, CA.

DeVahl J, Blau P, Alexander J, Bartell K, Crain N, Fox A, Phan T, Sturton M. The Validity and Reliability of the Jefferson Scale of Physical Therapist Lifelong Learning. Poster session presented at APTA Combined Sections Meeting. 2016 February, Anaheim, CA.

Reyes BA, Kurth A, Kukowsk BS, **Mulligan EP**, Phelan AH, Khazzam M. Subscapularis Integrity and Function Following Reverse Total Shoulder Arthroplasty. Poster session presented at American Shoulder Elbow Surgeon Society Annual Meeting. 2015 October, Boston, MA.

Khazzam M, **Mulligan EP**. Sleep Disturbance Does Not Correlate with Rotator Cuff Tear Severity. Poster session presented at American Shoulder Elbow Surgeon Society Annual Meeting. 2015 October, Boston, MA.

Wang-Price, S, **Zafereo, J**, Brizzolara, K, Sokolowski, L, Turner, D. Do three verbal instructions influence lumbar multifidus muscle thickness differently in both asymptomatic adults and patients with low back pain? Platform presentation at American Academy of Orthopaedic Manual Physical Therapy Annual Conference; 2105 October, Louisville, KY.

Zafereo, J, Wang-Price, S, Roddey, T, Brizzolara, K. Regional manual therapy and motor control exercise for the management of chronic low back pain with hip and spine motion loss: a randomized clinical trial. Poster session presented at: TPTA Annual Conference; 2015 October; Arlington, TX.

Deschenes, BK, Signorelli, A, Dyer, L, Robidou, C, Schilb, J, Franks, S, Kamp, C, **Zafereo, J**. The development of an equation to predict doctorate of physical therapy (DPT) GPA using pre-admission factors. Poster session presented at: TPTA Annual Conference; 2015 October; Arlington, TX.

Dickson T, Mulligan EP. The Reliability of Classifying Scapular Dyskinesia in Symptomatic Shoulders. Poster session presented at TPTA Annual Conference. October 2015, Arlington, TX.

Dickson, T., McGaugh, J. Evaluation of Needs during the Admissions Process Regarding Students of Color. Poster session presented at: TPTA Annual Conference; 2015 October, Arlington, TX.

Presentations

Nelson L. Wellstone Muscular Dystrophy Symposium. Exercise in Duchenne muscular dystrophy and Becker muscular dystrophy. Dallas, TX. August 2016. National. Invited lecture.

Querry, R. Clinical Correlations and Considerations of Muscle Physiology and Biomechanics for Application in Rehabilitation. UT Southwestern Physical Medicine Residency Grand Rounds, Dallas, TX. August 2016. Local. Invited lecture.

Mulligan EP. What is Physical Therapy? UT Southwestern Department of Family and Community Medicine Grand Rounds. Dallas, TX. August 2016. Local. Invited lecture.

Shearin S, McCain K. Video-based Case Presentations & Discussion, Co-presenter, IV STEP Conference, American Physical Therapy Association, Columbus, Ohio. July, 2016. National. Invited platform presentation.

Middleton, EF. Concussion in Adolescents. District 12 School Nurses. Waco, Texas. July 19, 2016. State. Invited lecture.

Mulligan EP. Evaluation and Treatment of Athletic Hip Injuries. Primary Care Sports Medicine Musculoskeletal Series. UT Southwestern Medical Center. Dallas TX. June 2016. Local. Invited lecture.

Zafereo, J. Early Exercise Interventions for Patients with Chronic, Widespread Pain and Hypersensitivity. UT Southwestern 18th Annual Physical Medicine and Rehabilitation Scientific Day, Dallas, TX. May 2016. State. Invited platform presentation.

Nelson L. Evaluation and management of patients with pediatric neuromuscular disease UT Southwestern Neuromuscular Fellowship program. Dallas, TX. May 2016. Local. Invited lecture.

Dickson, T., Anderle, D. Clinical Instructor Certification Course, Part II. Local course presented on behalf of the Texas Consortium for Physical Therapy Clinical Education. Baylor University Medical Center, Dallas, TX. March 2016. State. Invited Course.

Eggebraten B, Garrison C, **Middleton E, Mulligan EP.** Preparation Strategies and Review for Sports Physical Therapy Specialization Examination. Sports Physical Therapy Section of the American Physical Therapy Association. Anaheim, CA. February, 2016. National. Invited. 2-day pre-conference course.

Middleton EF, Mulligan RP, Mulligan EP. Evaluation and Management of Syndesmotic Ankle Injuries in Athletes. American Physical Therapy Association's Annual Combined Sections Meeting. Anaheim, CA. February, 2016. National. Invited lecture.

Dickson, T., Hull, B., van den Bent, J., Lopez, H. Panel Focus on Students and New Professionals, North Texas District of the Texas Physical Therapy Association, Irving, TX, January 2016. State. Invited Speaker.

Querry, R. Clinical Correlations: Concepts of Muscle Physiology for Application in Rehabilitation. UT Southwestern MS-1 Medical Students. Dallas, TX. November 2015. Local. Invited Lecture.

Middleton EF. Physical Therapy Evaluation and Management of Hip Pain. UT Southwestern Physical Medicine & Rehabilitation Residents. Dallas, TX. November, 2015. Local. Invited lecture.

Mulligan EP. Management strategies for Non-arthritic Hip Pain. American Academy of Physical Therapists. Dallas, TX. November, 2015. National. Invited lecture.

Mulligan EP. Functional Testing to Determine Readiness to Return to Play. UT Southwestern Department of Physical Medicine and Rehabilitation Grand Rounds. Dallas TX. November 2015. Local. Invited lecture.

Simpkins, S. Pediatric Physical Therapy Examination CAID Comprehensive Care Center for Disability, Santo Domingo, Dominican Republic, and October, 2015. International. Invited lecture

Mulligan EP. Physical Examination and Diagnostic Accuracy of Common Musculoskeletal Special Tests. Department of Internal Medicine Grand Rounds. University of Tennessee Memphis, TN. October 2015. National. Invited instructional laboratory.

Middleton EF, Mulligan EP. Evaluation and Management of Femoroacetabular Impingement Syndrome. Texas Physical Therapy Association Annual Conference. Arlington, TX. October 2015. State. Invited lecture.

Dickson, T., Geelhoed, M., Sneary, M. Clinical Instructor Certification Course, Part II, Presented on behalf of the Texas Consortium for Physical Therapy Clinical Education. TPTA Annual Conference, Arlington, TX, October 2015. State. Invited lecture.

C. Editorials, position papers, background papers

D. Original invited lectures and presentations published for distribution

Presentations

Membership on Editorial Boards

Mulligan E. 2013 – present. Journal of Manual Therapy

Mulligan E. 2011 – present. Physical Therapy in Sport Journal

Middleton EF. 2015-present. International Journal of Sports Physical Therapy

Simpkins S: Invited reviewer for one manuscript for a special issue of Pediatric Physical Therapy

REHABILITATION COUNCILING 2015-2016

Research Grants and Contracts

Grants Submitted, Award Decision Pending

Grants Awarded

Grants Submitted but Not Funded

Total Grant Submissions

Publications

Refereed Journals

Non-refereed Journals

Book Chapters

Nieswiadomy, R., Nieswiadomy, M., & **McConnel, C.** (2016). Nursing Research and Healthcare Economics. In Nieswiadomy, R. M. & Bailey, C. (Eds.). *Foundations of Nursing Research*, 7th edition. Upper Saddle River, NJ: Prentice Hall. In Production

Books

Other

A. Published scientific review

B. Abstracts (Platform or Poster Presentations)

Gomez, B., **Silver, C.**, Resch, J., & Cullum, M.C. IMPACT performance of high school student athletes with ADHD. Presented at the annual meeting of the National Academy of Neuropsychology; November, 2015 ; Austin, TX.

C. Editorials, position papers, background papers

D. Original invited lectures and presentations published for distribution

Presentations

Casenave, G. Presentation on Ethics and Professionalism to the Physician Assistant students. UT Southwestern Medical Center. Dallas, Texas. August 2016. Invited presenter.

Casenave, G. Ethics Presentation to the International Association of Rehabilitation Professionals Texas All Day Seminar. Collin County College. March 2016 Invited Presenter

Casenave, G. A discussant for the 21st Century Strategies for Obesity at the Capra Symposium. UT Southwestern Medical Center. Dallas, Texas. February 2016 Invited participant.

Casenave, G. The Physics and Biology of an Ethic of Care. Department of Psychiatry/ Education The Ken Altshuler, M.D. Grand Rounds in Psychiatry. UT Southwestern Medical Center. Dallas, Texas. January 2016. Invited Platform Presentation.

Casenave, G. Presentation on Change and Stress Management to Arlington Department of Assistive Rehabilitation Services (DARS). Fort Worth, Texas. October 2015 Invited Presenter

Membership on Editorial Boards