

**Southwestern School of Health Professions (SSHP)
Scholarly Activity Report
FY 2016-2017**

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 September 1, 2016 – August 31, 2017. Programs for individuals not listed reported no publications/grants for the time period requested.

SSHP Faculty Publications and Grants Summary FY 2016-2017

Research Grants and Contracts

| | |
|---|-----------|
| <i>Grants Submitted, Award Decision Pending</i> | 20 |
| <i>Grants Awarded</i> | 33 |
| <i>Grants Submitted But Not Funded</i> | 14 |
| Total Grant Submissions | 67 |

Publications

| | |
|--|------------|
| <i>Refereed journals</i> | 46 |
| <i>Refereed journals under review</i> | 16 |
| <i>Non-refereed journals</i> | 8 |
| <i>Book Chapters</i> | 5 |
| <i>Books</i> | 4 |
| <i>Other:</i> | |
| A. Published scientific review | 1 |
| B. Abstracts (platform or poster presentations) | 49 |
| C. Editorials, position papers, background papers | 2 |
| D. Original invited lectures and presentations published for distribution | 0 |
| Total Publications | 131 |

| | |
|---------------------------------------|-----------|
| Presentations | 71 |
| Membership on Editorial Boards | 15 |

*SSHP Faculty Publications and Grants Summary FY 2016-2017
by Department*

Clinical Nutrition

Research Grants and Contracts

| | |
|---|----------|
| <i>Grants Submitted, Award Decision Pending</i> | 4 |
| <i>Grants Awarded</i> | 4 |
| <i>Grants Submitted But Not Funded</i> | 0 |
| Total Grant Submissions | 8 |

Publications

| | |
|--|-----------|
| <i>Refereed journals</i> | 12 |
| <i>Refereed journals under review</i> | 1 |
| <i>Non-refereed journals</i> | 1 |
| <i>Book Chapters</i> | 1 |
| <i>Books</i> | 0 |
| <i>Other:</i> | |
| A. Published scientific review | 0 |
| B. Abstracts (platform or poster presentations) | 6 |
| C. Editorials, position papers, background papers | 0 |
| D. Original invited lectures and presentations published for distribution | 0 |
| Total Publications | 21 |

Presentations

5

Membership on Editorial Boards

4

Clinical Rehabilitation Counseling

Research Grants and Contracts

| | |
|---|----------|
| <i>Grants Submitted, Award Decision Pending</i> | 1 |
| <i>Grants Awarded</i> | 0 |
| <i>Grants Submitted But Not Funded</i> | 1 |
| Total Grant Submissions | 2 |

Publications

| | |
|--|---|
| <i>Refereed journals</i> | 0 |
| <i>Refereed journals under review</i> | 0 |
| <i>Non-refereed journals</i> | 0 |
| <i>Book Chapters</i> | 0 |
| <i>Books</i> | 0 |
| <i>Other:</i> | |
| A. Published scientific review | 0 |
| B. Abstracts (platform or poster presentations) | 0 |
| C. Editorials, position papers, background papers | 0 |
| D. Original invited lectures and presentations published | 0 |

| | |
|---------------------------|----------|
| for distribution | 0 |
| Total Publications | 0 |

| | |
|---------------------------------------|----------|
| <u>Presentations</u> | 3 |
| <u>Membership on Editorial Boards</u> | 1 |

Health Care Sciences

| | |
|---|-----------|
| <u>Research Grants and Contracts</u> | |
| <i>Grants Submitted, Award Decision Pending</i> | 7 |
| <i>Grants Awarded</i> | 11 |
| <i>Grants Submitted But Not Funded</i> | 1 |
| Total Grant Submissions | 19 |

| | |
|---|-----------|
| <u>Publications</u> | |
| <i>Refereed journals</i> | 9 |
| <i>Refereed journals under review</i> | 2 |
| <i>Non-refereed journals</i> | 7 |
| <i>Book Chapters</i> | 3 |
| <i>Books</i> | 2 |
| <i>Other:</i> | |
| A. Published scientific review | 1 |
| B. Abstracts (platform or poster presentations) | 4 |
| C. Editorials, position papers, background papers | 0 |
| D. Original invited lectures and presentations published for distribution | 0 |
| Total Publications | 28 |

| | |
|---------------------------------------|-----------|
| <u>Presentations</u> | 36 |
| <u>Membership on Editorial Boards</u> | 6 |

Physical Therapy

| | |
|---|-----------|
| <u>Research Grants and Contracts</u> | |
| <i>Grants Submitted, Award Decision Pending</i> | 0 |
| <i>Grants Awarded</i> | 14 |
| <i>Grants Submitted But Not Funded</i> | 10 |
| Total Grant Submissions | 24 |

| | |
|---------------------------------------|----|
| <u>Publications</u> | |
| <i>Refereed journals</i> | 12 |
| <i>Refereed journals under review</i> | 6 |
| <i>Non-refereed journals</i> | 0 |
| <i>Book Chapters</i> | 1 |
| <i>Books</i> | 2 |
| <i>Other:</i> | |
| A. Published scientific review | 0 |

| | |
|---|-----------|
| B. Abstracts (platform or poster presentations) | 13 |
| C. Editorials, position papers, background papers | 0 |
| D. Original invited lectures and presentations published for distribution | 0 |
| Total Publications | 34 |

| | |
|---------------------------------------|-----------|
| <u>Presentations</u> | 27 |
| <u>Membership on Editorial Boards</u> | 4 |

Physician Assistant Studies

| | |
|---|----------|
| <u>Research Grants and Contracts</u> | |
| <i>Grants Submitted, Award Decision Pending</i> | 2 |
| <i>Grants Awarded</i> | 4 |
| <i>Grants Submitted But Not Funded</i> | 0 |
| Total Grant Submissions | 6 |

| | |
|---|-----------|
| <u>Publications</u> | |
| <i>Refereed journals</i> | 13 |
| <i>Refereed journals under review</i> | 7 |
| <i>Non-refereed journals</i> | 0 |
| <i>Book Chapters</i> | 0 |
| <i>Books</i> | 0 |
| <i>Other:</i> | |
| A. Published scientific review | 0 |
| B. Abstracts (platform or poster presentations) | 20 |
| C. Editorials, position papers, background papers | 0 |
| D. Original invited lectures and presentations published for distribution | 0 |
| Total Publications | 40 |

| | |
|---------------------------------------|----------|
| <u>Presentations</u> | 0 |
| <u>Membership on Editorial Boards</u> | 0 |

Prosthetics-Orthotics

| | |
|---|----------|
| <u>Research Grants and Contracts</u> | |
| <i>Grants Submitted, Award Decision Pending</i> | 6 |
| <i>Grants Awarded</i> | 0 |
| <i>Grants Submitted But Not Funded</i> | 2 |
| Total Grant Submissions | 8 |

| | |
|--------------------------------|---|
| <u>Publications</u> | |
| <i>Refereed journals</i> | 0 |
| <i>Non-refereed journals</i> | 0 |
| <i>Book Chapters</i> | 0 |
| <i>Books</i> | 0 |
| <i>Other:</i> | |
| A. Published scientific review | 0 |

| | |
|--|---|
| B. Abstracts (platform or poster presentations) | 6 |
| C. Editorials, position papers, background papers | 2 |
| D. Original invited lectures and presentations published for distribution | 0 |

Total Publications **8**

Presentations **0**

Membership on Editorial Boards **0**

Southwestern School of Health Professions (SSHP)
Scholarly Activity Report
Department of Clinical Nutrition 2016-2017

Research Grants and Contracts

Grant Submitted, Award Decision Pending

Title: "Lipogenesis in the Meibomian Glands and Adnexa in the Norm and Pathology".

Purpose: To determine the effect of fish oils on Meibomian gland and adnexa lipids in subjects with hypertriglyceridemia.

Funding Agency: Submitted to NEI and scored; final funding pending for November 2017.

Funding Requested: pending approval by agency after revision.

Principal Investigator: Igor Butovich, PhD

Co-Investigator: Gloria Lena Vega, PhD (5).

Title: "SPARC: Vagus Nerve Activity and Liver Metabolism"

Funding Agency: NIH RFA RM-15-018 application submitted.

Funding Requested: pending approval by agency

Purpose: The overall goal of the proposal is to determine whether manipulation of the vagus nerve (afferent vs. efferent) impacts glycemic control by directly interfering with hepatic metabolic pathways.

Principal Investigator: Elmquist, Joel DMV, PhD

Co-Investigator: Vega, Gloria Lena (30%).

Title: Individualized Nutrition of Preterm Infants to Optimize Growth and Body Composition.

Purpose: To optimize nutrition in preterm infants

Funding Agency: NIH Exploratory/Developmental Research Grant Program (Parent R21). Opportunity ID PA-16-161

Funding Dates: Pending final approval after revision.

Principal Investigator: Brion, Luc MD

Co-Investigator: Vega, Gloria Lena PhD (3%)

Title: Impact of geranylgeraniol and d-8-tocotrienol on the cognitive function and hippocampal protein biomarkers in streptozotocin-induced Alzheimer's rat models.

Purpose: These studies are designed to determine effect of geranylgeraniol and d-8-tocotrienol diet on the cognitive function in Alzheimer's disease.

Funding Agency: SHP Interdisciplinary Research Grant Program-UTSW

Funding Dates: 09/01/2017-08/31/2018

Amount Awarded: \$14,000

Principal Investigator: H. Yeganehjoo

Role: Co-Investigator: M Mizuno, 15% effort.

Grants Awarded

Title: “Effect of PCSK9-inhibitor (alirocumab) on dyslipidemia of nephrotic syndrome”.
Purpose: A primary aim of the study is to determine the effect of the drug on VLDL and IDL as PCSK9 levels are reduced. [clinicaltrials.gov \(NCT03004001\)](https://clinicaltrials.gov/ct2/show/study/NCT03004001)
Funding Agency: Regeneron Inc. and Sanofi Aventis.
Funding Requested: \$ 379K 2016-2018 initiated in Jan 2017 to be extended to 2019. The study site is Dallas VAMC.
Principal Investigator: Vega, Gloria Lena (10%)
Co-Investigators: Oo, Yin, M.D. and Concepcion, Michael, M.D.

Title: “Effects of cross-sex hormonal therapy on white adipose tissue of transgender Veterans”
Purpose: To examine effect of cross-sex hormone therapy on body composition and mRNAs of subcutaneous adipose tissue in transgender Veterans.
Funding Agency: Veterans Medical Center at Dallas
Funding Requested: \$100,000
Funding Dates: November 2017 to November 2019
Principal Investigator: Sow, Kyaw, M.D.
Co-Investigator: Vega, Gloria Lena (5%).

Title: Preventing Hypertension and Sympathetic Overactivation by Targeting Phosphate
Purpose: To determine whether excess phosphate consumption causes hypertension in human.
Funding Agency: NIH-ROI1
Funding Dates: 04/01/2017 - 03/31/2021
Amount Requested: ??
Principle Investigator: Wanpen Vongpatanasin
Co-Investigator: Lona Sandon, 5% effort

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: Nora Gimpel, 20% effort

Grants Submitted but Not Funded

Publications

Refereed journals

Matar-Boumosleh J, Grundy SM, Phan J, Neeland IJ, Chang A, **Vega GL**. Metabolic Concomitants of Polycystic Ovarian Syndrome. *Eur. J. Clinical Investigation*. **In press (2018)**.

Farrell SW, Finley CE, Barlow CE, Willis BL, DeFina LF, Haskell WL, **Vega, GL**. Moderate to High levels of Cardiorespiratory Fitness Attenuate the Effects of Triglyceride/HDL-C Ratio on Coronary Heart Disease Mortality in Men. *Mayo Clinic Proc*. **In press Dec. 2017**

Grundy SM, Williams C, **Vega GL**. Body Fat and Metabolic Syndrome. *European J. Clin. Invest.* **In press (2017)**.

Tremelling K, **Sandon L, Vega G**, McAdams C. Orthorexia and eating disorder symptoms in dietitians in the United States. *J Acad Nutr Diet*. 2017;117:1612-1617.

Gupta A, Pandey A, Ayers C, Beg MS, Lakoski SG, **Vega GL**, Grundy SM, Johnson DH, Neeland IJ. An Analysis of Individual Body Fat Depots and Risk of Developing Cancer: Insights From the Dallas Heart Study. *Mayo Clin. Proc*. 2017 Apr;92(4):536-543.

Vega GL, Grundy SM, Barlow CE, Leonard D, Willis BL, DeFina LF, Farrell SW. Association of triglyceride-to-high density lipoprotein cholesterol ratio to cardiorespiratory fitness in men. *J Clin Lipidol*. 2016 Nov - Dec; 10(6):1414-1422.

Yeganehjoo H, DeBose-Boyd R, McFarlin BK, Mo H. Synergistic impact of d- δ -tocotrienol and geranylgeraniol on the growth and HMG CoA reductase of human DU145 prostate carcinoma cells. *Nutrition and cancer*. 2017

Torabi S, **Yeganehjoo H**, Shen C, Mo H. Peroxisome proliferator-activated receptor γ downregulation mediates the inhibitory effect of d- δ -tocotrienol on the differentiation of murine 3T3-F442A preadipocytes. *Nutrition Research*. 2016

Davis KE, Li X, Adams-Huet B, **Sandon LF**. Infant feeding practices and dietary consumption of US infants and toddlers: NHANES 2003-2012. *Public Health Nutrition*. [Under review during reporting period] [Accepted for publication Sep. 2017]

Jewell M, Rodder S, **Carson JAS**. The effects of probiotic supplementation on dyslipidemia. *Pulse*, peer reviewed newsletter of the Sports, Cardiovascular, and Wellness Nutrition Dietetic Practice Group of the Academy of Nutrition and Dietetics. 2017: 36(2).

Van Horn L, **Carson JAS**, Appel LJ, Burke LE, Economos C, Karmally W, Lancaster K, Lichtenstein AH, Johnson RK, Thomas RJ, Vos M, Wylie-Rosett J, Kris-Etherton P. Recommended dietary pattern to achieve adherence to the AHA/ACC guidelines: a scientific statement from the American Heart Association. *Circulation*. 2016: .134(22):e505-e529.

Shannon L. Lennon, Diane M. DellaValle, **Susan G Rodder**, Melissa Prest, Rachel Sinley, M. Katherine Hoy, Constantina Papoutsakis, 2015 Evidence analysis Library Evidence-Based Nutrition practice Guideline for the Management of Hypertension in Adults. *J Acad Nutr Diet* 2017.

Refereed journals under review

Susan G Rodder, Tiffany B Kindratt, Venetia Orcutt, Courtney Koch, Kelley McIlvaine, Mary Alice Neville. Teaching and evaluating smartphone applications: An inter-professional curriculum expansion. *Education for Health*. Submitted November, 2016. Under Review.

Non-refereed journals

Melanie Jewell, **Susan Rodder**, Jo Ann Carson, The Effects of Probiotic Supplementation on Dyslipidemia. *SCAN's PULSE* Spring 2017, Vol.36, No.2.

Book Chapters

Sandon L. Computerized food and nutrition analysis systems. *In Munoz N., Ed. Nutrition Assessment: Clinical and Research Applications*. [In editing]

Books

Other

A. Published scientific review

B. Abstracts (Platform or Poster Presentations)

Yeganehjoo H, DeBose-Boyd R, McFarlin BK, Mo H. *Synergistic Impact of d- δ -Tocotrienol and Geranylgeraniol on the Growth and HMG CoA Reductase of Human DU145 Prostate Carcinoma Cells*. Experimental Biology meeting. 2016

Sandon L, 10-Week worksite weight loss program increases self-efficacy and self-regulation for weight management behaviors. *J Acad Nutr Diet*. 2016;116(9 Suppl):A9. Poster presentation at the Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, Oct. 16, 2016, Boston, MA.

Yan S, **Carson JAS**, Pappas A, Vafiadis D. Evaluating healthy vending at the American Heart Association National Center: a pilot study. *J Acad Nutr Diet*. 2017;117(9):A55. (Abstract)

Susan G Rodder, Tiffany B Kindratt, Venetia Orcutt, Courtney Koch, Kelley McIlvaine, Mary Alice Neville. Teaching and evaluating smartphone applications: An inter-professional curriculum expansion. Abstract of Distinction Oral Presentation and Poster Session. *Innovations in Health Science Education Annual Conference*, February, 2017.

Gilmore A, Bispeck K, Pahwa N, Gerges A, Hogan J, Byrd C, Hedberg A. A collaborative program to develop a standardized malnutrition documentation and communication process utilizing the consensus statement guidelines for malnutrition assessment in an oncology setting. Poster session presented at: The Malnutrition Symposium at the University of Texas MD Anderson Cancer Center; 2016 September 29; Houston, TX.

Gilmore A, Hedberg A, Deas H, Ruzensky D, Hogan J, Miller J. Development of a standardized malnutrition assessment program at a comprehensive cancer center using the consensus statement guidelines. Poster session presented at: The Malnutrition Symposium at the University of Texas MD Anderson Cancer Center; 2016 September 29; Houston, TX.

C. Editorials, position papers, background papers

D. Original invited lectures and presentations published for distribution

Presentations

Sandon L. Building an A Team: Collaborative, Creative, Critical Thinkers with Team Based Learning. Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo. Nutrition Educators of Health Professionals priority session presenter. Boston, MA. Oct. 17, 2016. Accepted Platform Presentation.

Carson JAS. Are Healthier Dietary Practices in Reach. American Heart Association Healthier Food Leadership Summit. Washington, DC. May 2017. National Invited Platform Presentation.

Rodder, SG. Dietary Recommendations for Heart Healthy Eating. College of Education at the University of Arlington on February 12th, 2016.

Campbell T. Nutrition in MS: An Important Talk on Diet and MS, University of California San Diego Multiple Sclerosis Expo, Temecula, CA. March, 2017. Accepted Platform Presentation.

Day, L. NFPE: Identifying Micronutrient Deficiencies. Nutrition Focused Physical Assessment: A Hands-on Workshop. Texas Academy of Nutrition and Dietetics 2017 Annual Conference, Georgetown, TX. March 30, 2017. Invited Platform Presentation.

Membership on Editorial Boards

Vega G. 2013 – 2021. [Journal of Clinical Lipidology](#).

Vega G. 2010 – present. [Metabolic Syndrome and Related Disorders](#).

Vega G. 2010 – present. [Nutrients](#).

Vega G. 2010 – present. [Cholesterol](#).

Department of Clinical Rehabilitation Counseling 2016-2017

Research Grants and Contracts

Grants Submitted, Award Decision Pending

Title: Effectiveness of a short education series to reduce anxiety for health professions graduate students

Purpose: To determine if a short education series can reduce anxiety and increase health behaviors in first-year graduate students

Funding Agency: Southwestern School of Health Professions Interdisciplinary Grant Program

Funding Dates: 09/1/2017-8/31/2018

Amount Requested: \$3750.00

Principal Investigator: Karen Brewer-Mixon, Ph.D., 50% effort

Note: Received notification that a \$3000 grant was awarded on 9/28/17.

Grants Awarded

Grants Submitted but Not Funded

Title: Orix Foundation Community Innovation Project

Purpose: To permit Crossroads Community Services (CCS) to collaborate with the UTSW Department of Rehabilitation Counseling to adapt its vocational skills training program, Personal and Social Adjustment Training (PSAT) for use with financially at-risk parents and adolescents currently receiving services through Café Momentum, Shared Housing Center, Inc., and the Stewpot's Venturing Crew.

Funding Agency: Orix Foundation

Funding Dates: 10/2016-10/2019

Amount Requested: \$94,000.00

Principal Investigator: Robert Drake, M.S., CRC, LPC-S (40% effort)

Presentations

Brewer-Mixon, K. Personality Development & Theory. UTSW PGY-4 Lecture Series. November 15, 2016; local presentation.

Brewer-Mixon, K. Working with Cognitively Impaired Patients. UTSW Clinical Psychology Continuing Education program. September 16, 2016; local presentation.

Drake, R. Behavior Modification and Patient Communication. HCS 5106 Ideal Professional Development program; March 1, 2017; local presentation

Membership on Editorial Boards

Brewer-Mixon, K. 2015-present; *Applied Neuropsychology* (reviewer)

Department of Health Care Sciences 2016-2017

Research Grants and Contracts

Grant Submitted, Award Decision Pending

Title: Impact of geranylgeraniol and d-8-tocotrienol on the cognitive function and hippocampal protein biomarkers in streptozotocin-induced Alzheimer's rat models.

Purpose: These studies are designed to determine effect of geranylgeraniol and d-8-tocotrienol diet on the cognitive function in Alzheimer's disease.

Funding Agency: SHP Interdisciplinary Research Grant Program-UTSW

Funding Dates: 09/01/2017-08/31/2018

Amount Awarded: \$20,000

Principal Investigator: H. Yeganehjoo

Role: Co-Investigator: M Mizuno, 15% effort.

Title: Insulin Resistance Augments Exercise Pressor Reflex Function in Diabetes

Purpose: These studies are designed to determine the contributions of hyperinsulinemia to the development of exercise pressor reflex dysfunction in diabetes.

Funding Agency: Grants for scientific research-Meiji Yasuda Life Foundation of Health and Welfare

Funding Dates: 04/01/2018-03/31/2019

Amount Awarded: \$10,000

Principal Investigator: Norio Hotta

Role: Collaborator: M. Mizuno, 5% effort.

Title: Validation of a Novel Animal Model for Predicting Therapeutic Utility of Interventions for Autonomic Dysreflexia Following Spinal Cord Injury

Purpose: The intent of the research is to develop and validate a spinal cord injury model that will allow interrogation of sympathetic and hemodynamic responses to physiological perturbation to determine whether they contribute to the generation of hypertensive crisis after injury.

Funding Agency: National Institutes of Health, National Institute of Neurological Disorders and Stroke, Innovation Grants to Nurture Initial Translational Efforts (R21/R33)

Funding Dates: 2018-2021

Amount Awarded: \$275,000 (submitted June 2017; awaiting review)

Principal Investigator: Zeljka Minic, PhD

Role: Co-Investigator: S. Smith, 10% 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: 01/01/2018 – 12/31/2018

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

Principal Investigator: Jon Williamson, In-kind

Title: HIV Molecular Surveillance

Purpose: Conduct HIV/STD testing among CDC-HIV cluster identified Hispanic/Latino MSM and people in their network. Educate providers on the importance of PrEP and molecular genotype testing of HIV test samples

Funding Agency: Department of State Health Services

Funding Dates: 01/01/2018 – 12/31/2018

Amount Requested: \$856,694 Status: pending DSHS contract

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: 07/01/2017 – 05/31/2018

Amount Requested: \$234,349 Status: pending DSHS contract

Principal Investigator: Jon Williamson, In-kind

Title: National HIV Behavioral Surveillance

Purpose: Public health surveillance activity that helps to measure risks associated with HIV infection in populations at increased risk for infection. HIV testing is included and linkage to care is provided for newly diagnosed individuals.

Funding Agency: Department of State Health Services

Funding Dates: 01/01/2018 – 12/31/2018

Amount Requested: Amount unknown for 2018 Status: pending DSHS contract

Principal Investigator: Jon Williamson, In-kind

Grants Awarded

Title: Preventing Hypertension and Sympathetic Overactivation by Targeting Phosphate

Purpose: These studies are designed to determine the contributions of phosphate in the development of hypertension and sympathetic overactivation.

Funding Agency: NIH

Funding Dates: 04/01/2017-03/31/2021

Amount Awarded: \$792,454

Principal Investigator: W. Vongpatanasin

Role: Collaborator: M. Mizuno, 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

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, Basic Research Grant

Funding Dates: 2017-2021

Amount Awarded: \$1,960,000

Principal Investigator: Wanpen Vongpatanasin

Role: Co-Principal Investigator, **S. A. Smith**, 15% 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: 01/01/2017 – 12/31/2017

Amount Requested: \$766,662 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: 01/01/2017 – 12/31/2017

Amount Requested: \$538,617 Status: awarded

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

Title: National HIV Behavioral Surveillance

Purpose: Public health surveillance activity that helps to measure risks associated with HIV infection in populations at increased risk for infection. HIV testing is included and linkage to care is provided for newly diagnosed individuals.

Funding Agency: Department of State Health Services

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

Amount Requested: \$400,824 Status: awarded

Principal Investigator: Jon Williamson, In-kind

Title: Hepatitis C Surveillance

Purpose: Develop and examine Hepatitis C Surveillance in Texas and partner with the state's prevention programs to link infected people to testing, care, and other services. Develop transition plan and establish a transition date for moving Hepatitis C surveillance to the TB/HIV/DTD and Viral Hepatitis Unit. Facilitate the transitioning of surveillance and reporting.

Funding Agency: Department of State Health Services

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

Amount Requested: \$402,824 Status: awarded

Principal Investigator: Jon Williamson, In-kind

Title: HIV Incidence Surveillance

Purpose:

Funding Agency: Texas Department of State Health Services

Funding Dates: September 1, 2016 – December 31, 2017

Amount Awarded: \$68,336

Principal Investigator: J.W. Williamson, % effort.

Title: HIV Incidence Surveillance

Purpose:

Funding Agency: Texas Department of State Health Services

Funding Dates: September 1, 2016 – December 31, 2017

Amount Awarded: \$449,948

Principal Investigator: J.W. Williamson, % effort.

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: Awarded.

Co-Principal Investigator: P.J. Longo, 10% effort.

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: 07/1/16-06/2018

Amount Awarded: \$2,675.

Co-Principal Investigator: P. J. Longo, 10% effort.

Grants Submitted but Not Funded

Title: Community Approaches to Reducing Sexually Transmitted Diseases

Purpose: Work with community advisors to assess and develop strategies to increase access to care to reduce STD infections among men of color in Dallas.

Funding Agency: HRSA

Funding Dates: 05/01/2017 – 04/30/2018

Amount Requested Year 1: \$312,144 Status: Submitted but not funded

Principal Investigator: Jon Williamson, In-kind

Publications

Refereed journals

Downey RM, **Mizuno M**, Mitchell JH, Vongpatanasin W, **Smith SA**. Mineralocorticoid receptor antagonists attenuate exaggerated exercise pressor reflex responses in hypertensive rats. *Am J Physiol Heart Circ Physiol*. 2017 Jul 21:ajpheart.00155.2017. doi: 10.1152/ajpheart.00155.2017.

Mizuno M., Mitchell JH and **Smith SA**. The exercise pressor reflex in hypertension. *Journal of Physical Fitness and Sports Medicine*, 5(5): 339-347, 2016.

Mueller PJ, Clifford PS, Crandall CG, **Smith SA**, and Fadel PJ. Central/peripheral circulatory integration during exercise. *Comprehensive Physiology*, 2017 (in press).

Leal AK, Cherry BH, Murphy MN, Squiers JJ, Downey RM, **Mizuno M**, **Smith SA**. Activation of the skeletal muscle mechanoreflex increases nitric oxide production in the rat brainstem: Direct evidence using a novel technique for the imaging and measurement of the *in vivo* production of nitric oxide. *Journal of Physiology*, (in preparation).

Williamson JW. Will the Pokemon be heroes in the battle against physical inactivity? *J. Sports and Exerc. Med.* 2(1):13-14, 2016. (*invited commentary*)

Deschenes B, **Williamson JW**. Awareness of Physical Activity Health Benefits Can Influence Participation and Dose. *Sports Med. and Rehab. J.* 1(1): 1-7, 2016.

Allen DR, **Huang M**, Parupia IM, Dubelko AR, Frohman EM, Davis SL. Impaired sweating responses to a passive whole-body heat stress in individuals with multiple sclerosis. *J Neurophysiol*. 2017 Jul 1;118(1):7-14.

Huang M. APSselect article (selected as part of a collection of the best original research papers published by the American Physiological Society). May 2017

Poh PYS, Adams AN, **Huang M**, Allen DR, Davis SL, Tseng AS, Crandall CG. Increase postural sway in persons with multiple sclerosis during short-term exposure to warm ambient temperatures. *Gait and Posture*. 2017 Feb 8;53:230-235.

Refereed journals under review

Gavinski K, Covin Y, **Longo P**. Learning how to build Illness Scripts. *Academic Medicine*. Submitted, June 2017. Under revision.

Longo PJ, Orcutt VL, James K, Kane J, Coleman V. A Concurrent Validity Pilot Study Investigating Knowledge Network Organization in Clinical Reasoning. *Journal of Physician Assistant Education*. Submitted August, 2017. Under review.

Non-refereed Journals

Krumwiede K. Using Situated Learning, Community of Practice, and Guided Online Discourse in Healthcare Education for Learning Effective Interprofessional Communication, dissertation, December 2016; Denton, Texas., University of North Texas Libraries, Digital Library, digital.library.unt.edu/ark:/67531/metadc955043/

Navarro K. Prove It: Prehospital ultrasound improves diagnosis, treatment and transport decisions. Available at <https://www.ems1.com/ems-products/technology/articles/275392048-Prove-It-Prehospital-ultrasound-improves-diagnosis-treatment-and-transport-decisions/>. June 2017.

Navarro K. Prove It: Dual defibrillation of refractory ventricular fibrillation. Available at <https://www.ems1.com/ems-products/cpr-resuscitation/articles/245294048-Prove-It-Dual-defibrillation-of-refractory-ventricular-fibrillation/>. May 2017.

Navarro K. Prove It: Mobile stroke care improves patient outcome. Available at <https://www.ems1.com/mobile-stroke-unit/articles/204219048-Prove-It-Mobile-stroke-care-improves-patient-outcome/>. March 2017.

Navarro K. Prove It: Epinephrine may have a role during resuscitation from cardiac arrest. Available at <https://www.ems1.com/epinephrine/articles/159258048-Prove-It-Epinephrine-may-have-a-role-during-resuscitation-from-cardiac-arrest/>. January 2017.

Navarro K. Prove It: Administering dextrose during cardiac arrest improves outcomes. Available at <https://www.ems1.com/cardiac-care/articles/137587048-Prove-It-Administering-dextrose-during-cardiac-arrest-improves-outcomes/>. October 2016.

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

Rideaux K, Washington C, Leaver D. Gynecologic Cancers. In: Principles and Practice in Radiation Therapy, 4th. Mosby Elsevier: United States. 2017. In Press.

Scotch R, **McConnel CE.** Disability and the Future of Work.: A Speculative Essay. Book Series: Research in Social Science and Disability. In *Factors in Studying Employment for Persons with Disabilities*, Volume 10, 249-266, Emerald Publishing Limited. 2017.

Nieswiadomy R, Nieswiadomy ML, **McConnel CE.** Chapter 19, Health Economics for Nurses, in Foundations in Nursing Research (7thEdition) by Rose Nieswiadomy, Pearson: Prestice Hall, 2016. In Press.

Books

Hoggatt Krumwiede K., co-illustrator. Hoffman B, et al. Williams Gynecology, Third Edition, McGraw-Hill Companies, Incorporated, 2016.

Navarro K. *Paramedic textbook* (working title). Philadelphia, PA: F. A. Davis. Manuscript in preparation; 2017.

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.* Vol.5, No.5: 339-347, 2016.

B. Abstracts (Platform or Poster Presentations)

Mizuno M, Mitchell JH, **Smith SA.** Exaggerated cardiovascular Response to Muscle Mechanoreflex Activation in Type 2 Diabetic Rats. *Medicine and Science in sports Exercise.* Vol. 49, No. 5: 66-67, 2017.

Mizuno M, Mitchell JH, Smith SA. Exaggerated sympathetic and pressor responses to exercise pressor reflex activation are attenuated by intracerebroventricular insulin administration in type 2 diabetic rats. *FASEB Journal Vol. 31, No. 1, 712.3, 2017.*

Covin Y, **Longo PJ**. Validating a Clinical Reasoning Assessment Strategy to Identify Actionable Feedback for Struggling Medical Students. 2017 Society for General Internal Medicine Annual Meeting, April 20th, 2017. Washington, DC. National (Poster presentation)

Orcutt VO, **Longo PJ**. Deconstruction of Clinical Reasoning into Three Competency Components: A Pilot Investigating Methodology. 7th Annual SWAT Educational Symposium, University of Texas Southwestern Medical Center, April 6, 2017. Dallas, Texas (Poster presentation)

C. Editorials, position papers, background papers

D. Original invited lectures and presentations published for distribution

Presentations

Mizuno M, Mitchell JH, Smith SA. Exaggerated Cardiovascular Response to Muscle Mechanoreflex Activation in Type 2 Diabetic Rats. *6th Annual Congress of the American College of Sports Medicine*, Denver, USA, May-June 2017

Mizuno M, Mitchell JH, Smith SA. Exaggerated sympathetic and pressor responses to exercise pressor reflex activation are attenuated by intracerebroventricular insulin administration in type 2 diabetic rats. *Experimental Biology 2017*, Chicago, USA, April 2017.

Smith S, UT Southwestern Medical Center, School of Health Professions, Capra Interdisciplinary Healthcare Symposium; Dallas, TX – “Preventing High Blood Pressure by Targeting Dietary Phosphate: A Collaborative Team Approach”, 2017

Smith S, University of Texas at Arlington, Clinical Translational Research Forum, Arlington, TX – “Sympathetic Dysfunction during Exercise in Hypertension: Evidence from Multiple Rodent Models”, 2017

Smith S, Visiting Professor, Danish Cardiovascular Research Academy; Copenhagen, Denmark-“Animal Models for the Study of Autonomic Cardiovascular Control”, 2017

Smith S, International Union of Physiological Sciences, 38th World Congress, Rio de Janeiro, Brazil – “Exercise Pressor Reflex Dysfunction in Hypertension”, 2017

Williamson J, Role of Central Command in the Neural Control of the Circulation. *Invited presenter*, Danish Cardiovascular Research Academy, Copenhagen, Denmark, May, 2017.

Williamson J, Planning for the Future. *Invited presenter*, Faculty Assembly, School of Health Professions, Dallas, TX, Nov, 2016.

Orcutt VO, **Longo PJ**. A New Collaboration Model to Study Clinical Reasoning. SSHP Capra Interdisciplinary Healthcare Symposium: Collaborate-Transforming Medical Education and Patient Care through Inter-Professional Research, February 15, 2017. Dallas, Texas

Huang M, Allen DR, Parupia IM, Frohman EM, Davis SL. Preserved tolerance to lower-body negative pressure during heat stress in individuals with multiple sclerosis. *Experimental Biology 2017*, Chicago, IL USA. (Published Abstract)

Pizzey FK, Parupia IM, Allen DR, **Huang M**, Luetkemeier MJ, Davis SL. Attenuated sweating responses in tattooed skin during a passive whole-body heat stress. *Experimental Biology 2017*, Chicago, IL USA. (Published Abstract)

Allen DR, **Huang M**, Frohman EM, Purkayastha S, Brothers RM, Davis SL. Multiple sclerosis alters cerebral autoregulation during passive heat stress. *Experimental Biology 2017*, Chicago, IL USA. (Published Abstract)

Ferraro MS, **Huang M**, Frantz J, Sabo T, Bell K, Purkayastha S. Improvement in Heart Rate Variability during Mild Cognitive Task Following Concussion. *Texas American College of Sport Medicine 2017*, Waco, TX, USA. (Published Abstract).

Huang M, Allen DR, Frohman EM, Davis SL. Decreases in core temperature and sweating onset during whole-body heating in individuals with multiple sclerosis following administration of 4-aminopyridine. *Experimental Biology 2016*, San Diego, CA, USA. (Published Abstract)

Allen DR, **Huang M**, Frohman EM, Davis SL. Blunted arterial blood pressure responses to whole-body cooling in individuals with multiple sclerosis. *Experimental Biology 2016*, San Diego, CA, USA. (Published Abstract)

Poh PYS, Adams A, **Huang M**, Allen D, Davis SL, Crandall CG. Postural sway in persons with multiple sclerosis during passive heat exposure. *ACSM Annual Meeting 2016*, Boston, MA, USA. (Published Abstract)

Hoggatt Krumwiede K. A Model of Educational Technology in the Future of Interprofessional Education (IPE). The Association of Schools of Allied Health Professions (ASAHP) 2017 Annual Conference: ASAHP at 50: Reflections on the Past. Window to the Future of Healthcare, October 2017. San Antonio, Texas.

Simpkins S, **Hoggatt Krumwiede K**. Effective Interprofessional Communication in an Electronic Health Record. Assurance and Improvement in Collaborative Practice: An Interprofessional Symposium for Students, Faculty, Preceptors, and Alumni, UT Southwestern Medical Center, April 2017. Dallas, Texas.

Hoggatt Krumwiede K. An Innovative Model Incorporating Educational Technology in Interprofessional Education (IPE). The Association of Educational Communication and Technology 2016 AECT International Convention: Learning from Las Vegas, October 2016. Las Vegas, Nevada.

Navarro K. CPR in Schools: What Does the Evidence Show?, Educational Methodology for CPR Instruction: Learning and Teaching Styles, Evolution and Revolution in Resuscitation Training, The Science of a Team-based Approach to Resuscitation. Emergency Cardiovascular Care Update. New Orleans, LA: December, 2017.

Navarro K. CPR-induced Consciousness: Don't Go Into the Light, Five Studies from 2016 That Could Change Your Future Practice. Texas EMS Conference. Fort Worth, TX: November, 2017.

Navarro K. Double-sequential Defibrillation: Are Two Better Than One?, Fluid Resuscitation Without An IV: EMTs Treating Shock, Medical/Legal Case Studies for EMS. Virginia EMS Symposium. Norfolk, VA: November, 2017.

Navarro K. CPR-induced Consciousness: Don't Go Into the Light., Five Studies from 2016 That Could Change Your Future Practice, Using Cognitive Models to Develop High-quality Multiple-choice Questions. St. Elizabeth Healthcare EMS Fall Conference. Edgewood, KY: November, 2017.

Navarro K. High-performance Team Training. AHA Regional Emergency Cardiovascular Care Conference. Stamford, CT: November, 2017.

Navarro K. High-performance Team Training AHA Regional Emergency Cardiovascular Care Conference. San Francisco, CA: October, 2017.

Navarro K. Using Cognitive Models to Develop High-quality Multiple-choice Questions. National Association of EMS Educators. Washington, DC: August, 2017.

Navarro K. High-performance Team Training. AHA Regional Emergency Cardiovascular Care Conference. Minneapolis/St. Paul, MN: June, 2017.

Navarro K. High-performance Team Training. AHA Regional Emergency Cardiovascular Care Conference. Charlotte, NC: May, 2017.

Navarro K. Using Cognitive Models to Develop High-quality Multiple-choice Questions. Texas EMS Educator's Summit. Galveston, TX: April, 2017.

Navarro K. High-performance Team Training. AHA Regional Emergency Cardiovascular Care Conference. Phoenix, AZ: April, 2017.

Navarro K. High-performance Team Training. AHA Regional Emergency Cardiovascular Care Conference. Indianapolis, IN: March, 2017.

Navarro K. Five Studies from 2016 That Could Change Your Future Practice, Time is Brain: The Science of Prehospital Stroke Care. National Collegiate EMS Foundation Conference. Baltimore, MD: February, 2017.

Navarro K. Pit Crew Approach to Cardiac Arrest Management. (preconference workshop), Twenty-First Century CPR: Rise of the Machines. Texas EMS Conference. Dallas, TX: November, 2016.

Navarro K. Constructing the Multiple Choice Exam, Therapeutic Hypothermia: Should EMS Just Chill Out?". St. Elizabeth Healthcare EMS Fall Conference. Edgewood, KY: October, 2016.

McConnel M. The Allocation of Physician Services-Balancing Physician Supply and Patient Demand. Introduction to Health Economics for Medical Students. U. T. Southwestern April 17, 2017. (invited)

Scotch R, **McConnel M.** Disability and the Future of Work. The Western Social Science Association academic meeting, Apr 12-15, 2017 San Francisco, California.

Membership on Editorial Boards

Mizuno M. 2016-present. *BMC Cardiovascular Disorders*

Mizuno M. 2011-present. *Frontiers in Physiology*

Smith S. 2017-present. *Experimental Physiology*

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

Williamson J. 2016-present. *Sports Medicine and Rehabilitation Journal*

Williamson J. 2014-2017. *Sports and Exercise Medicine*

Department of Physical Therapy 2016-2017

Research Grants and Contracts

Grant Submitted, Award Decision Pending

Grants Awarded

Title: Predictive Validity of Lumbopelvic Stress Tests to Determine Those Who Will Benefit from Lumbar Traction: A Pilot Study

Purpose: To identify a subset of patients who may benefit from lumbar traction

Funding Agency: Texas Woman's University Research Enhancement Program

Funding Dates: 11/1/16-11/1/18

Amount Awarded: \$10,000

Co-Investigator: J. Zafereo, 5% effort

Title: Investigating Bone and Skeletal Muscle Interaction in Men with Prostate Cancer Treated with Androgen Deprivation Therapy

Purpose: To identify the effects of androgen deprivation on muscle strength, bone quality, and pain perception

Funding Agency: Charles Y.C. Pak Foundation

Funding Dates: 1/1/17-7/1/18

Amount Awarded: \$100,000

Co-Investigator: J. Zafereo, 5% effort

Consultant: R. Querry, 5% effort

Title: A Prospective, Randomized, Double-Blind, Sham-Controlled Study of the Low-Level Phoenix Thera-Lase 42 Watt Laser in Patients with Fibromyalgia

Purpose: To compare active to sham laser therapy in patients with fibromyalgia

Funding Agency: Phoenix Thera-Lase, LLC

Funding Dates: 09/01/16-12/31/17.

Amount Awarded: \$25,000

Principal Investigator: J. Zafereo, 10% effort

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

Funding Agency: National Center for Advancing Translational Sciences (NCATS) of the National Institutes of Health (NIH), CTSA grant number UL1TR001105

Funding Dates: 11/10/2016-2/10/2017

Amount Awarded: 5 hours of biostatistical consultation awarded

Principal Investigator: J. DeVahl

Co-investigators: P. Blau, E. Mulligan, S. Simpkins

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-arthritic hip pain

Funding Agency: Texas Physical Therapy Foundation Grant

Funding Dates: 10/01/16-20/01/17

Amount requested: \$3,300

Principal Investigator: E. Mulligan, 4% effort

Title: The Effectiveness of Self-Administered Thoracic Spine and Rib Mobilization for Improving Sleep Quality in Patients Who Have Shoulder Pain

Purpose: To determine if mobilization of the thoracic spine provides a cost-effective treatment approach to improve sleep quality in patients who present with shoulder pain.

Funding Agency: The National Center for Advancing Translational Sciences of the National Institutes of Health under the UTSW Center for Translational Medicine's award number UL1TR001105

Funding Dates: 01/01/2017-04/01/2017.

Amount Awarded: \$4,521.00

Principal Investigator: T. Dickson, 65% 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: 2/15/16-2/15/18

Amount Awarded: \$50,000.00

Principle Investigator: S. Simpkins 10% effort

Title: Impact of carbon fiber AFOs on gait and resulting changes in quality of life across time in persons with Parkinson's disease

Purpose: To evaluate the impact of bracing design on gait and quality of life in persons with Parkinson's disease

Funding Agency: American Orthotic and Prosthetic Association

Funding Dates: July, 2016 through August, 2018

Amount Awarded: \$15,000

Principle Investigator: Staci Shearin, PT, NCS, effort 10%

Co-Investigator: Karen McCain, PT, DPT, NCS, 5% effort

Title: Motor Adaptation of Unanticipated Locomotor Transitions in Individuals with Parkinson's Disease

Purpose: To identify motor learning processes involved in the locomotor transitions of individuals with and without Parkinson's disease

Funding Agency: UTSW Mobility Foundation

Funding Dates: May, 2017 through June, 2018

Amount Awarded: \$95,551

Co- Investigator: Staci Shearin, PT, NCS, effort 10%

Title: Community Boxing Program for Individuals with Parkinson's Disease

Purpose: To evaluate the impact of a boxing program on gait, upper extremity function, posture, and quality of life in persons with Parkinson's disease

Funding Agency: National Parkinson Foundation

Funding Dates: July, 2017 through August, 2018

Amount Awarded: \$12,500

Principle Investigator: Staci Shearin, PT, NCS, effort 5%

Title: Acute Hospital Treadmill Exercise Training in Adults with Cystic Fibrosis Exacerbation

Purpose: To identify the effects of treadmill training on patients admitted to the hospital with Cystic Fibrosis on pulmonary function at discharge and occurrence rates for readmission

Funding Agency: Internal funding Department of Physical Therapy, Clements University Hospital

Funding Dates: 9/2016-8/18

Amount Awarded: Internally funded, no direct funding

Co-Investigator: R. Querry, 3% time and effort donated

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: 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, 3% effort.

Co-Investigator: R. Querry, 3% effort

Title: Concurrent Validity of the APDM Opal and the Zeno Instrumented Gait Mat for the Analysis of Temporal and Spatial Gait Parameters in Individuals with Parkinson's disease. In association with the Parkinson Disease Biomarker Program (PDBP)

Purpose: Project focus is validation analysis of wearable sensor technology (APDM®) for accuracy of temporal and spatial gait parameters when concurrently measured with an instrumented gait mat (Zeno®) in individuals who have pathological gait impairments associated with Parkinson's Disease.

Funding Agency: Internal Department Project

Funding Dates: 8/2015-12/2016.

Amount Awarded: No direct funding

Principal Investigator: R. Query, 3% effort.

Grants Submitted but Not Funded

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: L 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: Clinician Implementation of Evidence-Based Cardiovascular Exercise Recommendations for Patients Post-Stroke on an Inpatient Rehabilitation Unit: A Knowledge Translation Project

Purpose: To respond to the gap in physical therapy practice between recommended and currently prescribed levels of cardiovascular exercise for patients post-stroke in the inpatient rehabilitation environment via the development of a clinician-focused knowledge translation process based on the Knowledge to Action Cycle.

Funding Agency: American Physical Therapy Association Neurology Section

Funding Dates: 10/01/17-10/01/18

Amount Requested: \$20,000 Status: submitted, not funded

Principal Investigator: E. Perez, 10% effort

Title: Physical telerehabilitation of people with multiple sclerosis

Purpose: To determine the effectiveness of telerehabilitation compared to in-clinic care of persons with multiple sclerosis

Funding Agency: PCORI

Funding Dates: 2017-2021

Amount requested: \$456,818

Site Principle Investigator/Clinic site: Karen McCain, PT, DPT, NCS/UTSW to be clinic site for multi-site grant, 10% effort

Title: Impact of brace selection on gait parameters and quality of life in persons with peripheral neuropathy

Purpose: To evaluate the impact of bracing design on gait and quality of life in persons with peripheral neuropathy

Funding Agency: American Orthotic and Prosthetic Association

Funding Dates: 2017-2018

Amount requested: \$15,000

Principle Investigator: Karen McCain, PT, DPT, NCS, 10% effort

Title: Clinical Investigation of Temporal Gait Parameters and Readiness to Return to Activity Post-mild Traumatic Brain Injury (mTBI)

Purpose: To investigate changes in gait parameters in a post-concussive population serially with the goal of using gait as a measure of return to activity readiness

Funding Agency: Texas Institute for Brain Injury and Repair (TIBER) Pilot Grant Program

Funding Dates: 3/2017 – 3/2018

Amount Requested: \$110,740 Status: Submitted but not funded

Co-Principal Investigator: E. Middleton, 8% Effort

Title: The impact of exercise intensity on brain derived neurotrophic factor in Parkinson's disease: From the bench to the clinic

Purpose: To evaluate the impact of exercise intensity on BDNF, gait, and quality of life in persons with Parkinson's disease

Funding Agency: CTM Pilot Application

Funding Dates: May 2017 through May, 2018

Amount Requested: \$49,880

Co-Investigator: Staci Shearin, PT, NCS

Title: The impact of exercise intensity on brain derived neurotrophic factor in Parkinson's disease

Purpose: To evaluate the impact of exercise intensity on BDNF, gait, and quality of life in persons with Parkinson's disease

Funding Agency: UTSW Mobility Foundation

Funding Dates: May 2017 through May, 2018

Amount Requested: \$99,955.00

Co-Investigator: Staci Shearin, PT, NCS

Title: Developing a Virtual Clinical Assistant that Provides Targeted Real-Time Feedback on Dynamical Balance of Human Locomotion

Purpose: To evaluate the impact of virtual balance training on balance parameters for individuals post stroke

Funding Agency: CTM Shark Tank

Funding Dates: 2017-2018

Amount Requested: \$29,660.00

Co-Investigator: Staci Shearin, PT, NCS

Title: Focused outpatient community users success with walking – the FOCUS study

Purpose: To evaluate the effectiveness of two different outpatient gait training protocols on gait outcomes in persons with stroke

Funding Agency: Mobility Foundation Center for Rehabilitation Research at UTSW

Funding Dates: 2017-2018

Amount requested: \$98,120

Principle Investigator: Staci Shearin, PT, NCS

Principle Investigator: Karen McCain, PT, DPT, NCS, 10% effort

Publications

Refereed journals

McDonald C, Cambell C, Torricelli RE, Vita G, Flanigan K, Goemans N, Hydemann P, Kaminska A, Kirschner J, Muntoni F, Nascimento A, Schara U, Sejersen T, Shieh P, Sweeney HL, Topaloglu H, Tulinius M, Vilchez JJ, Voit T, Wong B, Elfring G, Kroger H, Luo X, McIntosh J, Ong T, Riebling P, Souza M, Spiegel RJ, Peltz SW, Mercuri E, Alfano L, Eagle M, James MK, Lowes LP, Mayhew A, Mazzone ES, **Nelson LL**, Rose KJ, Abdel-Hamid HZ, Apkon S, Barohn RJ, Bertini E, Bloetzer C, et al. Ataluren in patients with nonsense mutation Duchenne muscular dystrophy (ACT DMD): a multicentre, randomised, double-blind, placebo-controlled, phase 3 trial. *The Lancet*. In press.

Nichols C, Jain MJ, Meilleur KG, Wu T, Collins J, Waite MR, Dastqir J, Salman A, Donkervoort S, Duong T, Keller K, Leach ME, Lott DJ, McGuire MN, **Nelson L**, Rutkowski A, Vuillerot C, Bonnemann CG, Lehky TJ. Electrical impedance myography (EIM) in individuals with COL6 and LAMA2 congenital muscular dystrophy: a cross-sectional and two-year analysis. *Muscle & Nerve*. In press.

Deschenes B, Zafereo, J. Immediate and Lasting Effects of a Thoracic Spine Manipulation in a Patient with Compressive Cervical Radiculopathy and Upper Extremity Hypersensitivity: A Case Report. *Physiotherapy Theory and Practice*. 2017, 33 (1): 82-88

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*. 2017, 25(1):22-29.

Deschenes B, Williamson J. Awareness of Physical Activity Health Related Benefits: Physical Activity Participation and Dose. *Sports Med Rehabil J.* 2016; 1:1-7.

Mulligan EP, Anderson A, Watson S, Dimeff RJ. The diagnostic accuracy of the lever sign test for detecting anterior cruciate ligament injury. *Int J Sports Phys Ther.* Accepted for publication August 2017

Reyes BA, Hull BR, Kurth AB, Kuskowski N, **Mulligan EP**, Khazzam M. Do MRI Characteristics of Full-thickness Rotator Cuff Tears Correlate with Sleep Disturbance? *Ortho J Sports Med.* Accepted for publication July 2017. OJSM/2017/024075

Khazzam M, **Mulligan EP**, Brunette M, Shirley Z. Sleep Quality in Patients with Rotator Cuff Disease. *J Amer Acad Ortho Surg.* 2017. Accepted for publication on 4/19/17

Mulligan EP, DeVahl J. Sports physical therapy curricula in physical therapist professional degree programs. *Int J Sports Phys Ther.* 2017: October 12(5): 787-797.

Khazzam M, Reyes B, **Mulligan EP.** Sleep disturbance does not correlate with rotator cuff severity. *J Shoulder Elbow Surg.* E170. 2017

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.* 2017 (41) 173–181.

McCain KJ, Shearin SM. Case Narrative: 47-Year-Old Woman with Stroke. *Pediatric Physical Therapy.* 2017. In press.

Refereed journals under review

White, P, **Zafereo, J**, Elvir, L, Hernandez, H. Treatment of drug-resistant fibromyalgia symptoms using high-intensity laser therapy: a case-based review. *Rheumatology International.* Submitted August 2017. Under Review.

Wang-Price, S, **Zafereo, J**, Brizzolara, K, Anderson, E. Effects of tactile feedback on lumbar multifidus muscle activity in asymptomatic healthy adults and patients with low back pain. *Journal of Bodywork & Movement Therapies.* Submitted August 2017. Under Review.

Nasr, A, **Zafereo, J.** The effects of dry needling and slump tensioners on idiopathic neuropathy: a case report. *Journal of Bodywork & Movement Therapies.* Submitted August 2017. Under Review.

Dickson, T., and Taylor, B. Predictive ability of institutional factors on entry-level DPT program proliferation. *Physical Therapy.* Submitted August 2017. Under Review.

McCain KJ, Shearin SM. The Impact of Modified Standardized Task-Specific Training (MSTT) on Gait Outcomes in Persons with Subacute Stroke: A Case Report. *Cogent Medicine.* Under review.

Querry, R.G., Dewey, R., Khemani, P. Concurrent Validity of the APDM Opal and the Zeno Instrumented Gait Mat for the Analysis of Temporal and Spatial Gait Parameters in Individuals with Parkinson's disease. *Gait and Posture*. Submitted August 2017. Under Review

Non-refereed journals

Book Chapters

Iannaccone ST, **Nelson LL**. (2016). Spinal Muscular Atrophy Clinical Trials: Lessons Learned. In: Sumner CJ, Paushkin S, and Ko C. eds. *Spinal Muscular Atrophy: Disease Mechanisms and Therapy*. San Diego, CA:Elsevier Science Publishing Co Inc, United States. 423-427.

Books

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. In press.

Simpkins S, Zipp G, Fell D. Functional Activity Intervention: Upright Mobility. *Lifespan Neurorehabilitation*. FA Davis Plus. In press.

Other

A. Published scientific review

B. Abstracts (Platform or Poster Presentations)

Glanzman AM, Mazzone ES, Dunaway Young S, Gee R, Rose K, Mayhew A, **Nelson LL**, Yun C, Alexander K, Darras B, Zolkipli Z, Tennekoon G, Day JW, Finkel RS, Mercuri E, DeVivo DC, Baldwin R, Bishop K, Montes J. Reliability of Functional Outcome Measures in Spinal Muscular Atrophy: Multi-Centered, Global, Phase 3 Clinical Trials. *Poster Presentation*. CureSMA 21st SMA Researcher Meeting. June 29 – July 1, 2017. Orlando, FL, USA.

Krosschell KJ, **Nelson LL**, Duong T, Lowes LP, Alfano L, Benjamin D, Carry TB, Devine G, Gadekan R, Kelly C, Malkus B, Nicorici A, Pasternak A, Provance-Orr S, Roemeister-Logan L, Tussell D, Youg SD, Montes J, Power PJ, Quinoes R, Quigley J, Bosch M, Coffey CS, Yankey JW, Bartlett A, Kissel JT, Kolb SJ. Motor Function Test Reliability During the Neuronext Spinal Muscular Atrophy Infant Biomarker Study. *Poster Presentation*. CureSMA 21st SMA Researcher Meeting. June 29 – July 1, 2017. Orlando, FL, USA.

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. Platform presentation, Combined Sections Meeting, San Antonio, TX, February 2017.

Brizzolara, K. Wang-Price, S, **Zafereo, J.** Assessment of Abdominal Muscle Thickness in Post-Partum Women Who Have Undergone Cesarean Sections as Compared to Vaginal Births. Platform presentation, Combined Sections Meeting, San Antonio, TX, February 2017.

Nasr, A. **Zafereo, J.** The Effects of Dry Needling and Slump Tensioners on Idiopathic Peripheral Neuropathy: A Case Report. TPTA Annual Conference, Fort Worth, TX, October 2016

Deschenes, B, **Zafereo, J.** The Development of an Equation to Predict Doctorate of Physical Therapy (DPT) GPA using Pre-Admission Factors: Update. Poster presentation, Educational Leadership Conference, Phoenix, AZ, October 2016

Dickson T, **DeVahl J.** The Impact of Clinical Teaching on Clinician Productivity Across the UTSW Campus. Poster session presented at SWAT Annual Research Symposium, UT Southwestern Medical Center; 2017 April; Dallas, TX.

Mulligan EP, Dickson T, Khazzam M. Diagnostic accuracy of the scapular retraction maneuver in assessing the status of the rotator cuff. Accepted for APTA Combined Sections Meeting. Research Poster Presentation. San Antonio, TX 2017.

Mulligan EP, Dickson T, Pain and sleep quality do not correlate with rotator cuff tear morphology. TPTA Annual Conference Research Poster Presentation. Ft. Worth, TX. 2016

Neuman R, Allegre A, Faweya O, Theisen M, Pelto M, Nguyen M, Fey NP, **Shearin S, McCain K.** Design and neuromotor evaluation of a low-cost and lightweight hip flexion assistive device in individuals with and without multiple sclerosis; accepted to Biomedical Engineering Society annual meeting, Phoenix, AZ, October 2017. (Accepted July 2017)

Tejani, A, Hynan, L, **Middleton, E,** Bell, K, Cullum, M, Smith, E, Vargas, B. Treatment outcomes of Triptan compared with NSAIDs/analgesics and opioid medications in post-concussive patients from the North Texas Concussion Registry (ConTex). Poster session presented at: American Academy of Neurology; 2017 July 14 ; Jacksonville, FL.

Tejani, A, Hynan, L, **Middleton, E,** Bell, K, Cullum, M, Smith, E, Vargas, B. Gender differences in Post-concussive Headache Treatment Outcomes Among Patients from the North Texas Concussion Registry (ConTex). Poster session presented at: American Academy of Neurology; 2017 July 14 ; Jacksonville, FL.

Shearin, SM. Physical therapy For a Geriatric individual with Early PD. GeriNotes. January 2017.

C. Editorials, position papers, background papers

D. Original invited lectures and presentations published for distribution

Presentations

Nelson L. Determining outcomes for Spinal Muscular Atrophy: Considerations for Clinical Trials. Roche Pharmaceuticals Advisory Board. Rome, Italy. June 24, 2017.

Nelson L. Evaluation for Spinal Muscular Atrophy. Texas Children's Hospital, Houston. Houston, TX. May 20, 2017

Nelson L. Clinical Evaluation and Assessment of patients with Duchenne Muscular Dystrophy. CureDuchenne Workshop. Dallas, TX. January 27, 2017.

Nelson L. SMA Advanced Medical Training. Functional Endpoints, Overview of the HINE, HFMSE, CHOP INTEND, and ULM/RULM. Boston MA. November 2, 2016.

Zafereo, J. High Intensity Laser Therapy for Fibromyalgia, UTSW Department of Internal Medicine, Dallas, TX, August 2017. Invited presentation.

Zafereo, J. Updated Clinical Practice Guidelines for Low Back Pain: Panel Discussion, North Texas District TPTA Meeting, Dallas, TX, April 2017. Invited presentation.

Zafereo, J. Physical Therapy for Management of Pain, UTSW Convergence Day, Dallas TX, October 2016. Invited presentation.

DeVahl, J., Dickson, T. Clinical Instructor Certification Course, Part II. Instructional course presented on behalf of the Texas Consortium for Physical Therapy Clinical Education. Baylor University Medical Center, Dallas, TX. June 2017. State. Invited Course.

DeVahl, J., Garrett, M. Clinical Instructor Certification Course, Part II. Instructional course presented on behalf of the Texas Consortium for Physical Therapy Clinical Education. Hendrick Health System, Abilene, TX. April 2017. State. Invited Course.

DeVahl J, Dillon L. Clinical Teaching is More Than Telling. American Physical Therapy Association/American Council of Academic Physical Therapy Educational Leadership Conference, Phoenix, AZ. October 2016. National. Accepted course.

DeVahl J. So You Want to be an Ethical Practitioner? UT Southwestern Medical Center, Dallas, TX. October 2016. Local. Invited Course.

Mulligan EP. Evaluation and Treatment of Athletic Hip Injuries. Primary Care Sports Medicine Musculoskeletal Series. UT Southwestern Medical Center. Dallas TX. May 2017. Local. Invited 1.5-hour lecture.

Mulligan EP. Evidence-Based Management of the Shoulder. United Regional Hospital System. Wichita Falls TX. April 2017. State. Invited one-day instructional course

Mulligan EP. Evidence-Based Management of the Hip/Knee. Salina Regional Hospital System. Salina KS, March 2017. State. Invited two-day instructional course

Mulligan EP, Hartley G, Harrington K. Residency 101. Combined Sections Meeting. San Antonio TX. February 2017. National. Invited 2-hour instructional course

Mulligan EP. Normal and Abnormal Gait. Department of Orthopedic Surgery Grand Rounds. UT Southwestern Medical Center. Dallas, TX. January 2017. Local. Invited 1-hour presentation.

Mulligan EP. Sleepless Shoulder Science. Texas Physical Therapy Association Annual Conference. Arlington, TX. Oct 2016. State. Accepted 3-hour instructional lecture.

Mulligan EP. What is Physical Therapy? Department of Family and Community Medicine Grand Rounds. UT Southwestern Medical Center. Dallas, TX. September 2016. Local. Invited 1-hour presentation.

Mulligan EP. Does Core Stability Reduce Foot and Ankle Injuries? Texas Podiatric Medical Association Conference. Frisco, TX. September 2016. State. Invited 30-minute lecture.

McCain, KJ. Evaluation and Treatment of Gait Dysfunction in Myelopathy. American Academy of Neurology Annual Meeting, Boston, Massachusetts, April 2017. Accepted Presentation.

McCain, KJ. Gait Analysis Review and Orthosis Selection and Evidence Based Rehabilitation after Stroke, Nebraska Physical Therapy Association Fall Conference, October 2016. Invited Presentation.

Middleton, E, Vargas, B. Office Follow Up and Management Evaluation of Sport Related Concussion. American Academy of Neurology Sports Concussion Conference, Jacksonville, FL July 14 2017. Invited Platform Presentation.

Shearin, SM. Impact of exercise intensity on brain derived neurotrophic factor in Parkinson's disease: From the bench to the clinic, UTSW Capra symposium, February 2017. Invited Presentation.

Shearin, SM. IV Step Conference Review TPTA: Activity-dependent Plasticity: Implications for Adult and Pediatric Rehabilitation, Texas Physical Therapy Association, January 2017. Invited Presentation.

Querry, R. Clinical Considerations of Biomechanics and Exercise Prescription for Application in Wellness Programs. Local invited lecture, Viverae, 6/2017

Querry, R. Clinical Correlations: Concepts of Muscle Physiology for Application in Rehabilitation. Invited Lecture, UT Southwestern MS-1 Medical Students 11/2016

Querry, R. The Science and Application of Photobiomodulation (Laser) Therapy. Invited Lecture, UTSW School of Health Professions Search Committee for Physical Therapy Department Chair. June 7, 2017.

Membership on Editorial Boards

DeVahl, J. 2006-Present. Texas Physical Therapy Association Continuing Competence Approval Program.

Mulligan E. 2013 – present. Journal of Manual Therapy

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

Middleton, E. 2015 – Present. International Journal of Sports Physical Therapy

Department of Physician Assistant Studies 2016-2017

Research Grants and Contracts

Grant Submitted, Award Decision Pending

Title: Texas Center for Minority Health, Education, Research, and Outreach, 2U54 MD00682-06

Purpose: Center of Excellence Grant to conduct community-based participatory research and biomedical research on health disparities in women's health that exists in Texas minorities such as cancer, HIV, obesity, cardiovascular diseases, and stroke.

Funding Agency: National Institutes of Health

Funding Dates: September 2017 – June 2022, five years

Amount Requested: Requested Support \$6,433,113.00

Role: Bradley-Guidry C. Doctoral Assistant, Education Coordinator, 5% effort

Responsibility: Development of a triple negative breast cancer community education curriculum grounded in evidenced-based research. Conduct triple negative breast health education seminars, dissemination of information, and coordinate educational activities with community members, and partner organizations.

Title: Suture Workshop.

Purpose: To enhance pediatric literacy among homeless women and children.

Funding Agency: Johnson and Johnson Medical Devices Companies

Funding Dates: 9/30/17.

Amount requested: \$3,739.20. Status: Submitted, Decision Pending.

Principal Investigators: S. Harrington, **J. Kane.**

Grants Awarded

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

Purpose: Identify the current use of the MMI within 12 PA programs.

Funding Agency: Physician Assistant Education Association.

Funding Dates: 09/22/16- 08/31/18.

Amount Awarded: \$5,330.

Principal Investigator: **K. James**

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: 07/01/16 – 06/30/18.

Amount Awarded: \$2180, Status: Ongoing

Principal Investigator: **Orcutt VL**, 10% effort

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: 07/01/16 – 06/30/18.

Amount Awarded: \$2180, Status: Ongoing

Principal Investigator: **Orcutt VL**, 10% 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.

Grant Submitted But Not Funded

Publications

Refereed journals

Orcutt V, James K, Bradley-Guidry C, Jones P. Similarities and Differences Between Physician Assistant Program and Medical School Mission Statement Themes. *J Physician Assist Educ.* 2017. In Press.

Kindratt T, Orcutt V. Development of a Quality Improvement Curriculum in Physician Assistant Studies. *J Physician Assist Educ.* 2017;28(2):103-107.

Langston J, Duszak R, **Orcutt VL**, Schultz HM, Hornberger B, Jenkins L, Hemingway J, Hughes DR, Pruthi RS, Nielson ME. The Expanding Role of Advanced Practice Providers in Urologic Procedural Care. *Urology.* 2017. doi:10.1016/j.urology.2017.03.047.

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.

Gimpel NE, **Kindratt TB**, Dawson A, Pagels P. Community Action Research Track (CART): Community-based participatory research and service-learning experiences for medical students. *Perspectives on Medical Education.* Submitted May 1, 2017. Accepted September 29, 2017. In Press.

Kindratt T, Gonzalez JR. Perceived maternal relationship as a predictor of pap test utilization: Results from The Longitudinal Study of Adolescent to Adult Health. *Journal of Adolescent and Family Health.* Submitted December 1, 2016. Accepted in September 2017. In Press.

Gimpel N, Pagels P, **Kindratt T.** Teaching Exchange: Community Action Research Experience for Family Medicine Residents. *Educ Prim Care.* Feb 28:1-6. doi: 10.1080/14739879.2017.1295789. [Epub ahead of print].

Bradley-Guidry, C, Garner, W. What Really Ails Diversity Efforts in Healthcare? *Journal of Leadership Studies.* 2016;10(1):85-86. Doi: 10.1002/jls

Hernandez SL, Banks HE, Bailey AE, Bachman MJ, **Kane JP**, Hartos JL. Relationships Among Chewing Tobacco, Cigarette Smoking, and Chronic Health Conditions in Males 18–44 Years of Age. *The Journal of Primary Prevention.* 2017; 38(5), 505-514.

Klocko, D. Enhancing physician assistant student clinical rotation evaluations with the reporter-interpreter-manager-educator scoring format: A retrospective 3-year analysis. *Journal of Physician Assistant Education.* 2016; 27 (4); 1-4.

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

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

Sturges D, Race matters in physician assistant education and clinical practice. *J Physician Assist Educ.* 2017;28(2):109-112.

Refereed journals under review

Longo PJ, **Orcutt VL, James K, Kane J, Coleman V**. A concurrent validity pilot study investigating knowledge network organization in clinical reasoning. *J Physician Assist Educ*. 2017. Under Review.

Rodder SG, **Kindratt TB, Orcutt V**, Koch C, McIlvaine K, Neville MA. Teaching and evaluating smartphone applications: An interprofessional curriculum expansion. *Educ Health (Abingdon)*. Under Review. Submitted December 1, 2016.

Kindratt TB, Dallo FJ, Roddy J. Cigarette smoking among Arab Americans in the United States. *Public Health Rep*. Under Review. Submitted August 21, 2017.

Kindratt TB, 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 Stud Run Clin*. Under Review. Revisions submitted May 19, 2017.

Kane TD, Tubog TD, **Kane JP**. Effect of Epidural Volume Extension on Quality of Combined Spinal Epidural Anesthesia for Cesarean Delivery: A Systematic Review and Meta-Analysis. *J AANA*. 2017. Under Review.

Sturges D, The Black church and its pastor as a community partner in health education and health promotion interventions targeting African-Americans: a brief literature review. *Health Educ Behav*. 2017. Under Review.

Esrock L, **Sturges D**, Evaluation of novel in-class review techniques in physician assistant education. *J Physician Assist Educ*. 2017. Under Review.

Non-refereed journals

Book Chapters

Books

Other

A. Published scientific review

B. Abstracts (Platform or Poster Presentations)

Rodder SG, **Kindratt TB, Orcutt V**, Koch C, McIlvaine K, Neville MA. Teaching and Evaluating Smartphone Applications: An Interprofessional Curriculum Expansion. University of Texas Southwestern School of Health Professions Research Poster Day. Dallas, TX. August 30, 2017. Poster Presentation.

Dekat L, **Orcutt V, Kindratt T**. Enhancing Competence through an Integrated Diabetes Curriculum. University of Texas Southwestern School of Health Professions Research Poster Day. Dallas, TX. August 30, 2017. Poster Presentation.

Kindratt T, Orcutt V. The Continuous Quality Improvement ‘Squeeze’ into the Curriculum in PA Education: A Model for Adaption in Physician Associate Programmes. Oral Presentation at the Association for the Study of Medical Education Annual Scientific Meeting. Exeter, England, June 21, 2017. Platform Presentation.

Orcutt VL and Longo PL. Deconstruction of clinical reasoning into three competency components. Southwestern Academy of Teachers, April 2017. Dallas, TX. Platform presentation.

Lemke HR, **Orcutt VL**, Williams JM, Garza J, Gentry AN, Higashi RT. Factors influencing selection and retention of primary care practice by Texas physician assistants: A mixed methods approach. Research Appreciation Day. University of North Texas Health Science Center. April 2017. Fort Worth, TX. Poster presentation.

Rodder SG, **Kindratt TB, Orcutt V**, Koch C, McIlvaine K, Neville MA. Teaching and evaluating smartphone applications: An interprofessional curriculum expansion. University of Texas System, Kenneth I. Shine MD Academy of Health Science Education, 2017 Innovations in Health Science Education Annual Conference. Austin, TX. February 16, 2017. Poster Presentation.

Kindratt T, Pagels P, Chung K, Park C, Corder TM, Kim J, Walls K, Salinas H, Williams J. Evaluating the Reach Out and Read Program to Promote Pediatric Literacy in a Student-Run Homeless Shelter Clinic. University of Texas Southwestern School of Health Professions Research Poster Day. Dallas, TX. August 30, 2017. 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. University of Texas Southwestern School of Health Professions Research Poster Day. Dallas, TX. August 30, 2017. Poster Presentation.

Kindratt T, Rodder SG, **Orcutt V**, Koch C, McIlvaine K, Neville MA. Teaching and Evaluating Smartphone Applications: An Inter-professional Curriculum Expansion for PA and Nutritionist students. Oral Presentation at the Association for the Study of Medical Education Annual Scientific Meeting. Exeter, England, June 23, 2017. Platform Presentation.

Sturges D, Kindratt, T, Coleman V. Pop Culture and Physician Assistant Education. e-Poster Session - American Academy of Physician Assistants Annual Conference, Las Vegas, NV. May 2017. Poster Presentation.

Kindratt T, Dallo F, Reddy J. Disparities in Tobacco Use among Non-Hispanic Whites: Heterogeneity among Foreign-Born Arab and European Americans. University of Texas School of Public Health’s Annual Research Day. Houston, TX. April 6, 2017. Poster Presentation.

Leland M, Dawson A, Sepdham D, Gimpel N, **Kindratt T**. Access to Primary Care and Pharmacy Services Among High-Frequency Emergency Department Users. North American Primary Care Research Group's 44th Annual Meeting. Denver, CO. November 15, 2016. Poster Presentation.

Leland M, Dawson A, Sepdham D, Gimpel N, **Kindratt T**. Access to Primary Care and Pharmacy Services Among High-Frequency Emergency Department Users. Poster Presentation at the Texas Academy of Family Physicians (TAFP) 2016 Annual Session and Primary Care Summit. Dallas, TX. November 4, 2016. Poster Presentation

Kindratt T, Rodder S, Mulfinger K. Life Habits Interprofessional Education with MyNetDiary. Physician Assistant Education Association (PAEA) Education Forum, Minneapolis, MN. October 13, 2016. Poster Presentation.

Bradley-Guidry C, Bester V, LeLacheur S, Huggins-Oxendine L, Bowen D, Ryujiin D, Samuels K, Maldonado A, Himmerick K. A Phenomenological Assessment of Minority Physician Assistant Faculty Retention. Long Beach, CA. September 2017. Student-Run Homeless Shelter Clinic. University of Texas Southwestern School of Health Professions Research Poster Day. Dallas, TX. August 30, 2017. Poster Presentation.

Millner L, **Bradley-Guidry C**, Beck, T. Comparing Community-Based Breast Cancer Education and Navigation Programs: Disparate Outcomes Among African American and Hispanic Targeted Populations in North Texas. Texas Public Health Association Annual Education Conference, Fort Worth, TX. March 2017. Platform Presentation.

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, Denver Colorado, November 2016. Platform Presentation.

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 22-24, 2017. Invited workshop presentations.

Esrock L, **Sturges D**. Evaluation of Novel In-Class Review Techniques in Physician Assistant Education. UT Southwestern – School of Health Professions Research Poster Day, Dallas, Texas. August 2017.

Sturges D. Cultural Awareness. Presented at LSU Health, Physician Assistant Program Shreveport, LA. May 2017. Platform Presentation.

C. Editorials, position papers, background papers

D. Original invited lectures and presentations published for distribution

Presentations

Membership on Editorial Boards

Department of Prosthetics-Orthotics 2016-2017

Research Grants and Contracts

Grant Submitted, Award Decision Pending

Title: Controlling Locomotion over Continuously Varying Activities for Agile Powered Prosthetic Legs

Purpose: The overall goal of this project is to model and control human locomotion over continuously varying tasks for the design of agile, powered prostheses that require little to no tuning.

Funding Agency: NIH-NATIONAL INST OF BIOMEDICAL IMAGING (R01)

Funding Dates: September 2018 – August 2023

Amount requested: \$106,817 for subcontract. Status: Submitted, Pending.

Co-Investigator (and PI of a UTSW subcontract): Gray L, 3% effort.

Title: Wearable ultrasound technologies for control of robotic knee-ankle prostheses and assessment of user response

Purpose: To enable advanced bionic technologies that target enhanced daily ambulation capability, a key contributor to improving independence and quality of life of impaired individuals. The overall objective is to inform, implement and clinically-test robotic knee-ankle prosthesis control strategies capable of enhancing daily ambulation of transfemoral amputees.

Funding Agency: NIH- NATIONAL INST OF CHLD HLTH & HMN DEV (R01)

Funding Dates: September 2018 – August 2023

Amount requested: Time to be billed to Grant PI, Status: Submitted, Pending

Co-Investigator: Gray L, 3% effort.

Title: Clinical and Biomechanical Evaluation of Personalized Knee-Ankle Powered Prosthesis Control Compared to Passive Device

Purpose: The overall objective of this proposal is to inform, implement and clinically-test robotic knee-ankle prosthesis control strategies capable of enhancing daily ambulation of people with transfemoral amputation by testing the hypothesis that continuous estimation of task-relevant variables through additional sensing and machine learning can enable robotic prosthesis controllers to deliver improved personalized assistance in a range of daily ambulation tasks—quantified via metabolic cost and bilateral mechanics.

Funding Agency: US Department of Defense (DOD)

Funding Dates: 2018-2013

Amount requested: Status: Submitted, Pending

Co-Investigator: Gray L, 3% effort.

Title: Time-Invariant, Multi-Objective Extremum Seeking Control for Model-Free Auto-Tuning of Powered Prosthetic Legs

Purpose: This research project seeks fundamental knowledge and understanding of model-free adaptive optimization methods with varying time-scales and competing objectives to enable real-time auto-tuning of powered prosthetic legs.

Funding Agency: NSF

Funding Dates: September 2018 – August 2021

Amount requested: Time to be billed to Grant PI, estimated \$6,250, Status: Submitted, Pending

Co-Investigator: Gray L, 3% effort.

Title: Scalable Open-Source Robotic Leg Prostheses that Lower the Barrier for Academic Research

Purpose: The primary benefit in this research is the development of a superior lower-limb prosthesis and associated control system. The goal is to open a new branch of translational science and demonstrate exciting new potential to improve ambulation in lower-limb amputees, including the ability to walk more safely in uncertain environments.

Funding Agency: NSF

Funding Dates: September 2018 – August 2021

Amount requested: Prosthetist time to be billed to Grant PI, estimated \$6,250. Status: Submitted, Pending

Co-Investigator: Gray L, 3% effort.

Title: State estimation to enable individuals with above-knee amputation – Personalized robotic assistance for differing mobility and etiology.

Purpose: The primary benefit in this research is the development of a superior lower-limb prosthesis and associated control system. The goal is to open a new branch of translational science and demonstrate exciting new potential to improve ambulation in lower-limb amputees, including the ability to walk more safely in uncertain environments.

Funding Agency: NSF

Funding Dates: September 2018 – August 2021

Amount requested: Prosthetist time to be billed to Grant PI, Status: Submitted, Pending

Co-Investigator: Gray L, 3% effort.

Grants Awarded

Grants Submitted but Not Funded

Title: An Innovative and Interactive Learning Module for Plantarflexion Assist Carbon Fiber Ankle Foot Orthoses

Purpose: To develop, implement, and assess an innovative, interactive learning module on plantarflexion assist carbon fiber ankle foot orthoses (AFOs) for healthcare students and professionals.

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

Funding Dates: December 16, 2016-December 15, 2017

Amount requested: \$5,000. Status: Submitted, Not Funded.

Principal Investigator: **Wilson DG**, 10% effort.

Co-Investigator: **Gray L**, 2% effort.

Title: The Effect of Variations in Carbon Fiber Lay-Up of Custom AFOs on Gait in Chronic Stroke Patients

Purpose: To assess gait analysis data from chronic stroke subjects using varying carbon fiber strut ply AFOs, to provide guidelines on matching patient presentation to AFO stiffness through carbon fiber lay-up optimization.

Funding Agency: Orthotic and Prosthetic Education and Research Foundation (OPERF)

Funding Dates: April 2017-April 2018

Amount requested: \$5,000. Status: Submitted, Not Funded.

Principal Investigator: **Wilson DG**, 10% effort.

Other

A. Published scientific review

B. Abstracts (Platform or Poster Presentations)

Gray L, Littrell E, Smith Z, Marsh B. The effects of posterior strut width of a PLS on ankle and knee kinematics. Poster presented at 43rd Academy Annual Meeting and Scientific Symposium; 2017 March 2-5; Chicago, IL.

Wilson DG, Brock MT, Henke LJ. The Effects of Strut Layup and Width on Carbon Fiber AFO Stiffness. Poster presented at 43rd Academy Annual Meeting and Scientific Symposium; 2017 March 2-5; Chicago, IL.

Wilson DG. The Influence of the Plantarflexors on AFO Selection in an Adult Population. Texas Chapter of The American Academy of Orthotists and Prosthetists. Dallas, TX. August 2017. State. Accepted Platform Presentation.

Graham, T, Gregory, T, Harris, J, Walsh, M. Effectiveness of Cranial Remolding Orthoses in Reducing Asymmetry in Patients with Plagiocephaly in Relation to Start Age and Severity. Poster session presented at 43rd Academy Annual Meeting and Scientific Symposium 2017 March 2-4; Chicago, IL

Graham, T. Pathophysiology of Cranial Deformities. 2017 American Academy of Orthotists and Prosthetists National Meeting, Chicago, IL, March 2017. Accepted Platform Presentation.

Graham, T. Screening and Differential Diagnoses of Cranial Deformities. 2017 American Academy of Orthotists and Prosthetists National Meeting, Chicago, IL, March 2017. Accepted Platform Presentation.

C. Editorials, position papers, background papers

Gray, L. (2017). Quantifying PLS Stiffness: Effects of Trim Lines, Materials, and Heights. *The Academy Today*, 13(2):13.

Graham, T. (2017). Making Better Use of the CAD Technology Already in Your Clinic. *The Academy Today*, 13(3):5-6.