SSHP Faculty Publications & Grants for Fiscal Year 2012-2013

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 12-13. (September 01, 2012 - August 31, 2013). 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 2012-13

Department of Clinical Nutrition

Publications	0	
Grants and Contracts	0	
Community Prevention and Intervention Unit		
Publications	0	
Grants and Contracts	7	
Emergency Medicine and Education Program		
Publications	12	
Grants and Contracts	0	
Healthcare Education and Research		
Publications	0	
Grants and Contracts	5	
Grant Submissions in Review	1	
Unfunded Grant Submissions	1	
Department of Healthcare Sciences		
Publications	12	
Grants and Contracts	2	
Department of Physician Assistant Studies		
Publications	5	
Poster Presentations	1	
Grants and Contracts	1	
Department of Physical Therapy		
Publications	7	
Grants and Contracts	5	

Presentations

3

Department of Prosthetics and Orthotics

Publications	3
Abstracts and Presentations	3
Grants and Contracts	4

Department of Rehabilitation Counseling

Publications	8
Grants and Contracts	8

Community Prevention & Intervention Unit Grants and Contracts:

Non-competitive renewal application for STD/HIV Prevention Training Center grant; CDC; Anne Freeman, PI; \$587,000; April 1, 2013-March 31, 2014.

Non-competitive renewal application for Capacity-Building Assistance Center grant; CDC; Anne Freeman, PI; \$542,862; April 1, 2013 – March 31, 2014.

Non-competitive renewal of HIV Prevention Program contract: Texas Department of State Health Services; Anne Freeman, PI; \$849,000; January 1, 2013-December 31, 2013.

Non-competitive renewal of Medical Monitoring Project contract with Texas Department of State Health Services; Anne Freeman, PI; \$276,000; June 1, 2013-May 31, 2014.

Non-competitive renewal of HIV Incidence Project contract with Texas Department of State Health Services; Anne Freeman, PI; \$224,000; January 1, 2013-December 31, 2013.

Non-competitive renewal of VARHS Project contract with Texas Department of State Health Services; Anne Freeman, PI; \$125,000; January 1, 2013-December 1, 2013.

Non-competitive contract with the University of California, San Francisco; Anne Freeman, local PI; \$200,000; August 1, 2012-July 31, 2013.

<u>Emergency Medicine Education Program</u> <u>Publications:</u>

Richard King

DelliFraine, J., Langabeer, J., 2nd, Segrest, W., Fowler, R., King, R., Moyer, P., . . . Jollis, J. (2013). Developing an ST-elevation myocardial infarction system of care in Dallas County. *Am Heart J, 165*(6), 926-931. doi: 10.1016/j.ahj.2013.02.005

Langabeer, J. R., Henry, T. D., Kereiakes, D. J., Dellifraine, J., Emert, J., Wang, Z., Stuart, L., King, R., Segrest, W., Moyer, P., Jollis, J. G.. (2013). Growth in percutaneous coronary intervention capacity relative to population and disease prevalence. *J Am Heart Assoc, 2*(6), e000370. doi: 10.1161/JAHA.113.000370

Kenneth Navarro

Navarro, K. (2013, August). The research review. Breathe easier: Devices that improve ventilation. EMS1.com. Available at <u>http://www.ems1.com/ems-</u>products/Capnography/articles/1477904-Breathe-easier-Devices-that-improve-ventilation/

Navarro, K. (2013, June). The research review. Prove It: Racial bias in prehospital analgesia. EMS1.com. Available at <u>http://www.ems1.com/columnists/kenny-navarro/articles/1458029-Prove-It-Racial-Bias-in-Prehospital-Analgesia/</u>

Navarro, K. (2013, June). The research review. Prehospital blood glucose analysis. EMS1.com. Available at <u>http://www.ems1.com/medical-clinical/articles/1454354-</u> Prehospital-blood-glucose-analysis/

Navarro, K. (2013, May). The research review. Drug resistant bacteria in the prehospital environment. EMS1.com. Available at <u>http://www.ems1.com/ems-products/Infection-Control/articles/1443696-Drug-resistant-bacteria-in-the-prehospital-environment/</u>

Sinz, E., Navarro, K., and Soderberg, E. S. (Eds). (2013). ACLS for experienced providers manual and resource text. Dallas, TX: American Heart Association.

Navarro, K. (2013, January). The research review. Prove It: Improving CPR Quality Increases ROSC Rates. EMS1.com. Available at <u>http://www.ems1.com/cardiaccare/articles/1392979-Prove-It-Improving-CPR-Quality-Increases-ROSC-Rates/</u>

Navarro, K. (2012, December). The research review. Technology and drug diversion. EMS1.com. Available at <u>http://www.ems1.com/ems-products/medical-</u>equipment/articles/1376483-Technology-and-drug-diversion/

Navarro, K. (2012, November). The research review. Prove It: Accuracy of the Broselow Pediatric Emergency Tape at predicting weight. EMS1.com. Available at http://www.ems1.com/fire-ems/articles/1367796-Prove-It-Accuracy-of-the-Broselow-Pediatric-Emergency-Tape-at-predicting-weight/

Navarro, K. (2012, September). The research review. Prove it: Giving epinephrine early during cardiac arrest improves neurological outcome. EMS1.com. Available at http://www.ems1.com/pharmacology/articles/1349101-Prove-it-Giving-epinephrine-early-during-cardiac-arrest-improves-neurological-outcome/

Navarro, K. (2012, September). The research review. Reducing door-to-balloon time. EMS1.com. Available at <u>http://www.ems1.com/cardiac-care/articles/1336327-Reducing-door-to-balloon-time/</u>

Healthcare Education and Research DFW Area Health Education Center Grants and Contracts:

Funded Grants/Contracts

- Project Director on Subcontract: Lori Millner, PhD Source: Department of Health and Human Services – Subcontract through University of Texas Medical Branch – Texas AHEC East Division (Steve Shelton, PA-C at UTMB is the PI) Title: Model State Supported Area Health Education Centers Amount of subcontract : \$86,240 Dates: September 1, 2012-August 31, 2013 Purpose: To implement core AHEC programs to improve the health of our communities.
- 2. Project Director on subcontract: Lori Millner, PhD

Source: State of Texas – Interagency contract with the University of Texas Medical Branch – Department of Legal Affairs - Texas AHEC East Division Title: Support for DFW AHEC programs (Steve Shelton, PA-C at UTMB is the PI) Amount: \$113,760 Dates: September 1, 2012-August 31, 2013 Purpose: To implement core AHEC programs to improve the health of our communities.

- Project Director: Lori Millner, PhD Source: Coastal Area Health Education Center Title: Ventanilla de Salud Amount: \$57,400 Dates: January 1, 2013 – December 31, 2013 Purpose: To provide health education and health referral services to the Hispanic community.
- Project Director: Lori Millner, PhD Source: Susan G. Komen for the Cure Title: The Ventanilla de Salud Breast Health Pilot Program Amount: \$50,000 Dates: June 1, 2012-May 31, 2013 Purpose: Provide Breast Self-Awareness Education to 12,000 Spanish –speaking men and women and to provide client navigation services to approximately 150-300 clients.(Time period overlapped and this was listed last year as well.)
- Project Director: Carolyn Bradley-Guidry Project Manager: Lori Millner, PhD Source: Susan G. Komen Dallas Affiliate Title: Screening Our Sisters Amount: \$70,000 Dates: April 1, 2013-Mar 31, 2014 Purpose: Provide Breast Self-Awareness Education and Client navigation services minority women in Dallas County

<u>Grant Submissions (in review)</u> Susan G. Komen Dallas Affiliate

Unfunded Grant Submissions

 Project Director: Lori Millner, PhD Source: Susan G. Komen Dallas Affiliate Title: The Ventanilla de Salud Breast Health Program Amount: \$61,000 Dates: April 1, 2013-Mar 31, 2014 Purpose: Provide Breast Self-Awareness Education and Client navigation services for Spanish-speaking minority women in Dallas County

Department of Healthcare Sciences Publications:

Gatson, J.W., M.M. Liu, K. Abdelfattah, J.G. Wigginton, S. Smith, S. Wolf, J.W. Simpkins and J.P. Minei. Estrone is neuroprotective in rats following traumatic brain injury. *Journal of Neurotrauma*, 29(12): 2209-2219, 2012.

Leal, A.K., M.N. Murphy, G.A. Iwamoto, J.H. Mitchell and S.A. Smith. A role for nitric oxide within the nucleus tractus solitarius in the development of muscle mechanoreflex dysfunction in hypertension. *Experimental Physiology*, 97.12: 1292-1304, 2012.

Mizuno, M., K. Siddique, M. Baum and S.A. Smith. Prenatal programming of hypertension induces sympathetic overactivity in response to physical stress. *Hypertension*, 61: 180-186, 2013.

Smith, S.A. and M. Baum. Sympathetic dysfunction in prenatal programming. *Hypertension*, 61: 3, 2013.

Gatson, J.W., M.M. Liu, K. Abdelfattah, J.G. Wigginton, S. Smith, S. Wolf, and J.P. Minei. Resveratrol decreases inflammation in the brain of mice with mild traumatic brain injury. *The Journal of Trauma and Acute Care Surgery*, 74(2): 470-475, 2013.

Murphy, M.N., R.M. Ichiyama, G.A. Iwamoto, J.H. Mitchell and S.A. Smith. Exercise pressor reflex function following acute hemi-section of the spinal cord in cats. *Frontiers in Physiology: Exercise Physiology*, 4(3): 1-8, 2013.

Murphy, M.N., M. Mizuno, R.M. Downey, J.J. Squiers, K.E. Squiers and S.A. Smith. Neuronal nitric oxide synthase protein expression is reduced within brainstem neurons excited by skeletal muscle reflexes in spontaneously hypertensive rats. *American Journal of Physiology*, 304: H1547-H1557, 2013.

Leal, A.K., J.H. Mitchell and S.A. Smith. Treatment of muscle mechanoreflex dysfunction in hypertension: effects of I-arginine dialysis in the nucleus tractus solitarii. *Experimental Physiology*, 98: 1337-1348, 2013.

Toru Kawada, Kazunori Uemura, Shuji Shimizu, Atsunori Kamiya, Michael J. Turner, <u>Masaki Mizuno</u>, Kenji Sunagawa and Masaru Sugimachi. Consideration on Parameter Determination of a New Model Describing Dynamic Vagal Heart Rate Control in Rats. *Conference Proceedings: Annual International Conference of the IEEE Engineering in Medicine and Biology Society* 3809-3812, 2012.

<u>Masaki Mizuno</u>, Khurrum Siddique, Michel Baum, and Scott A. Smith. Prenatal programming of hypertension induces sympathetic overactivity in response to physical stress. *Hypertension* Vol.61: 180–186, 2013.

Toru Kawada, Meihua Li, Shuji Shimizu, Atsunori Kamiya, Kazunori Uemura, Michael J. Turner, <u>Masaki Mizuno</u>, and Masaru Sugimachi. High-frequency dominant depression of peripheral vagal control of heart rate in rats with chronic heart failure. *Acta Physiologica* Vol. 207: 494-502, 2013.

Megan N. Murphy, <u>Masaki Mizuno</u>, Ryan Downey, Jack Squiers, Kate Squiers, Scott A. Smith. Neuronal nitric oxide synthase expression is lower in area of the nucleus tractus solitarius excited by skeletal muscle reflexes in hypertensive rats. *American Journal of Physiology Heart and Circulatory Physiology* Vol.304, No.11: 1547-1557, 2013.

Grants and Contracts:

Scott Smith, PhD

- 2008-13 National Institutes of Health, National Heart, Lung and Blood Institute Basic Research Grant Award (RO1 #HL088422, PI); "Mechanisms of Exercise Pressor Reflex Overactivity in Hypertension" (\$250,000/yr).
- 2013-17 National Institutes of Health, National Heart, Lung and Blood Institute Basic Research Grant Award (RO1 #HL113738, Co-Investigator); "The Role of Aldosterone on Augmented Exercise Pressor Reflex in Hypertension" (\$350,000/yr).

Department of Physician Assistant Studies Publications:

Jones PE, Williams J. Student mental health implications for physician assistant education. (in press). *J Physician Assist Educ*.

Cawley JF, **Jones PE**. Institutional sponsorship, student debt, and specialty choice in physician assistant education. 2013;24(4):4-8. *J Physician Assist Educ*.

Jones PE, Hooker RS. The Texas health workforce benefit of military physician assistant program veterans. *J Physician Assist Educ*. 2013;24(3):34-37.

Jones PE, Hocking JA. An innovative dermatology education tool for physician assistants: The medical student core curriculum. *Journal of Dermatology for Physician Assistants*. 2013;7(3):42-43.

Klocko DJ, Hoggatt-Krumweide K, Olivares-Urueta M, Williamson JW. Development, Implementation and Short-term Effectiveness of an Interprofessional Education Course in a School of Health Professions. *Journal of Allied Health*. 2012 41(1): 14-20.

Poster Presentations:

Klocko DJ. <u>What Biases Do Our Students Develop DuringClinical Rotations?</u> Innovations in Health Science Education Annual Meeting, The University of Texas Academy of Health Science Education Annual Meeting, Austin, TX. February 21, 2013.

Grants and Contracts:

Susan G. Komen, Dallas County Affiliate, CGA-2013-TX102-UTSO27-00018 "Screening Our Sisters" \$70,000 Award PI, **Carolyn Bradley-Guidry**, MPAS, PA-C, BSN Funding Period April 1, 2013 – March 31, 2014

Department of Physical Therapy Publications:

Ferraro, R., Pinto-Zipp, G., <u>Simpkins, S.</u>, Clark, M. (2013). Effects of an incline walking surface and balance abilities on spatiotemporal gait parameters in older adults. *Journal of Geriatric Physical Therapy* 36 (1) 31-38.

Biscardi, C., Mitchell, J., <u>Simpkins, S</u>. & Pinto-Zipp, G.(2013). Practice Characteristics and Lifestyle Choices of Men and Women Physician Assistants and the Relationship to Career Satisfaction. *Journal of Allied Health.* 42(3) 157-162

Kamm K, Simpkins S, Shah A, Quiceno M, Gupta R, Hoggatt Krumwiede K. (2013) Acknowledging Roles and Abilities of Team Members: A simulated geriatric care team meeting with the Coopers. *MedEdPORTAL*; 31-38. Available from: www. mededportal.org/publication/9305.

Hoggatt Krumwiede, K., Simpkins S., Hocking J, Carson J., Gray L., & Williamson. *Enhancing* Interprofessional Education (IPE) with Customized Clinical Case Presentations in a School of Health Professions. Journal of Allied Health (submitted)

Russell R, Knight JR, Mulligan EP, Khazzam M. Structural integrity after rotator cuff repair does not correlate with patient function and pain: a systematic review and meta-analysis. J Bone Joint Surg. accepted for publication June 25, 2013.

Mulligan EP, Cook PG. Effect of Plantar Intrinsic Muscle Training on Medial Longitudinal Arch Morphology and Dynamic Function. Man Ther. 2013 18(5):425-430

Mulligan EP, Mulligan RP. Shoulder Radiology for the Sports Physical Therapist. Indianapolis, IN; Sports Physical Therapy Section of the American Physical Therapy Association; 2013

Grants and Contracts:

Texas Physical Therapy Foundation: Submitted and reviewed DeVahl J. Amount: 2,000.00 Mulligan, E., Blau, P., DeVahl, J., & <u>Simpkins, S</u>. *Physical Therapists' Perspective on Lifelong Learning*

American Heart Association: Submitted and reviewed McCain, K., Querry, R., and Shearin, S. *The metabolic costs of walking following training with ESTT post stroke*

National Institute for Disability Research and Rehabilitation: Submitted and reviewed Smith, P., McCain, K. and Shearin, S.

The impact of ESTT training for persons post stroke on community participation and quality of life.

Veterans Administration Stroke and TBI rehabilitation section: Submitted and reviewed Anniswamy, T., McCain, K., and Querry, R

Locomotion recovery mechanisms in persons post stroke trained with ESTT compared to persons trained with more traditional methods.

Texas Physical Therapy Foundation Grant: Submitted

Zafereo, J.

Regional Manual Therapy and Motor Control Exercise for the Management of chronic low back pain with hip and spine motion loss: A Randomized controlled trial.

Peer Reviewed Scientific and Professional Presentations:

Mulligan EP, Cook PG. American Physical Therapy Association Combined Sections Meeting, San Diego, CA. Impact of Plantar Intrinsic Muscle Training on Navicular Drop in Relaxed Stance. Research Poster Presentation, February 2013

DeVahl, J., Simpkins, S. An Innovative Approach to Interprofessional Education at an Academic Medical Center, April 2013. Submitted but not accepted.

Doern, K., Farrar, M., Querry, R et al. The Impact of an ankle foot orthosis on gait recovery in MS: Pilot Data. National Multiple Sclerosis meeting. Research Poster Presentation, May 2013.

Department of Prosthetics-Orthotics Publications:

Gao F, Bedard GG (2013) Effects of Materials, Designs and Heat Treatment on SAFO Mechanical Properties: A Preliminary Report. J Prosthet Orthot 25: 143-150

Gao F, Zhang LQ (2013 in press) Development and Application of Intellistretch Rehabilitation Robot - Review. China Medical Devices (in Chinese)

Gao F, Zhang LQ (in press) Evaluation and treatment devices in rehabilitation. In: Clinical rehabilitation engineering (textbook used in Medical Schools of China, in Chinese) [Book chapter]

Abstracts and Presentations

Gao F, Bedard GG (2013) Effects of materials, reinforcement and heat treatment on thermoplastic SAFO mechanical properties: a preliminary study. In: American Academy of Orthotists and Prosthetists 39th Annual Meeting & Scientific Symposium, Orlando, FL [Thranhardt Lectures Finalist]

Gao F, Carlton W (2013) An Apparatus to Evaluate the Effectiveness of Cervical Orthoses in Restricting Neck Motion. In: American Academy of Orthotists and Prosthetists 39th Annual Meeting & Scientific Symposium, Orlando, FL

Gao F, Carlton W (2012) An innovative method to quantitatively and objectively evaluate the effectiveness of cervical orthoses in restricting neck motion. In: IEEE 2012 International Conference of the Engineering in Medicine and Biology Society, August 28-Sept. 1, 2012, San Diego, CA, USA, p 622

Grants and Contracts:

7/01/2009-6/30/2014

American Heart Association National Scientist Development Grant Investigation of effects of motorized facilitated ankle stretching. (09SDG2080460) Principal Investigator (Gao)

7/11/2013-7/10/2014

Pilot multi-center evaluations of reflex and nonreflex changes in cerebral palsy using a portable device, American Academy of Cerebral Palsy and Developmental Medicine (AACPDM). PIs: Deborah Gaebler, MD and Liqun Zhang, PhD. Mauricio Delgado, MD (PI at Texas Scottish Rite Hospital for Children) Co-I (Gao)

01/14/2013-01/14/2014

Texas Woman's University, Research Enhancement Program Kinematics, Kinetics, Electromyography and Plantar Pressure of Patients with Diabetic Foot Neuropathy Co-I (Gao)

8/28/2013 - 8/30/2013

OpenSim Travel Award to Attend 3-day OpenSim Advanced User Workshop at Stanford, California, NIH National Center for Simulation in Rehabilitation Research (NCSRR), Stanford University.

PI (Gao)

Department of Rehabilitation Counseling Publications:

McConnel CE (2013).Charges associated with pediatric head injuries: a five year retrospective review of 41 pediatric hospitals in the US. *Journal of Injury and Violence Research*; Jan 5 (1): 51-60.

Chiu, C. Y., Chan, F., Bishop, M., Cardoso, E., & O'Neill, J. (March, 2013). State vocational rehabilitation services and employment in multiple sclerosis. *Multiple Sclerosis Journal.* (Epub ahead of print)

Chiu, C. Y., Chan, F., Strauser, D., Feuerstein, M., Cardoso, E., & Muller, V. (March, 2013). Differential vocational service needs between employed and unemployed adult cancer survivors. *Journal of Occupational Rehabilitation.* (Epub ahead of print)

Shuval, K., **Chiu, C. Y.**, Balasubramanian, B., Wright, B., Euhus, D., & Skinner, C. (2013). Family history of chronic disease and meeting public health guidelines for physical activity: The Cooper Center longitudinal study. *Mayo Clinic Proceedings*, *88*(6), 588-92. doi: 10.1016/j.mayocp.2013.04.006.

Sung, C., **Chiu, C. Y.**, Lee, E. J., Bezyak, J., Chan, F., & Muller, V. (2013). Exercise, diet, and stress management as mediators between functional disability and health-related quality of life in multiple sclerosis. *Rehabilitation Counseling Bulletin, 56,* 86-95. doi:10.1177/0034355212439899

Doyle, N., **Chiu, C. Y.**, Haggard, R., Gatchel, R., & Wiggins, N. (2012). The prevalence of temporomandibular disorders in African Americans. *Journal of Applied Behavioral Research*, *17*(4), 249-260. doi: 10.1111/j.1751-9861.2012.00082.x

Chan, F., **Chiu, C. Y.**, Bezyak, J., & Keegan, J. (2012). Introduction to health promotion for people with chronic illness and disability. *Rehabilitation Counseling Bulletin, 56*(1), 3-6. doi:10.1177/0034355212440731

Chan, F., **Chiu, C. Y.**, Bezyak, J., & Keegan, J. (2012). Special issue: Health promotion for people with chronic illness and disability. *Rehabilitation Counseling Bulletin*, *56*(1), 1-67.

Grants and Contracts: Grants – Dr. Chung-Yi Chiu

University of Texas Southwestern Medical Center, School of Health Professions. Faculty Research Grants for FY 2009-10: "Evaluating the Health Action Process Approach as a Culturally-Sensitive Health Promotion Model for People with Multiple Sclerosis from Racial and Ethnic Minority Backgrounds." **\$2,250** (2010-2012). (Principal Investigator). Funded.

The North Texas Food Bank. The sponsored research program: "An Exploratory Study of Consumers' Experience of Using Food Pantries and Their Self-Sufficiency, Health, and Quality of Life." **\$3,080** (2012-2013). (Principal Investigator). Funded.

National Institute of Health, Dissemination and Implementation Research in Health (R21): "Breast Cancer Rehabilitation Improving Daily Function and Role Participation." **\$275,000** (2013-2015). (Principal Investigator). Submitted.

National Multiple Sclerosis Society. Pilot Research Grants: "Psychometric Properties of Outcome Measures Used to Evaluate Symptoms of Multiple Sclerosis." **\$42,923** (2012-2013). (Principal Investigator). Submitted.

Hogg Foundation for Mental Health. Mental Health Research Grants for Tenure-Track Assistant Professors in Texas: "A Theory-Driven Physical Activity Self-Management Intervention for Middle-Aged and Older Adults with Serious Mental Illness." **\$17,400** (2012-2013). (Principal Investigator). Submitted.

The North Texas Food Bank. The sponsored research program: "Stages of Change for Self Sufficiency." **\$56,000** (2012-2013). (Principal Investigator). Submitted.

The North Texas Food Bank. The sponsored research program: "Relationships Between Food Insecurity, Eating Behavior, and Health Among Food Assistance Users." **\$50,000** (2012-2013). (Principal Investigator). Submitted.

The University of Texas Academy of Health Science Education. The University of Texas System. Health Science Education Small Grants Program: "Improving Evidence-Based Practice Education by Building an Outcome Measure Information System for the University Rehabilitation Services." **\$4,780** (2012-2013). (Principal Investigator). Submitted.