# **GREGORY KNELL**

Postdoctoral Research Fellow
University of Texas Health Science Center at Houston
School of Public Health
7000 Fannin St · UCT #2528 · Houston, TX 77030
214-457-6485 (cell) · Gregory.Knell@uth.tmc.edu

### **EDUCATION**

2017 Ph.D., Epidemiology

University of Texas School of Public Health, Houston, Texas

2013 M.S., Kinesiology

University of North Texas, Denton, Texas

2005 B.S., Kinesiology

Texas A&M University, College Station, Texas

## **POST-GRADUATE TRAINING**

2017- Postdoctoral Research Fellow

University of Texas School of Public Health, Houston, Texas Michael & Susan Dell Center for Healthy Living, Austin, Texas Project: *Cancer Education and Career Development Program* Grant number: NCI/NIH R25 CA57712. Mullen, PD (PI).

# **PROFESSIONAL EXPERIENCE**

2013-2017 Doctoral Research Assistant

University of Texas School of Public Health, Austin, Texas

Project: Effects of Light Rail Transit on Physical Activity: A Natural Experiment.

Grant number: NIDDK/NIH R01 DK101593. Kohl, HW III (PI).

2011-2012 Teaching Fellow

Department of Kinesiology, Health Promotion & Recreation, College of Education,

University of North Texas, Denton, Texas.

2006-2011 Marketing Manager

Robwill Inc., Dallas, Texas

2005-2006 Subcontractor

Hurricane Katrina Relief, GL Barron Company, Inc., Fort Worth, Texas

### **RESEARCH INTERESTS**

- · Understanding the impacts of upstream, policy-level changes to the physical, social, behavioral, and economic environments on physical activity.
- The dynamic interplay of movement and non-movement behaviors (sleep, sedentary, and physical activity) across the 24-hour continuum, and collectively how these behaviors can be harnessed to prevent and treat chronic diseases.
- · Using and improving state of the art methods to measure movement and non-movement behaviors and their contextual factors (e.g., spatial location, etc.).

## **HONORS & AWARDS**

2017	Emerging Researcher Travel Award, National Institutes of Health (NIH), Office of Disease Prevention (ODP), Pathways to Prevention Workshop on Methods for Evaluating Natural Experiments in Obesity:
2017	National Honor Society of Public Health Inductee, Delta Omega, Alpha Iota Chapter
2016	Conference/Meeting Travel Award, Interdepartmental Concentrations, University of Texas School of Public Health
2016	Inaugural Outstanding Graduate Assistant, Michael and Susan Dell Center for Healthy Living
2014	UT School of Public Health Dean's Excellence Scholarship, University of Texas Health Science Center (UTHealth)
2013	Lauream Christian Robertson Memorial Scholarship, University of North Texas
2012	The Vivian S. Spohn Education Scholarship, University of North Texas
2012	Kenneth Bahnsen Scholarship, University of North Texas
2012	Victor and Flo Rodriguez Scholarship, University of North Texas
2005	Academic All American, Men's Collegiate Lacrosse Association, Texas A&M University

### **PUBLICATIONS**

*Peer reviewed (\*from dissertation)* 

- 1) **Knell G**, Qing L, Gabriel KP, Shuval K. Long term weight loss and metabolic health in adults concerned with maintaining or losing weight: findings from NHANES. *Mayo Clinic Proceedings*. Accepted April 20, 2018. (In Press).
- \*Knell G, Durand CP, Shuval K, Kohl III HW, Salvo D, Olyuomi AO, Gabriel KP. If you build it, will they come? A quasi-experimental evaluation of sidewalk improvements and changes in physical activity. *Translational Journal of the American College of Sports Medicine.* 2018 May; 9(66-71). NIHMSID: NIHMS931878. DOI: 10.1249/TJX.00000000000000000
- \*Knell G, Durand CP, Shuval K, Salvo D, Kohl III HW, Sener IN, Gabriel KP. Transit Use and Physical Activity: Findings from the Houston Travel Related Activity in Neighborhoods (TRAIN) Study. *Preventive Medicine Reports.* 2018 March; 9(55-61). PMID: 29340271 PMCID: PMC 5766755 DOI: doi.org/10.1016/j.pmedr.2017.12.012
- 4) Gabriel KP, Whitaker KM, Duprez D, Sternfeld B, Lewis CE, Sidney S, **Knell G**, Jacobs DR. Clinical importance of non-participation in a maximal graded exercise test. *Preventive Medicine*. 2017 Nov 2 (17). PMID: 29080827 DOI: 10.1016/j.ypmed.2017.10.025
- 5) **Knell G**, Gabriel KP, Businelle M, Shuval K, Wetter D, Kendzor D. Ecological momentary assessment of physical activity: validation study. *Journal of Medical Internet Research*. 2017 July; 19(7). PMID: 28720556 PMCID: PMC5539388 DOI: 10.2196/jmir.7602
- 6) Durand CP, Oluyomi AO, Gabriel KP, Salvo D, Sener IN, Hoelscher DM, **Knell G**, Tang X, Porter A, Robertson MC, Kohl III HW. The Effect of Light Rail Transit on Physical Activity:

Design and Methods of the Travel-Related Activity in Neighborhoods Study. *Frontiers in Public Health.* 2016 June; 4(103). PMID: 27376051 PMCID: PMC4899453 DOI: 10.3389/fpubh.2016.00103

- 7) Durand CP, Tang X, Pettee Gabriel K, Sener IN, Oluyomi AO, **Knell G**, Porter A, Hoelscher DM, Kohl III HW. The association of trip distance with walking to reach public transit: data from the California Household Travel Survey. *Journal of Transport & Health*. 2016 June; 3(2) 154-160. PMID: 27429905 PMCID: PMC4941821 DOI: 10.1016/j.jth.2015.08.007
- 8) Durand CP, Oluyomi A, Sener IN, **Knell G**, Pettee-Gabriel K, Kohl III, HW. Transport-related physical activity: definitions, status and research directions. *Russian Journal of Preventive Medicine*. 2014 February; 17(n1):55-60. PMCID: Not available published in Cyrillic characters.

### Under review

\*Knell G, Gabriel KP, Salvo DS, Durand CP, Shuval K, Kohl III HW, Brown HS. Cost-effectiveness of improvements to the built environment intended to increase physical activity. (Under review: *Preventive Medicine Reports*).

**Knell G**, Salvo D, Shuval K, Durand CP, Kohl III HW, Gabriel KP. A methodological approach to retaining instruments and associated data in community-based settings: The TRAIN Study. (Under review: *PLOS ONE*).

### In preparation

Oluyomi AO, **Knell G**, Durand CP, Salvo D, Sener IN, Gabriel KP, Hoelscher DM, Kohl III HW. The assessment of the micro-scale built environment features of light rail transit station neighborhoods – The TRAIN Study. (Target: *Journal of Health Geographics*).

**Knell G**, Durand CP, Kohl III HW, Shuval K, Wu I, Gabriel KP. Prevalence and trends of meeting sleep, screen-time, and physical activity recommendations among US youth: Findings from YRBSS. (Target: *Preventing Chronic Disease*).

ten Hoor G, **Knell G**, Plasqui G, Durand CP, Gabriel KP, Schol AMWJ, Kok Get al. Bidirectional association of accelerometer determined sedentary behavior and physical activity with sleep duration among adolescents. (Target: *Sleep*).

Kreis S, **Knell G**, Gabriel KP, Durand CP, Oluyomi AO, Kohl III HW. Examining the role of neighborhood self-selection on relocation and its effects on physical activity: A prospective analysis of the TRAIN Study cohort. (Target: *American Journal of Preventive Medicine*).

**Knell G**, Song JJ, Durand CP, Cheung J, Gabriel KP. The interaction effect of sleep and physical activity on energy expenditure. (Target: *Journal of Sport Sciences*).

# Reports/white papers

Nehme E, Byars A, **Knell G**, Oluyomi A. The South Lamar corridor study health impact assessment. Prepared by Hexagon Consulting Services. Prepared for HDR Engineering and Department of Transportation, City of Austin, Austin, Texas. URL: http://www.moveaustinforward.com/wp-content/uploads/2016/08/AppendixE\_HIA.pdf. (Archived by WebCite® at http://www.webcitation.org/6qalgWP9c). July 2015. Accessed 19 May 2017.

#### **PROFESSIONAL PRESENTATIONS**

Oral presentations

**Knell G**, Durand CP, Shuval S, Kohl HW, Sener IN, Gabriel KP. Transit use and physical activity: Findings from the Houston Travel-Related Activity in Neighborhoods (TRAIN) Study. Oral presentation. *Active Living Research* Conference 2018. Banff, Alberta, Canada. February 11-14, 2018.

**Knell G**, Gabriel KP, Durand CP, Salvo D, Kohl HW. Relationship between physical activity and public transit use. Oral thematic poster presentation. International Society for Physical Activity and Health *6th Annual Congress*. Bangkok, Thailand. November 17, 2016.

**Knell G**, Salvo D, Gabriel KP, Durand CP, Oluyomi A, Robertson M, Hoelscher DM, Kohl HW III. Describing the methodology to estimate accelerometer return percentage from a study utilizing mail-based data collection. Oral thematic poster presentation. American College of Sports Medicine *63rd Annual Meeting*. Boston, MA, USA. June 1, 2016.

**Knell G**, Gabriel KP, Businelle M, Shuval K, Kendzor D. Convergent Validity of Ecological Momentary Assessment to Assess Free-Living Sedentary Behavior and Physical Activity. Oral thematic poster presentation. American College of Sports Medicine *63rd Annual Meeting*. Boston, MA, USA. June 2, 2016.

Kohl HW, Durand CP, Gabriel KP, **Knell G**, Sener IN, Tang X, Hoelscher DM. Health in All Policies: Multi-sectoral policy approaches for encouraging physical activity session. Natural Experiments and Physical Activity at the Local Level: Houston TRAIN study. Round-table presentation. American Public Health Association *Annual Meeting Physical Activity Section*. Chicago, IL, USA. November 1-4, 2015.

**Knell G**, Morrow JR, Vingren J, Jackson AW. Reliability of an online system to assess musclestrengthening activities in kinesiology students. Oral presentation. American College of Sports Medicine *61st Annual Meeting*. Orlando, FL, USA. May 27-31, 2014.

#### **Posters**

Dooley EE, Salvo D, Gabriel KP, Johnson AM, Durand CP, **Knell G**, Kreis SJ, Sener IN, Kohl III HW. Factors related to accelerometer-determined patterns of physical activity in adults within The Houston TRAIN Study: The Houston TRAIN Study. Accepted for presentation at the American College of Sports Medicine *64th Annual Meeting*. Minneapolis, MN, USA. May 2018.

Johnson AM, Dooley EE, Salvo D, Kohl III HW, Durand CP, **Knell G**, Kreis SJ, Gabriel KP. Accelerometer-Determined Physical Activity and Sedentary Behavior among Majority-Minority Sample of Adults: The Houston TRAIN Study. Accepted for presentation at the American College of Sports Medicine *64th Annual Meeting*. Minneapolis, MN, USA. May 2018.

Shuval K, **Knell G**, Li Qing, Gabriel KP. Long-term weight loss and metabolic syndrome in U.S. adults. Accepted for presentation at the *Society for Behavioral Medicine* 39<sup>th</sup> Annual Meeting & Scientific Sessions. New Orleans, LA, USA. April 2018.

Johnson AM, Dooley EE, Salvo D, Kohl III HW, Durand CP, **Knell G**, Kreis SJ, Gabriel KP. Accelerometer-Determined Physical Activity and Sedentary Behavior among Majority-

Minority Sample of Adults: The Houston TRAIN Study. Accepted for presentation at the Texas Chapter of the American College of Sports Medicine 2018 Annual Meeting. Austin, TX, USA. March 2018.

Johnson AM, Dooley EE, Salvo D, Kohl III HW, Durand CP, **Knell G**, Kreis SJ, Gabriel KP. Accelerometer-Determined Physical Activity and Sedentary Behavior among Majority-Minority Sample of Adults: The Houston TRAIN Study. Accepted for presentation at the St. David's Center for Health Promotion & Disease Prevention *Annual Conference:* "Health Disparities in the Precision Health Era." Austin, TX, USA. February 2018.

**Knell G**, Durand CP, Shuval K, Kohl HW, Salvo D, Olyuomi A, Gabriel KP. If you build it, will they come? A natural experiment of sidewalk improvements and physical activity. Accepted for presentation at the Pathways 2 Prevention Workshop, Methods of Evaluating Natural Experiments in Obesity. *National Institutes of Health*. Bethesda, MD, USA. December 2017.

Fresquez J, **Knell G**, Durand CP. A randomized controlled trial using Amazon Mechanical Turk to determine the effect of questionnaire wording on response patterns. Accepted for presentation at the Summer Undergraduate Innovation in Cancer Prevention Research Seminar. *Cancer Prevention Research Institute of Texas (CPRIT)*. July 2017.

Xiaohui T, Durand CP, Salvo D, Gabriel KP, **Knell G**, Porter A, Sener IN, Hoelscher DM, Robertson M, Kohl HW. Application of theory of planned behavior to transit use: The Houston TRAIN Study. Accepted for presentation at the American College of Sports Medicine *63rd Annual Meeting*. Boston, MA, USA. May 2016.

**Knell G**, Gabriel KP, Durand CP, Oluyomi A, Armstrong M, Kohl HW. Obtaining accelerometer data through mail administration: The Houston Transport Related Activity in Neighborhoods (TRAIN) Study. Accepted for presentation at the American College of Sports Medicine *62nd Annual Meeting*. San Diego, CA, USA. May 26-30, 2015.

Xiaohua T, Oluyomi A, Durand CP, **Knell G**, Gabriel KP, Sener IN, Hoelscher D, Kohl HW. Land use walkability around a newly built light rail transit line: The Houston TRAIN Study. Accepted for presentation at the American College of Sports Medicine *62nd Annual Meeting*. San Diego, CA, USA. May 26-30, 2015.

Gabriel KP, **Knell G**, Durand CP, Oluyomi A, Kohl HW. Differences in accelerometer-determined sedentary time and physical activity by transportation-related characteristics. Accepted for presentation at the American College of Sports Medicine *62nd Annual Meeting*. San Diego, CA, USA. May 26-30, 2015.

Durand CP, Oluyomi A, Gabriel KP, Sener IN, Hoelscher DM, **Knell G**, Xiaohui T, Kohl HW. The Effect of Light Rail Transit on Physical Activity: Design and Methods of the Travel Related Activity in Neighborhoods (TRAIN) Study. Accepted for presentation at the American College of Sports Medicine *Conference "Moving Active Transportation to Higher Ground: Opportunities for Accelerating the Assessment of Health Impacts"* cosponsored by the *Transportation Research Board of the* National Academies of Science. Washington, D.C., USA. April 12-14, 2015.

**Knell G**, Jackson AW, Morrow JR. Health-related fitness in Texas children: 2010-2011 and 2011-2012 FITNESSGRAM® results. Presented at the Texas Association for Health, Physical Education, Recreation and Dance *Annual Convention*, Dallas, TX, USA. December 2013.

**Knell G**, Morrow JR, Martin SB, Jackson AW. Health-related fitness in Texas children: 2011-2012 FITNESSGRAM® results. Presented American College of Sports Medicine *60th Annual Meeting*, Indianapolis, IN, USA. May 2013.

Taylor VK, Faulkner J, **Knell G**, Greenleaf C. Gender differences in body-related psychological constructs. Presented Texas Association for Health, Physical Education, Recreation & Dance *Annual Convention*, Dallas, TX, USA. December 2011.

# **TEACHING EXPERIENCE**

#### A. Courses

YEAR	COURSE NAME	ROLE	MODE	LEVEL	# OF STUDENTS	# of SECTIONS
Univers	ity of Texas School of Public H	ealth				
2017	Advanced methods in epidemiology (Epi III)	Lead TA	ITV	Doctoral and masters	60	1
2016	Physical activity assessment and surveillance	TA	ITV	Doctoral and masters	6*	1
2015	Fundamentals of epidemiology (Epi I)	co-TA	Online	Doctoral and masters	60	1
	Physical activity and health: epidemiology and mechanisms	TA	ITV	Doctoral and masters	10*	1
2014	Field research methods in epidemiology (Epi II)	co-TA	ITV	Doctoral and masters	34	1
	Physical activity and public health practice	TA	ITV	Doctoral and masters	9*	1
University of Texas at Austin						
2016	Epidemiology	Specialist	In- person	Undergraduate	60	2
	Social and environmental contexts of health	Specialist	In- person	Undergraduate	48	2
2015	Epidemiology	Specialist	In- person	Undergraduate	60	2
University of North Texas						
2013	Scientific principles and practices of health-related fitness	Teaching fellow	In- person	Undergraduate	40	2
2011- 2013	Various physical activity courses	Teaching fellow	In- person	Undergraduate	>100	6

\*Course also included students from the University of Texas at Austin; number not reflected here.

# B. Guest lectures

YEAR	LECTURE	INSTITUTION	INSTRUCTOR
2018	"Transit use and physical activity: Findings from the Houston Travel-Related Activity in Neighborhoods (TRAIN) Study"	UTSPH-Dallas	Wendell Taylor, PhD
2018	"Transit use and physical activity: Findings from the Houston Travel-Related Activity in Neighborhoods (TRAIN) Study"	UTSPH-Houston	Sally Vernon, PhD
<mark>2018</mark>	"Transit use and physical activity: Findings from the Houston Travel-Related Activity in Neighborhoods (TRAIN) Study"	Texas A&M University	Heather Clark, PhD
2017	"Convergent validity of ecological momentary assessment of physical activity: Data from the PATHS Study"	UTSPH/UT Austin	Kelley Pettee Gabriel, PhD
2016	"Measuring physical activity: pitfalls and advances in technology"	UTSPH/UT Austin	Harold W. Kohl, III, PhD
2015	"Ecological momentary assessment of physical activity"	UTSPH/UT Austin	Kelley Pettee Gabriel, PhD

C. Mentorship				
YEAR	STUDENT NAME	LEVEL	PROJECT NAME	ROLE
2017	Samantha Kreis	Masters	Examining the role of neighborhood self-selection on relocation and its effects on physical activity: A prospective analysis of the TRAIN Study cohort.	Mentored on manuscript preparation and statistical analysis
	Joseph Fresquez	Undergraduate	A randomized controlled trial using Amazon Mechanical Turk to determine the effect of	Co-mentored CPRIT summer fellowship trainee on design, implementation, and dissemination of a cancer

questionnaire wording on response patterns.

prevention research project.

# **PROFESSIONAL SERVICE**

External	service

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2018	Ad-Hoc reviewer, International Journal of Environmental Research and Public Health		
2018	Ad-Hoc reviewer, BMC Public Health		
2017	Ad-Hoc reviewer, CA: A Cancer Journal for Clinicians		
2017	Consultant, Nutrition Policy Institute, California Health and Nutrition Goals Examination Survey, physical activity survey questionnaire review.		
Internal servi	ce and committees		
2017	Abstract Reviewer, PDA Travel Award, Postdoctoral Association, University of Texas Health Science Center (UTHealth) at Houston, Houston, Texas		
2016-2017	Committee Member, Special Advisory Committee on Graduate Student Caregivers' Needs, The Graduate School, The University of Texas at Austin, Austin, Texas		
2016-2017	Doctoral Student Representative, UTHealth School of Public Health in Austin Student Association		
Other service	activities		
2016	Academic Tutor, Breakthrough Austin, Austin, Texas		
2016	Meal Provider Team Leader, Friends of the House Charities – Ronald McDonald House Charities, Austin, Texas		
2007-2012	Tournament Director, Team Viva Lacrosse Club, Dallas, Texas		
2008-2010	Young Professional Advisory Committee, BRIDGE Lacrosse, Dallas, Texas		
2008-2010	President, Dallas Lacrosse Club, Dallas, Texas		

# **MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS**

2016-	International Society for Physical Activity and Health
2011-	American Public Health Association, Physical Activity Special Interest Group
2011-	American College of Sports Medicine