

**BIOGRAPHICAL SKETCH**

Provide the following information for the Senior/key personnel and other significant contributors.

Follow this format for each person. DO NOT EXCEED FIVE PAGES.

NAME: Garza, Kimberly B.

eRA COMMONS USER NAME (agency login): kbblake

POSITION TITLE: Assistant Professor of Health Outcomes Research and Policy

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Auburn University, Auburn, AL	BS	08/1998	Pharmacy
Auburn University, Auburn, AL	PHMD	06/1999	Pharmacy
West Virginia University, Morgantown, WV	MBA	08/2006	Business Administration
West Virginia University, Morgantown, WV	PHD	12/2010	Pharmaceutical and Pharmacological Sciences
Erlanger Health System, Chattanooga, TN	Resident	06/2000	Pharmacy Practice

**A. Personal Statement**

I have experience and expertise that will contribute to the success and completion of this project. My research involves application of concepts from behavioral economics (BE) to preventive health behaviors, specifically diet, physical activity, and medication adherence. In my work, I have incorporated the concepts of impulsive choice, loss aversion, and prospect theory in the assessment of behavior and design of interventions for health behavior change. I have also participated in projects related to vaccination, including the planning and analysis of a brief educational intervention to encourage zoster vaccination in community pharmacies. Therefore, I am well-equipped to provide training to pharmacists to help them leverage BE concepts to influence patient vaccination behaviors. In addition, I am a licensed pharmacist and will provide clinical oversight for the intervention in pharmacies located in Alabama.

- a. Garza KB, Harris CV, Bolding MS. Examination of value of the future and health beliefs to explain dietary and physical activity behaviors. *Res Social Adm Pharm.* 2013 Nov-Dec;9(6):851-62. PubMed PMID: [23287815](#).
- b. Garza KB, Ding M, Owensby JK, Zizza CA. Impulsivity and Fast-Food Consumption: A Cross-Sectional Study among Working Adults. *J Acad Nutr Diet.* 2015 Jun 19;PubMed PMID: [26095434](#).
- c. Teeter BS, Garza KB, Stevenson TL, Williamson MA, Zeek ML, Westrick SC. Factors associated with herpes zoster vaccination status and acceptance of vaccine recommendation in community pharmacies. *Vaccine* 2014; 32(43):5749-54.
- d. Garza KB, Owensby JK, Braxton Lloyd K, Wood EA, Hansen RA. Pilot study to test the effectiveness of different financial incentives to improve medication adherence. *Ann Pharmacother* 2016;50(1):32-8.

**B. Positions and Honors****Positions and Employment**

1999 - 2000	Pharmacy Practice Resident, Erlanger Health System, Chattanooga, TN
2000 - 2000	Clinical Pharmacist, Carraway Methodist Medical Center, Birmingham, AL
2001 - 2001	Clinical Pharmacy Specialist, Baptist Health System – Montclair, Birmingham, AL
2001 - 2002	Clinical/Staff Pharmacist, Memorial Health Care System, Chattanooga, TN
2002 - 2004	Staff Pharmacist, St. Mary's Medical Center, Huntington, WV

- 2003 - 2005 Director of Pharmacy Services, Pharmacy Associates, Inc., Huntington, WV
- 2005 - 2006 Director of Pharmacy, Cornerstone Hospital of Huntington, Huntington, WV
- 2006 - 2008 Graduate Teaching Assistant, West Virginia University School of Pharmacy, Morgantown, WV
- 2006 - 2010 Consultant Pharmacist, Health South Mountainview Rehabilitation Hospital, Morgantown, WV
- 2008 - 2010 Graduate Research Assistant, West Virginia University Health Research Center, Morgantown, WV
- 2011 - Assistant Professor of Health Outcomes Research and Policy, Auburn University Harrison School of Pharmacy, Auburn, AL

### **Other Experience and Professional Memberships**

- 2006 - Member, American Association of Colleges of Pharmacy
- 2006 - Member, International Society for Pharmacoeconomics and Outcomes Research
- 2008 - Member, Society for Medical Decision Making
- 2011 - Member, Society of Behavioral Medicine
- 2011 - Member, Alabama Obesity Task Force
- 2011 - Member, American Pharmacists Association
- 2011 - Faculty Advisor, Auburn University Student Chapter of the International Society for Pharmacoeconomics and Outcomes Research
- 2011 - 2014 Graduate Program Officer, Department of Health Outcomes Research and Policy, Auburn University Harrison School of Pharmacy
- 2011 - 2015 Member, American Association of Colleges of Pharmacy, Social and Administrative Sciences Section Graduate Programs Committee
- 2012 - 2013 Co-chair, Alabama Obesity Task Force Data Committee
- 2015 - Faculty Advisor, Harrison School of Pharmacy Student Chapter of the Academy of Managed Care Pharmacy
- 2015 - Member, Auburn University Assessment Quality Working Group

### **Honors**

- 2007 Wal-Mart Annual Conference Scholarship, American Association of Colleges of Pharmacy
- 2009 CVS Caremark – AFPE Pre-Doctoral Fellowship in Pharmaceutical Science , American Foundation for Pharmaceutical Education
- 2010 Graduate Student Outstanding Achievement Award, West Virginia University School of Pharmacy
- 2013 Faculty Mentor for Benjamin S. Teeter Wal-Mart Annual Conference Scholarship, American Association of Colleges of Pharmacy
- 2015 Faculty Mentor for Justin K. Owensby AFPE Pre-Doctoral Fellowship in Pharmaceutical Science, American Foundation for Pharmaceutical Education

### **C. Contribution to Science**

1. a. In my dissertation work, I analyzed the association between delay discounting as a measure of impulsivity, healthfulness of diet, and physical activity (Garza et al, 2013). The association between delay discounting and addictive behaviors, such as smoking, alcohol abuse, and illicit drug use had been well-established. However, there was a paucity of published research measuring the association between delay discounting and preventive health behaviors. My work demonstrated a negative association between degree of delay discounting and healthfulness of diet and physical activity levels (higher impulsivity was associated with less healthful behaviors). To extend this work, I conducted a larger study that demonstrated a positive association between delay discounting and frequency of fast food consumption (Garza et al, 2015). The implication of these findings is that successful interventions targeted toward these behaviors should be designed to counteract the tendency to place a higher value on immediate rewards compared to long-term rewards. In addition to these health behaviors, I also contributed to a study examining impulsivity and non-medical use of prescription drugs (Messina et al, 2014).

- a. Garza KB, Harris CV, Bolding MS. Examination of value of the future and health beliefs to explain dietary and physical activity behaviors. *Res Social Adm Pharm*. 2013 Nov-Dec;9(6):851-62. PubMed PMID: [23287815](#).
  - b. Messina BG, Silvestri MM, Diulio AR, Murphy JG, Garza KB, Correia CJ. Alcohol use, impulsivity, and the non-medical use of prescription stimulants among college students. *Addict Behav*. 2014 Dec;39(12):1798-803. PubMed PMID: [25123349](#).
  - c. Garza KB, Ding M, Owensby JK, Zizza CA. Impulsivity and Fast-Food Consumption: A Cross-Sectional Study among Working Adults. *J Acad Nutr Diet*. 2015 Jun 19;PubMed PMID: [26095434](#).
2. My recent research pursuits have transitioned from cross-sectional work describing the associations between delay discounting and health behaviors to the application of behavioral economics in designing interventions to improve health behaviors. Using a randomized controlled trial, we assessed the feasibility of different types of financial incentives, structured using concepts from behavioral economics (e.g., delay discounting, loss aversion, and unrealistic optimism) to improve medication adherence (Garza et al, 2016). Our study demonstrated feasibility of these incentive structures, but found no significant differences in effectiveness of the two structures, likely attributed to a ceiling effect due to high baseline adherence. Future studies will utilize a larger, more diverse population, with recruitment targeted toward individuals identified as having low adherence.
- a. Garza KB, Owensby JK, Braxton Lloyd K, Wood EA, Hansen RA. Pilot study to test the effectiveness of different financial incentives to improve medication adherence. *Ann Pharmacother* 2016;50(1):32-8.
3. In addition to my work in behavioral economics, I have been involved in a number of studies related to pharmacist-provided advanced-care programs. I have led a study to assess barriers to provision of medication therapy management (MTM) services (Blake et al, 2010). I also served as co-investigator on two studies assessing outcomes of student pharmacist-provided patient education on salt intake and shingles vaccination (Garza et al, 2013; Teeter et al, 2014; Garza et al, 2015). These studies demonstrated positive outcomes in both patients and student pharmacists. This body of work as a whole has informed the development of pharmacist-provided disease management and patient education services.
- a. Blake KB, Madhavan SS. Perceived barriers to provision of medication therapy management services (MTMS) and the likelihood of a pharmacist to work in a pharmacy that provides MTMS. *Ann Pharmacother*. 2010 Mar;44(3):424-31. PubMed PMID: [20179254](#).
  - b. Garza KB, Westrick SC, Teeter BS, Stevenson TL. Incorporating hypertensive patient education on salt intake into an introductory pharmacy practice experience. *Am J Pharm Educ*. 2013 Nov 12;77(9):199. PubMed PMID: [24249861](#); PubMed Central PMCID: [PMC3831410](#).
  - c. Teeter BS, Garza KB, Stevenson TL, Williamson MA, Zeek ML, Westrick SC. Factors associated with herpes zoster vaccination status and acceptance of vaccine recommendation in community pharmacies. *Vaccine*. 2014 Sep 29;32(43):5749-54. PubMed PMID: [25171848](#).
  - d. Garza KB, Williamson M, Stevenson TL, Teeter BS, Zeek ML, Savoie M, Westrick SC. Patient vaccination education program through an introductory pharmacy practice experience. *Curr Pharmacy Teach Learn* 2015;7(6):764-70.

**Complete List of Published Work in My Bibliography:**

<http://www.ncbi.nlm.nih.gov/sites/myncbi/kimberly.garza.1/bibliography/48669465/public/?sort=date&direction=ascending>

## **D. Research Support**

### **Ongoing Research Support**

MISP, Merck

Westrick, Salisa (PI)

09/01/15-08/31/17

Impact of a multicomponent immunization intervention on pneumococcal and herpes zoster vaccinations: A randomized controlled trial of community pharmacies in two states

The objective of this proposal is to increase the current level of pharmacy-based immunization delivery of pneumococcal vaccine and herpes zoster vaccine and foster practice change to sustain the intervention effect.

Role: Co-Investigator

### **Completed Research Support**

New Investigator Award, American Association of Colleges of Pharmacy

Garza, Kimberly B. (PI)

01/01/14-12/31/14

Effectiveness of different financial incentives to improve medication adherence

The objective of this proposal was to determine the relative effectiveness of interventions for medication adherence that use frequent feedback and incentives, based on concepts from behavioral economics.

Role: PI

AU IGP, Auburn University Internal Grants Program

Garza, Kimberly B. (PI)

02/01/12-01/31/13

The association between body weight, value of the future and dietary behaviors

The objective of this proposal was to evaluate the association between value of the future and dietary behaviors in underweight/healthy weight individuals compared to overweight/obese individuals.

Role: PI