

Research Initiation Program (RIP)
Award Recipients
2014-2015

The Research Initiation Program received an outstanding response to the call for proposals. The quality and quantity of proposals for this year's competition were generally great! The RIP Committee would like to have had sufficient funds available to award everyone, but due to the lagging economy only the following proposals have been selected for FY 2014-2015 funding

Dr. Richard Moye
Behavioral Sciences and Social Work
College of Arts & Sciences
Award Amount: \$8,400.00

Project Title: *"Investigation of Decision Making of Individuals Purchasing a House and the Resulting Patterns of Racial Residential Segregation"*

Abstract: This research project will investigate the decision making process of those individuals purchasing housing. Levels of black-white residential segregation remain extremely high in virtually all major metropolitan areas of the country. One of the primary explanations for the high levels of segregation is a preference among both blacks and whites to live in same-race neighborhoods. However, our knowledge about those preferences is extremely limited.

I will improve upon previous research by including only respondents actively shopping for housing, asking about specific neighborhoods instead of abstract 'ideals,' and including questions about schools.

I will collect data from a sample of 300 households who are currently on the market for a house.

Participants will complete the survey online.

I will ask realtors to pass along a link for their clients (buyers) to participate in the survey. I plan to compensate households for their time with a gift card incentive. Realtors will also receive a gift card incentive for each of their clients that participate in the survey.

The proposed research will provide insight into the decision making that perpetuates the existing patterns of racial and ethnic segregation in American Society. After demonstrating the efficacy of this research design, I will be able to apply for larger grants and bring dollars back to the University. Potential sources of external funding include HUD, Russell Sage Foundation, and the Ford Foundation.

Dr. Denise Nation
Behavioral Sciences and Social Work
College of Arts & Sciences
Amount Awarded: \$9094.52

Project Title: *"Views From the South: Occupational Perceptions of Female Police Officers"*

Abstract: The purpose of this study is to increase knowledge about sworn female officers' (SFOs) perceptions of their workplace, colleagues, the community and policing strategies. Few studies have examined the effects of perceptions of tokenism on either perceptions of workplace treatment, stress, discrimination both within and outside the police organization. This project will draw upon both quantitative and qualitative data collection methodology to achieve these aims. A sample of SFOs in law enforcement agencies throughout the state of North Carolina will be recruited using purposive sampling

strategy for larger agencies and stratified random sampling strategy for smaller agencies. It is anticipated that the findings from the project will provide important information that will inform police managers in creation of effective policies and procedures that will positively impact understanding of SFOs, thereby positively impacting recruitment and retention.

Dr. Mesia Steed
Biological Science
College of Arts & Sciences
Amount Awarded: \$10,000.00

Project Title: “MMP and Hypertension”

Abstract: Hypertension is a treatable and preventable disease that affects over 50 million people in the United States and evidence suggests that a genetic predisposition may underlie this condition. Studies suggest that hypertensive humans and animal models of hypertension exhibit increased central and peripheral vascular remodeling but the knowledge of the events that lead to tissue remodeling associated with vascular degradation and angiogenesis in elevated blood pressure is rudimentary. Our *goal* is to study the matrix metalloproteinases (MMP) expression in cerebral vessels to determine their integrity leading to ischemic and/or hemorrhagic strokes in hypertension. The overall *objective* is to understand the profound changes in the cerebral vascular remodeling. We will use a multifaceted approach to study changes in the cerebral vessels of (mRen2)²⁷ model of hypertension. We propose *2 specific aims* to address this objective: **1)** determine whether RAS-mediated hypertension differentially modulates MMP dynamics and how the dynamics are modified in hypertension; **2)** determine whether tissue inhibitors of matrix metalloproteinases (TIMPs) aid in altering MMP dynamics. We will use isolated capillaries from the medulla oblongata and hypothalamus. It is our *expectation* that the resultant approach will lead to a better perception of how MMP and TIMPs function to regulate the integrity of the vascular system during hypertension. More importantly, knowledge of the behavior of molecules responsible for alteration in cerebral vessels will point out novel targets for preventive and therapeutic interventions. Most importantly, the proposed research is designed to be successfully conducted alongside our undergraduate students at Winston Salem State University.

Dr. Chinyu Wu
Occupational Therapy
School of Health Sciences
Amount Awarded: \$7,615.00

Project Title: “Assessing Mental Health Needs Related to Frequent Emergency Department Use by Underserved populations: A Photovoice Study”

Abstract: Background/ Purpose: Frequent emergency departments (ED) visitors consume a disproportionately greater percentage of the expensive yet precious medical services of our society. Studies had found that characteristics of frequent ED users include being uninsured and being homeless. Recent studies revealed that mental health conditions such as alcohol abuse are more prevalent than physical health conditions among frequent ED users. The purpose of this proposed study is to explore lived experience of mental health issues in individuals who are underserved, factors leading to frequent ED visits, as well as community strengths that may help to reduce ED use.

Methods: This study will use a community-based participatory research method, photovoice, to conduct participatory needs assessment on issues in the community. Data will be gathered from two underserved

neighborhoods in Winston-Salem, NC. Research participants will use digital cameras to complete three photo assignments by taking photos in the community that represent issues under study. A photo group meeting will be held after each of the photo assignments is completed, and the SHOWED method will be used to guide group discussions about photos. Data analysis methods in grounded theory will be used to identify categories of common issues and themes, and a preliminary theoretical structure about mental health issues in relations to frequent ED use will be proposed.

Significance: Knowledge gained from the study will be used to develop a collaborative mental health program to address needs in the community. Future studies may be conducted to evaluate the efficacy and effectiveness of this program.