

Personal Statement of Research, Service, and Teaching: Accomplishments and Future Plans

I have benefited from the outstretched and guiding hands of several exceptional academicians who invested immeasurable personal and professional resources into my training. It is largely because of the mentoring of these scholars combined with institutional supports afforded me that I am inspired to strive for excellence in all three areas of academe: research, service, and teaching. Below I describe my accomplishments and future plans for each area.

Overview of Research:

I am a behavioral scientist. My scholarship is grounded in theories and methods found in the field of social psychology with application to persuasive health communications (particularly risk communication) and strategies to facilitate pro-health behavior change among individuals and the environments (social, informational, psychological) which support or impede engagement in behavioral determinants of chronic disease prevention or management. My research primarily falls into the following three themes and related broad research questions:

Theme #1: Multi-level Behavioral Interventions to Achieve Improvements in the Continuum of Cardiac Care from Inpatient to Outpatient Services and Reduce Disparities (Gender and Race/Ethnicity) in Access to and Utilization of Evidence-based Cardiac Services

Guiding Research Questions:

What are the individual, health care provider, and systems-level barriers for equitable access to and utilization of outpatient cardiac rehabilitation services?

What factors at the patient, provider, and systems levels can be modified using evidence-based strategies to overcome these barriers?

In particular, I am interested in descriptive and intervention research studies conducted in real-world clinical settings that will demonstrate the effectiveness of strategies to reduce well-documented gender and race/ethnic disparities in cardiac care access, utilization, and associated cardiac clinical outcomes.

Over the last six years, I have published several peer-reviewed articles and participated in numerous conference presentations (including invited and peer-reviewed oral presentations and panel discussions) on the topic of disparities in cardiac rehabilitation utilization. I successfully obtained funding (as a co-investigator) from the Centers for Disease Control and Prevention to assess barriers to White and African-American women's referral to and enrollment in outpatient cardiac rehabilitation. I also have conducted and published additional descriptive studies of barriers to referral among inpatient cardiologists, cardiothoracic surgeons, and generalists, as well as a recent study of threats to program viability from the perspective of rehabilitation program directors located throughout New York State (one manuscript was recently submitted to *Cardiopulmonary Physical Therapy Journal* and two manuscripts are in progress).

I believe I am the only scholar nationally who has systematically contributed to the literature that addresses the determinants of cardiac rehabilitation access and underutilization from multiple perspectives: women and minority cardiac care patients, the providers who are involved in inpatient cardiac care, as well as the directors of outpatient cardiac rehabilitation programs.

I have established a program of research on this topic with an expert multi-disciplinary collaborative team. My research utilizes both qualitative and quantitative methods, and I believe my record of peer-reviewed publications and professional conference presentations demonstrate my skill as a scientist to study a problem using multiple data collection and analysis tools.

My current and future plans are to secure funding of a large multi-year intervention trial to address barriers to patient education, physician referral, and systems of care that impede communication between inpatient and outpatient cardiac care settings. Strategies which I am currently pursuing include patient education (design and evaluation of print and video-based materials that are tailored to gender, race/ethnicity, and information processing motivation and ability to process characteristics), provider behavior change (targeting guideline-supported referral behaviors), and improved automated information systems (targeting improvements in the inpatient to outpatient continuum of care and better communication across settings).

I also am interested in building and maintaining collaborative relationships between: academics representing multiple disciplines; clinicians and other health care professionals; and consumers and patient advocates. I endeavor to conduct community-based participatory research that actively engages multiple stakeholders in the research planning, implementation, evaluation, and dissemination process to enhance the likelihood that the work will be sustained and replicated in other settings locally and nationally (as appropriate to the science and context).

Theme # 2: Health Communication Interventions

Guiding Research Question:

How do individuals process health communications and what combination of characteristics (related to the audience/receiver, message, source, channel, and context) can achieve optimum message learning, informed decision-making, and related health behavior change?

I am particularly interested in understanding how receiver characteristics (such as personal perceptions of risk) and message characteristics (such as framing variables) influence the processing of health messages and the decision to adopt a recommended action (such as the decision to be screened for heart disease risk factors).

My prior collaborative work has involved studies of information processing variables to better understand factors that influence the informed health care treatment decision-making among women (especially those underrepresented in clinical research such as African-Americans) recently diagnosed with breast cancer to choose a treatment plan that involved participation in a clinical trial (or not).

My recently published work on this topic assesses the effectiveness of experimental heart disease prevention messages that compare positive and negative framed appeals to motivate young adult women to engage in a desired health behavior, especially those who have a family history of risk factors and an elevated perception of their susceptibility. My publication on message frames targeting young adult women was recently recognized as an exceptional contribution to the field of health behavior, as I received an early career research award for health behavior research from the American Academy of Health Behavior (March 2006) with my paper having been selected by an expert peer-review panel as the winning submission.

My future plans for this area of research are intertwined with Theme #1: to design, implement, and evaluate the effectiveness of patient and physician education materials targeting cardiac recovery in a real-world inpatient cardiac care setting (such as Stony Brook University Hospital).

(3) Alternative Models of Health Care Service Delivery and the Integration of Evidence-based Behavioral Interventions into Health Care

Guiding Research Questions:

Can health care managers better link individuals, communities, health care professionals and their affiliated institutions using an alternative model of health care delivery that is designed to improve access to health care in underserved areas (such as rural communities locally and underdeveloped regions internationally) and improve human development through training lay health workers to help others help themselves? Specifically, will a team of trained Community Health Workers (CHW), which provides basic health education and routine health screenings and monitoring of vital signs linked to remotely located clinicians (Nurse Practitioner-Medical Doctor, 'CHW-NP-MD') using evidence-based chronic disease management e-health technologies, achieve improvements in health and health care access among the chronically ill and those in remote regions of the world?

These research questions represent my current and future research interests and builds on my post-doctoral community-based research training at the Johns Hopkins University School of Public Health, Department of Health Policy and Management, where I collaborated on a NINR-funded intervention research study of a CHW-NP-MD model to improve the high blood pressure care and control outcomes of underserved African American men in Baltimore (Principal Investigator: Dr. N. Martha Hill, Professor and Dean, The Johns Hopkins University School of Nursing). The involvement of CHWs in the health care delivery team is supported by research but underutilized as a strategy to improve health and health care management outcomes (access, quality, cost). I also have published a paper describing a peer-based health education model which involves a similar concept of community empowerment and low-cost alternatives to service delivery (see book chapter and paper on lay health educators with Dr. David R. Black). I am particularly interested in implementing the CHW-NP-MD model (or variations of the model such as involving physician assistants, physical or occupational therapists as appropriate) in underserved communities (such as rural communities, urban African-American communities, and communities in low-resource Caribbean countries such as the Dominican Republic).

My future goal is to intersect research themes 1-3 by leading a series of studies that train and evaluate a new model of cardiac rehabilitation service delivery in which community health workers and peer health educators (particularly minority women) educate women about the benefits of cardiac rehabilitation and use telehealth technologies to provide alternatives to traditional outpatient cardiac rehabilitation programs in communities where access is limited (such as a home-based cardiac rehabilitation exercise program to monitor vital signs using a 'telehealth-CHW-Physical Therapist-MD' team).

Supporting these interests is a commitment to collaborative research (multi-disciplinary and across institutional settings). Most of my work engages multiple academic and non-academic stakeholders in the research process, which I very much enjoy and believe adds to the relevance and meaning of my work (personally and professionally). I am frequently approached by faculty to help develop and maintain relationships with community-based collaborators or to advise them on how to create and successfully engage investigative teams that have complementary skills and expertise.

Overview of Service:

I strive to be a good citizen to the community of scholars with whom I work at Stony Brook University, to scholars and practitioners in the health professions, as well as the communities which I live in and with whom I identify personally and/or professionally.

I believe that my colleagues at Stony Brook University value me as a leader and active contributor to the Department of Health Care Policy and Management and to the School of Health Technology and Management (SHTM). I also believe that my peers in the fields of health behavior and community-based research value and recognize my expertise as a peer-reviewer at the national level.

I have organized this section of my personal statement into two themes: (1) service to the University and (2) service to public health and health care (research and practice).

1. Service to the University.

Among my assets as a professional is an ability to effectively organize and facilitate groups, particularly for purposes of collaborative and participatory research (such as interdisciplinary research and projects that involve a community advisory board) and faculty development to enhance the research capacity of our faculty and staff.

My skills in group dynamics and related communications have been recognized by my faculty colleagues as well as the Dean. One example is my promotion to a new school-wide position, Associated Dean for Research (appointed September 2006), to support the research development activities of junior faculty. I successfully obtained a grant from the W.K. Kellogg Foundation (\$20,000 in 2005-2006) to support faculty development around issues of community-based research capacity. This grant has funded three faculty-led mini-grant research awards to support pilot-work (the process of submission and criteria for review were developed by me); provides catering and honorariums for faculty development trainings/workshops held at our School with outside expert consultants; and supports a monthly school-wide research seminar for which I am the originator and provide ongoing coordination (such as recruiting presenters and facilitating monthly seminar discussions). I launched the first seminar in February 2005 and have not missed a month since its inception (due to faculty demand, there is a waiting list to be a featured seminar presenter). There are approximately 20 faculty/staff who participate in the seminar. The presentations feature the research activities of only SHTM faculty and include work that falls anywhere on the continuum from blossoming curiosity to established program of research. I consider it an accomplishment to have created the seminar and to lead as the seminar coordinator. The seminar is valued by faculty and staff as a safe environment to share scholarship and obtain constructive peer feedback while fostering a culture of multi-disciplinary collaboration.

My future plans are to grow the SHTM monthly research seminar to continually meet the changing faculty development and research needs of the SHTM as well as other schools in the Health Sciences Center (for example, faculty from the School of Nursing have expressed an interest in participating in the seminar). I also am interested in facilitating health science research that involves off-campus collaborators (community-based non-government organizations as well as industry) to enhance the application, sustainability, and replication of evidence-based health and health care services into community settings on Long Island and nationally.

Other examples of exceptional leadership to the University include the following: I am currently the Vice President of the SHTM Faculty Assembly, having been elected by a majority vote by my faculty/staff colleagues (appointed September 2006). I am currently Chair of an ad hoc committee to review SHTM Appointments, Promotions, and Tenure (APT) policies and procedures (appointed by the past President of the SHTM Faculty Assembly).

Last year I was elected by the Faculty Assembly and recommended by the Dean to serve as the SHTM representative on the Health Sciences Center Committee on Faculty Appointments (previously chaired by Dr. Norman Edelman). In the future, I would be interested in pursuing additional opportunities to serve on University-wide initiatives as I very much enjoyed working with east and west campus representatives on the Presidential Task Force on Graduation Education (2005).

2. Service to my profession.

I am thankful for the investment of several mentors to teach me the art and science of peer-review. My professional service includes active contributions to the federal peer-review process, as I am frequently invited on grant review panels (as a return peer-reviewer) for the National Institutes of Health (National Center for Minority Health and Health Disparities) and the Centers for Disease Control and Prevention (including Comprehensive Research Centers of Excellence and Prevention Research Center Grants, respectively). I am generally invited to review proposals that require a community-based and/or participatory research orientation. I am considered an expert in this field of inquiry and am among an elite group of public health scholars nationally who received post-doctoral training to understand and apply principles of participatory research (with support from the W.K. Kellogg Foundation as a post-doctoral fellow). Most recently I was invited and served as peer-reviewer for the inaugural issue of a journal dedicated to participatory research called “*Progress in Community Health Partnerships: Research Education and Action*” to be published by the Johns Hopkins University Press. I also have reviewed journal submissions for the *Journal of General Internal Medicine* which published a special issue on community-based participatory research (2002). I am a consistent contributor to several professional organizations (such as the American Public Health Association, Community-based Public Health Caucus) and serve as an abstract reviewer for the national meeting of the American Public Health Association among other organizations (such as the American Academy of Health Behavior). I also have served as a community health grant proposal reviewer for a non-government organization including Affinity Health Plan’s “Making a World of Difference” Program (2006).

In addition to community health research-related service, I also have been invited to peer-review journal submissions based on my expertise in cardiac and clinical outcomes (such as the *Journal of Cardiopulmonary Rehabilitation* and the *Journal of Clinical Outcomes Management*).

In the future I plan to develop a training workshop for junior faculty to understand the federal grant review process from the perspective of a peer-reviewer and apply this information to write a competitive application.

Overview of Teaching:

My teaching philosophy. I believe that teaching is an honor. My teaching philosophy is based on a respect for the expertise and diversity of learning styles and educational goals of the students with whom I have the privilege of engaging in a co-learning experience. I have a consumer-oriented approach to the extent that I strive for students to get the best possible product. I believe it is important to be accessible, responsive to and solicitous of constructive feedback, open to change, generous with time and skill-building and encouraging. I want my students to finish one of my courses changed for the better as I know that I will strive to do the same. For example, I ask students enrolled in each of my classes to complete a goal-setting exercise on the first day of class. The students submit their personal course goals and I review them. We discuss the extent to which the course objectives will achieve each student's stated course goals and adjustments are made (to my course content or to the student's goals as educationally appropriate). During the last class (15 weeks later), students are asked to revisit their goals and score the extent to which each was achieved on a scale from 1 (goal not achieved at all) to 10 (goal completely achieved). We discuss the extent to which goals were met and I integrate student feedback to continuously improve upon the educational experience for all involved.

My teaching accomplishments.

I have taught four different courses over the last 5 years and have served as an invited lecturer for my faculty colleagues in the SHTM departments of Physician Assistant and Occupational Therapy and the School of Medicine's Preventive Medicine Residency Program Seminar.

Three of the courses that I teach are at the masters-level (Research Design and Practicum Proposal Writing, Health Behavior and Risk Reduction, and Community Health and Patient Education), and one course was at the senior undergraduate level as extra service (Introduction to Public Health, 2003 only). One of the courses (Health Behavior and Risk Reduction) is a new course for which I developed the syllabus, submitted and received approval from the SHTM Curriculum Committee, and taught in summer, 2005 (as extra service). I received excellent evaluations from the students who enrolled in the course (100% of the students stated that they "strongly agree" with all of the evaluation categories measured on the standard evaluation form). My student evaluations are strong for all of my courses, but I am particularly pleased that as a first-time offering the students in this new course responded with exceptionally positive feedback.

I also would like to highlight my accomplishments to teach students about research design and proposal writing. The Research Design and Practicum Proposal Writing course is a core for all students enrolled in the Master of Science in Health Care Policy and Management program. I currently teach the course in the fall and spring semesters. My students are primarily working full-time health care professionals (clinical, administrative, and/or management) who are enrolled in the Master of Science in Health Care Policy and Management program on a part-time schedule. Many of the students come to my class with little prior experience reading peer-reviewed journals and lack confidence as a scientific/technical writer, especially with regard to writing a research proposal on an original topic of their choosing. I consider it an accomplishment (of my students and my own as their instructor) that despite a lack of research-oriented career interests among most of my students and the fact that this course is required my evaluations are extremely favorable. My students frequently comment on my enthusiasm and appreciate the extensive hand-written constructive feedback and personal attention which I give to help improve their proposal writing skills. My students also are pleased to have an active researcher teaching the course.

I bring my research scholarship into the classroom by presenting studies in progress and completed to illustrate the application of research methods to emerging problems. Several students develop an unexpected affection for research and pursue research opportunities beyond the course requirements.

An example of my influence on student goals can be illustrated by the experience of an alumnus of my research design course. This student works full-time in a health care position and also is a volunteer ambulance worker. During her coursework this student expressed concern about the burden of chronic (cumulative or repetitive exposure to) stress among unpaid ambulance workers who are the first responders to a medical emergency and often have a full-time job elsewhere. I advised this student to translate her practice-based concern into a research project. The student and I have co-authored a manuscript for submission to a peer-reviewed journal *Prehospital Emergency Care* based on her research project under my supervision. The study assessed chronic stress and coping strategies among 139 volunteer ambulance personnel in Suffolk County whom we surveyed using a standardized psychological assessment tool (the student is first author, I am second author). I fully expect that this paper will be accepted for publication (submitted Feb 15, 2007).

I truly value the ability to learn from my students about current day-to-day issues encountered in their health care practice and the barriers and facilitators to integrate clinical practice guidelines and other evidence-based tools into health care services in a variety of settings. I believe that one of my teaching strengths is that I am skilled at advising students to design and conduct masters-level research or program evaluation projects that apply scientific methods to real world problems in health care policy or management. The research is student-driven but faculty directed and completely relevant to emerging issues in health care practice.

Future plans for teaching.

In the short-term future, I would like to develop a persuasive health communication course (which would separate my current Health Behavior and Risk Reduction course into two courses: one devoted to health behavior change and another devoted to health communication theory, research, and practice). This course would be developed to meet the practical needs of health care managers who are often unfamiliar with theoretical frameworks and evidence-based interventions to change human behavior (such as the behaviors of patients, clinicians, employees, and organizations). Health care managers are often concerned about behavioral change issues associated with consumer satisfaction, patient compliance, integration and utilization of evidence-based decision-support tools and other systems/protocols into existing infrastructure, as well as effective dissemination of information about the products and services available to the surrounding community (including risk management and risk communication when things go wrong).

In the long-term future, I hope to advise graduate students at the doctoral and post-doctoral level in relevant fields of study. Following the legacy of my mentors, I endeavor to participate in and establish a community of scholars. I hope to do so at the University where I was first inspired by academe.