Loan Repayment Program (LRP)

My decision to become an independent researcher with a focus on clinical cancer epidemiology and health outcomes research has been shaped by a series of experiences during my medical training. My first introduction to clinical research was during my fourth year of medical school at Drexel University College of Medicine when I participated in a project involving "Improved Target Coverage in Prone Breast Irradiation". This interest only continued to grow as I entered my residency at the Mount Sinai School of Medicine in 2003. After completing my residency in 2006, I began the integrated Hematology/Oncology and Palliative Medicine Fellowship, also at the Mount Sinai School of Medicine. During my fellowship, I had the opportunity to take formal coursework in clinical research and applied methodologies and completed a Master's of Science in Clinical Research in 2009. I am currently an Assistant Professor in the departments of Hematology/Medical Oncology and Palliative Medicine, and my career goal is to become an independent investigator in the field of oncology and palliative care. My particular interest is in investigating clinical health outcomes in lung cancer care.

During my fellowship I had the opportunity to work with my primary mentor, Dr. XXX on a project evaluating determinants of disparities in diagnosis and treatment of lung cancer. My focus on this project involves evaluating lung cancer providers' attitudes and beliefs about minority patients as well as their practices and perceptions about palliative care consultation. This research has led to one poster and an oral presentation at the American Thoracic Society annual meeting in 2010. Additionally, I have worked with Dr. XXX on several projects using the Surveillance, Epidemiology and End Results (SEER) and SEER-Medicare database. On one of these projects I was awarded a Research Supplement to Promote Diversity in Health-Related Research from the National Cancer Institute. This project uses the SEER-Medicare database to identify predictors of surgical complications and post operative mortality among elderly patients undergoing resection for stage III non-small cell lung cancer. The research described has thus far produced four manuscripts of which I am first author on two and second author on the others. One manuscript is currently in press, one was recently resubmitted and the others have been submitted for publication and are pending review.

In order to obtain the skills and research methodologies needed to be a successful researcher, I began my studies towards a Master's of Science in Clinical Research at the Mount Sinai School of Medicine which I completed in 2009.While designing the proposed research plan and performing analyses for the projects described above, I recognized that I needed additional training in outcomes research to become an independent investigator. As such, I successfully applied for and was awarded a Clinical and Translational Science Institute Career Development K12 PhD Scholar award. I will be obtaining a PhD in clinical research during the three year award period. I will be taking didactic courses required to become proficient in the methodologies needed to conduct my proposed and future research projects with a chosen track on population, outcomes, and implementation research.

My goal is to pursue a career in academic, patient-oriented research as an independent investigator in oncology and specifically in health outcomes research in lung cancer care. I plan to eventually create a niche for myself by expanding my research to include determinants of cancer patients' quality of care, characterizing barriers to optimal patient care, and developing approaches to eliminating those barriers. In order to achieve this career goal, I have outlined a series of steps that can be divided into three main categories: research projects, mentorship, and coursework. Research Projects As previously mentioned, I have a K12 award which provides salary support and allows me 75% protected time for research. My

proposed project involves using SEERMedicare data to evaluate the effectiveness of IMRT versus 3D RT in elderly patients with advanced NSCLC. It will build upon my previous projects involving this database and is a larger project than I have previously undertaken, so it will improve my skills in research design, project management, and complex data analysis. This project will allow me to use the skills I learn while taking the PhD courses and apply them directly to my research. Mentorship I have a diverse group of mentors who will assist me in the conduct of the research project proposed in this application and who will help guide my career development. Dr. XXX, Associate Professor of Medicine,and Director of Research, Division of General Internal Medicine will be my primary mentor. He has considerable experience using the SEER and SEER-Medicare database. He has published many manuscripts using these databases addressing issues related to the diagnosis, treatment, disparities in care, and outcomes of patients with lung cancer. I will meet with Dr. XXX formally for a minimum four times each month, as well as informally as needed. Dr. XXX, Professor in the Department of Hematology and Oncology, Director of the Hematology/Oncology Fellowship Program and Director of the Masters of Science (MSCR) & PhD in Clinical Research will serve as a co-mentor. She will use her time and expertise in developing and teaching leadership and administrative skills to help me become an independent investigator. Dr XXX, Professor of Radiation Oncology and Chair of the Department of Radiation Oncology will be a co-mentor. He is a physician-scientist who specializes in treating lung cancer. He will help to incorporate the radiation therapy aspects of my research and assist with the dissemination of the information gained from the proposed research project.

Coursework To gain better skills in the fundamentals of cancer epidemiology and health services research, I will take not only formal coursework as part of the PhD program, but will also participate in research seminars and attend national conferences.

Formal Coursework: In addition to taking the required courses offered as part of the PhD in clinical research, I plan to take electives during the first 2 years of the award that will help me become skilled in the statistical methods that I will use for the analysis of the proposal. These courses include: Healthcare in Communities and the Public Sector, Research Methods, Seminar in Applied Clinical Epidemiology and Health Services Research, and Outcomes Research Methods. I will take additional courses if relevant to my field of interest, should they become available.

Seminar: I will actively participate in the weekly research meeting and present status updates on my research at the joint Medicine-Geriatrics-Palliative care work in progress meetings. These meetings offer an opportunity to present my findings, get feedback on manuscripts in preparation, and develop novel ideas for external funding.

Conferences: I will attend 1-2 national conferences including the American Society of Clinical Oncology's national meeting. My presence at conferences will provide an opportunity to network with other experts in the field and provide a venue to present my work through oral abstracts and presentations.

Along with the guidance of my mentors, proposed research projects, and formal coursework I plan to produce high quality research in the field of lung cancer care and outcomes. I will not only learn the research, administrative and leadership skills needed to accomplish this, but I plan to establish myself in this field by publishing manuscripts and in October 2011, I plan to apply for an American Cancer Society Mentored Research Scholar Grants which will further enhance my ability to become an independent clinical researcher.