**Title of Program:** Emergency Department Use Among Cancer Patients

**Dept/Center/Lab:** LCI Translational Research

**Principal Mentor:** Marc Kowalkowski, PhD  
Research Scientist, LCI Translational Research  
Levine Cancer Institute  
Carolinas HealthCare System

**Other Faculty:** Carol Farhangfar, PhD, MBA  
Assistant Vice President  
CHS Tissue Procurement & LCI Translational Research  
Carolinas HealthCare System

**Summary Description:**
We have several projects using translational epidemiology and outcomes research to delve deeply into the challenges our cancer patients face and the care they receive to identify new approaches to improve the care of cancer patients. Using large data sets, experts in the care setting (oncologists, physicians, surgeons, and other providers), epidemiologic, statistical, and outcomes research tools, we analyze the data under and IRB approved protocol to perform hypothesis-driven patient-centered outcomes research. The emergency room plays a vital role in the care of patients, however, some patients should not be seen in the ER if possible. This includes patients that do not have emergent issues which clog up the ER making it challenging to triage and provide quality care to the truly emergent cases as well as those with severely compromised immune systems if possible (e.g., cancer and transplant patients). This project is using data from national databases and CHS (over ~1 million patients per year) to explore the healthcare utilization of cancer patients seen in the ER, how it impacts outcomes for those patients, determine which patients receive their first cancer diagnosis in the ER and identify gaps in care that need new solutions to provide the best care for cancer patients.

**Expectations and Role of Student**
The successful student will be very comfortable with detail-oriented work and excited about the use of data to improve patient care. The scholar will help obtain and review data from the medical records to ensure the data set is accurate. They will also be exposed to analytical tools, big data and outcomes research approaches to answer important clinical questions. Students will participate in weekly meetings and participate in original research work, which may leading to abstracts, and new grant applications.