The Cancer Curriculum Initiative is an educationally based project to address specific needs within current grade-school biology instruction. Most children experience cancer, as nearly everyone knows someone with the disease. Despite the common incidence of cancer, we found that most of the age-appropriate resources for classrooms focus on the emotional and social aspects of a cancer diagnosis as applied to a child's family or circle of friends. Few resources offer opportunities to explore the science of cancer. Our goal has been to develop age-appropriate, scientifically accurate, and engaging educational resources for children to gain comprehension of cancer-related topics.

This summer, the Cancer Curriculum Initiative Project has accomplished many goals. After beginning in April 2011 with the observation that there is a gap between current educational curriculum and children's understanding of cancer, our project has worked to make such connections. We have seen our ongoing objectives continue through collaboration, curriculum planning, and future aspirations.

First, in terms of collaboration, we became official partners with Helen DeVos Children's Hospital this June. We are working with pediatric hematology and oncology nurses as well as their child-life specialists. DeVos staff have affirmed a need for science-based curriculum for classroom use that would assist students in truly understanding cancer. As these professionals make routine classroom visits for teacher and peer education, they are finding a lack of resources for such teaching. While there are many tools for teaching children how to care for others, there is little background for truly comprehending the essence of cancer. Such deficiencies in curriculum can lead to the propagation of myths or misconceptions about cancer, often resulting in uneducated decisions and lifestyles.

When we began our initiative, the scope of our project involved all grade levels and all cancer topics. Through our collaboration, we have narrowed our focus. For example, leukemias and lymphomas are the most common types of cancer in children, representing the majority of diagnosis found prior to age nine. Therefore, we chose to focus our efforts on the development of educational materials for K-5 students that specifically addresses issues relating to leukemia and lymphoma.

This unit currently has four sections. The first introduces children to the basic scientific concepts of cancer, distinguishing between cancerous and non-cancerous cells. The following section introduces children to leukemia and lymphoma, touching on the immune system. The third section includes information about cancer treatments, specifically chemotherapy, bone marrow transplants, and blood transfusions. The last category helps children find ways to care for others who have leukemia or lymphoma.

The unit currently has 10 - fully developed lesson plans that connect common core standards, provide for cross-curricular engagement, offer options for differentiation, and contain assessment tools. We have also made original worksheets and resources to correspond with each lesson. Furthermore, original one-page documents for teachers have been written to provide the background information necessary to effectively teach this material. Recently, we began creating a video series to supplement our lessons. Three pediatric cancer survivors who are now young adults, shared their stories. We hope that these materials will give students connectable experiences that will enhance their learning. We have also begun to prepare grant proposals to secure additional funding that will allow for the expansion of our curriculum to serve additional grade
levels and address additional cancer types and the development of a website that will facilitate wide dissemination of these materials.

In conclusion, the Cancer Curriculum Initiative Project has grown out of our desire to teach children about the biology of cancer. Our collaboration with Helen DeVos Children’s Hospital has affirmed the need for such educational materials. Our contributions this summer through lesson materials and connections to education standards will help our project to continue filling this void in current curriculum.