A. Global Health Discovery Project (GHDP): A key component of the Global Health Certificate of Distinction is the production of a systematic review that should provide an exhaustive review of studies relevant to a specific medical question. This will validate or negate the central question posed by the systematic review while in an underprivileged country (element 5) either by observation, interviews, or data acquisition and analysis and will be required to do one of the following: 1. Implement a curriculum that includes a robust evaluation. 2. Develop a multi-media presentation, or an educational brochure with demonstrated impact. 3. Write a policy paper with demonstrated impact. Please indicate ideas discussed regarding the GHDP.

Around 21,000 children die around the world every day. That is 1 child dying every 4 seconds; 14 children dying every minute. In 2010 there were 3.7 million children under 5 who died in the sub-Saharan region and 2.5 million who died in South Asia. Despite global efforts to control it, diarrhea is still one of the most common reasons for the high child mortality rates in many low and middle-income countries. Research shows that around 1.5 million children suffering from diarrhea can be saved every year with the right treatment. Back in the 1980s the WHO started a special program to reduce diarrhea-related child mortality. The organization estimated that about two thirds of all deaths from diarrheal diseases were attributable to violent, watery diarrhea and acute dehydration. It therefore promoted the greater use of rehydration solutions with sugar and salt additives and increased fluid intake. The recommendations were incorporated in most countries’ national health programs and active information campaigns were run through the WHO, UNICEF and national authorities. The use of the recommended treatments (rehydration or increased fluid intake) has increased but not as much as desired. There are several possible reasons for the lack of adequate and effective adoption and implementation of diarrhea management. Perhaps the information has not reached out to all households, or perhaps conflicting messages from health providers confuse users. It is also conceivable that poor and underprivileged families are unable to take care of the sick child, even if they know how to. Giving rehydration solution to a child with serious diarrhea is a 24-hour commitment in the most acute phases, something which might have to make way for other priorities in households with scant resources. I propose that an educational program in conjunction with a readily available and free from cost treatment of Oral Rehydration Fluid with zinc would greatly decrease the number of children dying from diarrheal disease.
B. Specific Aims: Describe briefly your goals/ objectives for your Global Health Discovery Project (GHDP).

By developing an easy to understand educational brochure and poster, and a train the trainer program, awareness of diarrheal symptoms, course and complications can be achieved.

By working with local ministries of health, health care workers, community leaders and local physicians and nurses, a cost-free supply of ORS and zinc can be made available to parents of children who have diarrheal disease.
C. Background and Significance: Describe here the rationale for the activities and/or project (why is it important) and any relevant prior literature on the subject.

(this is an example of a short discussion and only one reference; I encourage you to make yours more robust with more literature references)

Diarrhea is regarded as relatively minor illnesses in high-income countries – is the leading causes of death for children worldwide. This is according to a new series in The Lancet on childhood diarrhea and pneumonia, which provides the evidence for integrated global action to address these conditions, including treatment and prevention interventions. The series also details the costs of preventing deaths from childhood diarrhea and pneumonia by 2025. The report features a number of articles authored by Johns Hopkins Bloomberg School of Public Health faculty, and will be published to coincide with the Global Action Plan for the Prevention and Control of Pneumonia and Diarrhea (GAPPD).

“The Lancet series identifies 15 key interventions that, if delivered at high coverage and quality, would eliminate 95 percent of diarrheal and 67 percent of pneumonia deaths in children younger than 5 years by 2025.”

D. Preliminary Work in the Area: Describe here any past work you or your mentor(s) have performed in this area.

(no worries if you don’t have any experience here; just say so; leave the “mentor” reference out)

As medical director of Medical Mercy I have traveled to over 20 countries and have cared for over 175,000 children since 2004. I implemented a nutritional assessment program and identified those who were malnourished and developed a “Rapid nutritional rescue program”. The great majority of the children who were malnourished had significant diarrheal disease that was chronic. By putting in place a comprehensive program of nutritional supplements and zinc, we were able to stem the diarrheal disease and improve the nutritional status of the children.

E. Project Design and Methods: Describe your activities and/or project, including design, setting/participants, and specific procedures. Explain your plan for development and implementation of your project.

(this should be very simple; expect expand on it when you and your mentor meet; mine is very simple; yours should be more in depth yet general in nature until you meet)

After a thorough systematic review of diarrheal mortality and morbidity in children under the age of 5 in underprivileged countries, I propose to design an educational program for parents who are minimally literate and many of whom will be illiterate to describe, identify, and guide them on diarrheal disease.
F. Project Evaluation: Describe how you will assess the impact of the activities and project you will undertake. Please include an evaluation component for each activity/project.

After presenting the educational brochure and topic, specific questions will be asked assessing the parents’ understanding of the information. Demonstrations on how to mix ORS and give zinc will be done, and the parents will be asked to mimic the demonstration. A rubric assessing performance will be used.

G. Project Timeline: Describe the timeline for your activities and/or project development, implementation, and assessment.

(something like this)

In years 1 and 2, the systematic review will be completed and the central issue and topic will be explained in depth using the systematic review guidelines. In year 3 if possible and in year 4, a GH elective will be done to validate or negate the GHDP-SP question.
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**GH Director:**  
David H. Beyda, MD

**GH Director Approval:**