Abstract: The purpose of this study is to spend a week in Guatemala completing an assessment and to develop interventions afterwards as needed. Assessments will include inspecting the kitchen, food handling, and water sources; reviewing current procedures in place for handling water; and tracking any illnesses and infections in the group. This study seeks to solve the problem of foodborne disease outbreaks at Hope of Life in Zacapa, Guatemala. Over the course of the past several mission trips to Guatemala, a significant number of students from Liberty University’s College of Osteopathic Medicine have fallen ill with diarrhea. The goal of this study is to identify the factors that are leading to disease and to implement protocol that can protect our students, as well as the staff and patients of Hope of Life.

This study will examine the condition of the clinic’s cleanliness and visually examine the personal hygiene of the staff. The processes that are in place to maintain the hygiene of the facility and staff will be evaluated. Water quality and sanitation will be assessed, including how the water is processed and distributed. Another factor relating to water sanitation is the ice that is used to chill the beverages; does the ice come from a pure source and is it maintained sanitary? Food preparation will be evaluated. Factors pertaining to food preparation and food safety include proper cooking time and temperatures, proper cooling time and temperatures, proper hot
and cold holding temperatures, proper date marking, food handling procedures, and cross-
contamination prevention. Food service will be evaluated; this includes components such as
proper storage of in-use utensils, proper storage and handling or utensils and linens, and proper
use of gloves. Additionally, foodborne illness outbreaks will be recorded and monitored, and the
Hope of Life staff will be asked to monitor further foodborne disease outbreaks.

**Christian worldview integration:** Hope of Life (HOL) seeks to provide vital, lifesaving
help to people in both physical and spiritual need. HOL exists to provide people with nutritious
food, clean shelter, medical aid, school supplies, and more. I desire to effect changes that will
protect the health of the doctors and students who are serving the people at HOL so that they can
help the people of Guatemala to the best of their ability. The information gathered from this
research could protect medical teams during these trips, as well as help HOL become more
effective at reducing infectious risk.

Matthew 25:40 tells us, “Truly I tell you, whatever you did for one of the least of these brothers
and sisters of mine, you did for me.” I Corinthians 12:27 says, “All of you together are Christ’s
body, and each of you is a part of it.” Because each human is made in the image of God, each
individual carries much value, and the quality of our healthcare should reflect this belief. As a
member of Christ’s body, I feel a responsibility to extend Christ’s love and healing in any way
that I am able, and I desire to be a help to others. I have been blessed with the resources and
given the opportunity to help and care for God’s children; therefore, I must act and use the
knowledge and resources that I have been given. I look forward to the research that I will be able
to conduct, because its finding will be able to protect future volunteers, workers, and patients, as
well as hopefully improve the health of the people who are currently in Zacapa, Guatemala.