## **EXECUTIVE SUMMARY**

The following report details the various topics researched and developed throughout the fall and spring semester, as part of the Architectural Engineering Student Individual Thesis. The project is based on the University of Maryland – Baltimore Health Sciences Facility III building. Within, the lighting systems, and electrical systems of the existing project have been re-evaluated, and redesigned. The re-evaluated spaces include:

- CIRCULATION SPACE ELEVATOR LOBBY
- LARGE WORK SPACE NANOMEDICINE WORKSTATION
- SPECIAL PURPOSE SPACE MEETING ROOM
- OUTDOOR SPACE EXTERIOR PLAZA

In addition to the lighting and electrical depths of study, two breadth studies have been completed. First, the implementation of a rain screen system was evaluated against the existing exterior façade. This system would prove beneficial, but to confirm its effectiveness, a structural summary of the exterior façade has also been studied.