

Routine testing for sexually transmitted infections (STIs) is not a common practice of many sexually-active people. As a result, common infections such as chlamydia and gonorrhea are highly prevalent, with four million cases of chlamydia occurring in 2018 [1]. In order to encourage routine testing of STIs and increase universal testing in general, STI screening needs to be less intimidating and more attainable. The primary way to accomplish this goal is through self-swab STI testing, which allows women to complete an intravaginal swab in the privacy of a clinic room, rather than experience the discomfort of being vaginally swabbed by a physician [2]. However, self-swab testing introduces the potential for contamination of the environment the test is administered in. Currently, self-collection STI tests involve a swab that must be inserted into the body, then removed and transported to an external vial of preservative media. In this process, there are many avenues of contamination, including the swab coming in contact with surfaces and the media vial spilling [2]. The goal of this project is to create a device that limits the potential contamination of the testing environment and of the swab. To do this, a proposed final design includes a swab housed in an external casing, a cap containing the media that screws onto the device, and an easy-to-handle structure. Ultimately, a STI self-swab test such as this would allow for increased universal testing while limiting contamination.