Abstract: Native to the Indo-Pacific region, Lionfish are an invasive species in the Caribbean Sea that were first introduced by aquarium owners irresponsibly releasing their pets into the ocean. The lionfish population continues to threaten marine life in the region and WPI has aimed to address the problem. In its third year, this MQP proposes a fully autonomous robotic solution to kill and capture the invasive species. Building off of previous teams’ work, this year’s focus is on developing a new harvesting system, refined identification algorithm, and autonomous navigation algorithm. These systems will be integrated into an off-the-shelf ROV to create a completely self-contained lionfish capturing robot.

Team Members: Michael Abadjiev, Qingyuan Chen, Clark Ewen, Nicholas Johnson, Nicholas Olgado, Harrison Saperstein, Orion Strickland, Chris Whimpenny

Advisors: Profs. Craig Putnam, Bradley Miller, William Michalson