

Disinfection of Bio Pathogens

Kali Fennell-Lyman, Gianna Giovannoni, Horacio Nunez-Ramirez, Joshua Villanueva | David Chavez, Richard Burr

Project Objective and Intern Contribution:

We proposed a prototype for an autonomous disinfection device that could be operated in under 1 hour in general workspaces with 99% efficacy on bacteria and viruses.

To accomplish this aim we networked with Navy engineers and read many research articles about UVC and Hydrogen Peroxide disinfection.

These contributions included:

- Compiling research in a formal document
- Proposing best disinfection method for prototype and future research
- Developing test procedure for Steriliz device
- Building a prototype for proof of concept

RD UVC Steriliz Device



Skills Learned

1. We are most proud of the networking and hands-on experience that allowed for field testing of the Steriliz device and building of a prototype.
2. Experiencing the types of projects engineers work on was valuable for a practical understanding of the industry.
3. Constantly look back to the project requirements/guidelines.



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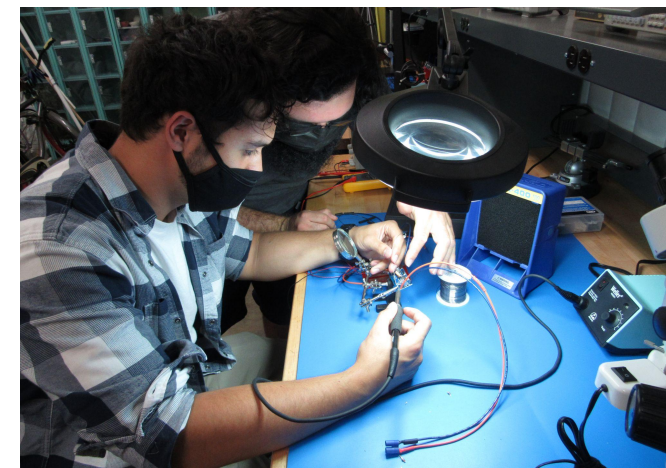
Results / Accomplishments / Next Steps:

We demonstrated the need for new disinfection technologies to be developed.

For the Navy this lays groundwork for future research and prototype development. In eliminating the threat of contact and inhalation hazards, there will be fewer instances of disease transmission and lost work days.

It's important to develop LED technology to eliminate pathogens and automate the disinfection process.

This work will help prevent pandemics or outbreaks from shutting down an entire country's economy.



Josh and Horacio soldering