# Dossier: PURIOLABS, LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,099,031.00

**Award Date:** 2023-02-16

**Branch:** DHA

## AI-Generated Intelligence Summary

**Company Overview:**

PURIOLABS, LLC is a US-based company focused on developing and delivering advanced air purification and bio-decontamination solutions, with a particular emphasis on addressing challenges within controlled environments, critical infrastructure, and defense applications. Their core mission is to create safer, healthier, and more secure environments by eliminating airborne pathogens and harmful contaminants. They address the problems of airborne disease transmission, bio-threat mitigation, and maintaining optimal air quality in sensitive locations. Their unique value proposition lies in their use of multi-stage filtration and advanced oxidation technologies, combined with real-time monitoring and control systems, to achieve superior air purification and decontamination performance compared to traditional methods, particularly against difficult-to-eliminate biological agents. They appear to target a market segment needing high-efficacy solutions exceeding basic filtration capabilities.

**Technology Focus:**

* Multi-Stage Filtration Systems: Utilizing a combination of HEPA filters, activated carbon filters, and other specialized filters to remove particulate matter, volatile organic compounds (VOCs), and odors.
* Advanced Oxidation Processes (AOP): Implementing proprietary AOP technology, potentially involving ultraviolet (UV) light and catalysts, to break down and neutralize airborne pathogens and contaminants at a molecular level. These systems are likely configurable to different environmental needs, scaling from smaller unit sizes to integration into large-scale HVAC systems.

**Recent Developments & Traction:**

* In November 2021, PURIOLABS announced a partnership with the U.S. Army Combat Capabilities Development Command (DEVCOM) Chemical Biological Center (CBC) to assess the performance of their air purification technology against aerosolized Bacillus anthracis spores, a proxy for anthrax. (Source: https://www.prnewswire.com/news-releases/puriolabs-partners-with-us-army-devcom-cbc-to-assess-air-purification-technology-301420523.html)
* PURIOLABS received a follow-on contract with the U.S. Department of Defense in September 2022 to test and evaluate the efficacy of the BioAirstream 400 at multiple military facilities. (Source: https://www.wraltechwire.com/2022/09/12/durhams-puriolabs-lands-2-1m-deal-with-department-of-defense/)
* In September 2022, PURIOLABS secured a $2.1 million contract with the Department of Defense to test and evaluate their BioAirstream 400 product at multiple military facilities.

**Leadership & Team:**

* Andy Belmonte is listed as CEO. While publicly available background information is limited, his leadership role suggests experience in business development and technology commercialization.

**Competitive Landscape:**

* Steril-Aire: A competitor offering UV-C based solutions for HVAC systems, focused on eliminating mold, bacteria, and viruses. PURIOLABS differentiates itself through a multi-stage approach potentially offering broader spectrum filtration and decontamination.
* Airpura: Another competitor in the high-performance air purifier market, utilizing HEPA and activated carbon filtration. PURIOLABS differentiates by integrating AOP technology which is expected to result in a higher efficacy against biological agents, especially in closed and critical environments.

**Sources:**

1. https://www.prnewswire.com/news-releases/puriolabs-partners-with-us-army-devcom-cbc-to-assess-air-purification-technology-301420523.html

2. https://www.wraltechwire.com/2022/09/12/durhams-puriolabs-lands-2-1m-deal-with-department-of-defense/

3. https://puriolabs.com/ (Company Website)