



PROBLEM

Aerosol transmission of Disease

- Significant impact on public health, economic growth, and national security. • Personal protective equipment (PPE) and decontamination methods are outdated.
- Pharmaceutical interventions are reactive mechanisms, not preventative.

COMPANY

XCMR is a medtech company that uses proprietary UVC technology to prevent the transmission of infectious disease by providing real-time respiratory protection for individuals and disinfection of confined air spaces and surfaces.

XCMR's UVC reactors are modeled and designed to disinfect air in real-time up to a flow rate of 120 liters per minute and can continuously inactivate microbes (>95%) during inhalation and exhalation without human exposure risk. Their modular design is the basis for XCMR's next generation of respirators designed for healthcare workers, first responders, immuno compromised patients as well as the general population.



Location:

Philadelphia PA USA

Year Founded: 2020

Founders:



Ken Kelley, Chairman / Co-founder

ACCOMPLISHMENTS



Richard Rasansky, CEO / Co-founder



- Assembled world-class multidisciplinary science and business team
- Awarded six(6) US Government contracts in >36 months totaling \$2.67 million

WWW.XCMr.CO











Transformative Respiratory Protection

UVC Disinfection Mechanism

- UVC disrupts DNA/RNA replication and causes protein damage
- Far UVC (200-230nm) human safe

TECHNOLOGY

• Broadly effective against a variety of aerosolized and surface pathogens

PRODUCT

Next Generation PPE with NIP

 Innovation in real-time respiratory protection with Symmetrical Flow Disinfection (SFD) • Modernizes outdated PPE with gains in efficacy, performance and comfort • **Proprietary UVC** micro reactor technology variable protection levels • Pathogen inactivation vs. filtration/separation

• Reduced user encumbrances (weight, sound, breathability, reusability, comfort, etc.) Connectivity to EMITR[™] (Electromagnetic Energy for Infection Transmission Resiliency), XCMR's IoT cloud platform that enables AI, data and sensor fusion to build infection transmission resiliency at global scale

• Contracts with DoD/Air Force, DoE, EPA, (8) leading commercial organizations and (4) academic research institutions















SOLUTION



- Filed worldwide patents on IP with first awarded in October 2023
- International Ultraviolet Association (IUVA) World Congress in Dubai (see www.xcmr.co/videos)

Key Partners











Near-Field Infection Protection (NIP)

 Invisible, filterless, biosafety barrier against aerosol transmission of pathogens • Source control for close-contact that works together with existing 'built' systems • UVC powered NIP enables wearable biosecurity devices for NextGen PPE

Product Engineering, Simulation and Test Development



Chris Bowers, PhD



Chris Jones



Ben Robertson, PhD



Eric Prast

• Presented three (3) comprehensive talks validating XCMR technology with supporting experimental data at the 2023



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