



## ENVIROPROCESS CONSULTANTS, INC. EXECUTES LAB CONTRACT:

- COVID-19 ULTRAVIOLET SURFACE INACTIVATION STUDY
- WITH BOSTON UNIVERSITY MEDICAL SCHOOL

**Boston, MA (18 August 2020)** – Today, Boston University Medical School and [EnviroProcess Consultants, Inc.](#) signed a research contract for BU’s NEIDL biosafety laboratory (BSL-3/4) to study inactivation of SARS-CoV-2 (Covid-19) via low-wavelength ultraviolet light (UVC), at five distinct wavelengths and on common surfaces such as upholstery, stainless steel, and granite. Our research aims to further understand UVC inactivation of Covid-19 where present in public places - on surfaces and airborne. EP Consultants has developed a proprietary dose translation algorithm to correlate surface viral inactivation to indoor air disinfection dose rates.

While prior research has demonstrated UVC inactivation of pathogens with 254 nm and 222 nm for Covid-19 in plastic lab ware (see [Griffiths](#) and [Kitagawa](#)), to date no one has studied Covid-19 UVC inactivation on real-world surfaces, or for other UVC wavelengths below 220 nm and 230-250 nm. Mounting evidence suggests lower UVC wavelengths may not be harmful – studies with mice and *in-vitro/in-vivo* tissue samples have indicated no observable chronic effects at 207 nm and 222 nm.

EP Consultants’ [July 2020 media advisory](#) describes patent applications that were filed for multiple claims including 6 novel inventions to use UVC to continuously disinfect air and surfaces, *in the presence of people and without direct exposure*:

- Indoors for restaurants, offices, schools, gyms, airplanes, trains, buses, and personal vehicles;
- Retail counters, seated theaters/arenas, ATMs/keypads, elevators, and gas pumps; and
- Personal use with hand-held devices and 3-D disinfection chambers.

Neeraj Chaudhary, Business Analyst at EP Consultants, states these inventions will quickly lead to “affordable consumer and commercial products to accelerate the safe reopening of economies, while providing necessary peace of mind as people return to a state of normal in homes, offices, schools, retail and entertainment establishments, and transportation systems.”

Ultraviolet disinfection technology has been used for over 100 years in many applications including hospitals, laboratories, and water treatment facilities. EP Consultants’ products are designed with a 100x safety margin for acceptable exposures as established by FCC for devices such as cell phones.

EP Consultants’ LUV™ (“low-UVC”) product line includes personal and installed devices to disinfect surfaces and air while people are present and conducting their normal activities, *without direct*



Duplo© lab setup with substrate discs and 254 nm LUV™ light fixture.

*human exposure.* In addition to using a benign wavelength range and a >100x safety factor, the LUV™ products include motion, body temperature, tilt, and distance sensors, plus algorithms including a mobile app to automatically control and monitor operation of the devices.

These inventions were designed in America and Anu Sood, Principal at EP Consultants, states “the products can easily be 100% manufactured in the United States.” EP Consultants is now actively seeking business and governmental partners to continue research and development, create prototypes, secure international patents, and establish a manufacturing and distribution pipeline.

EP Consultants is a broad-based environmental research and consulting company, with over 30 years of experience with air quality, disinfection and pollution control, transport/fate analysis, and environmental risk assessment. Our clients include Continental Airlines, US naval bases, Los Alamos National Lab, Santa Fe Railway, Huntsman Corporation, Clean Harbors, Los Angeles USD, and small businesses such as dry cleaners, foundries, and aerospace parts manufacturers.

Upon the advent of Covid-19, EP Consultants formulated a proprietary system with UVC lights to disinfect public spaces including the air people breathe and surfaces that they touch. We quickly assembled a team from MIT, Boston University, and Caltech to determine the unique UVC light wavelengths that are most effective at pathogen disinfection while maximizing public safety. Selected medical, photonics, and engineering experts were tapped to incorporate novel features to ensure safety and effectiveness for our LUV™ product line.

To assure the highest quality design and functionality for the LUV™ product line, we retained a team of intellectual property experts to craft and submit utility patent applications based on the EP Consultants product configurations, complete with operational parameters, sensors and algorithms, and a mobile app to operate and maintain the LUV™ products. Key members of our LUV™ team:

Name/Project Role	Affiliation	Education	Notes
<a href="#">Anu Sood</a> Project Manager	Principal, EP Consultants	MIT – MS, BS	Professional Engineer, primary inventor.
<a href="#">Anthony Griffiths</a> Lead Researcher	Associate Professor, Boston University	Univ of Cambridge – PhD Univ of Reading - BS	School of Medicine.
<a href="#">Lev Bromberg</a> Research Advisor	Research Scientist, MIT	Moscow State Univ – PhD	<a href="#">Professor T. Alan Hatton Group</a> (chemical engineering).
<a href="#">Neeraj Chaudhary</a> Business Analyst	Associate, EP Consultants	UC Berkeley - BA	Co-inventor.
<a href="#">Danish Khatri</a> Lead Engineer	Principal Engineer, Semiconductors	MIT – ME, BS	Electrical engineer.
<a href="#">Sandy Seth</a> Lead Counsel	Principal, Sethlaw PLLC	Univ of Houston - JD UT Austin - BS	General counsel.
<a href="#">Roy Sharma</a> QA Engineer	Systems Engineer, Boeing	Loyola Marymount University – MS, MBA	Testing and verification of safety and effectiveness.
<a href="#">John Holcomb</a> Former Senior IP Advisor	Partner, Greenberg Gross LLP *	Harvard - JD, MBA MIT - BS	* Former affiliation.

Please direct inquiries to EP Consultants at [LUV@epconsultants.net](mailto:LUV@epconsultants.net).

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