

## **Brad Hollander and UV LLC**

Since 1976, Brad Hollander, **UVC LLC's** founder, has been a leading innovator, inventor, consultant and designer of UVC germicidal disinfection products for air, surfaces, and water. Over the years, Brad's companies have invented, developed, manufactured, engineered and sold products in the UV (Ultraviolet), germicidal, and disinfection industries.

### **Highlights**

- Developed UV/ ozone/ advanced oxidation, PCO and other disinfection treatment systems for hospitals, health care to combat HAIs (Hospital Acquired Infections).
- Co-wrote the existing safety and application protocols for UVC germicidal.
- Patented and manufactured the first UV, HO, VHO and SHO germicidal disinfection lamps.

### **Collaborations**

- Currently, working with the United States, Canada, Italy, Central America, and other countries to adopt and educate populations about the hazards of grow lights.

### **Background details**

#### **2020**

- Provided expert consultation on the disinfecting properties of UV light to control viruses, bacteria, mold and spores in air, water and touch surfaces.
- Presented solutions to mitigate and control COVID-19 and SARS to the DOD and various other agencies.
- Developed new systems to disinfect N95 face mask and PPE's for the healthcare industry.
- Developed disinfection systems for first responders and transportation systems, including autos and ambulances.
- Consulted with several companies to design and distribute disinfection products for hospitals, health care, offices and homes in the US and Canada for COVID SARS-19 and other diseases.
- Developed a chemical-free disinfection system that disinfects touch surfaces 24/7. Launched the breakthrough product in 2020.

- Applied for several new patents for disinfection processes for surface disinfection for COVID-19, SARS, and other diseases.
- Worked with building owners and health care professionals to mitigate legal exposure.
- Currently participating with several “Think Tanks” in various industries to bring good science practices to the medical industry and building industry for disinfection of COVID-19, SARS, and other air and surface disinfection processes, now and into the future.
- Presently working with building owners, developers, architects, and tenants to disinfect buildings and spaces during and after the 2020 COVID-19 pandemic outbreak.

## 2019

- Appointed as a voting member of the [UL](#) Standards Committee (STP) to fast track new horticulture UV lighting standards (UL 8000), including those that became law
- As lead expert, co-wrote light exposure safety protocols (photobiological hazards) for the grow industry.
- Appointed as Chairman to the TG (Task Group) for UL 8800 for expanding the current regulations for photo-biological hazards of UV and infrared light.

## 2018

- Developed a patent-pending Safety Lens Technology™ solution to eliminate up to 99% harmful UV and HEV Blue Light Radiation from grow lights, while letting essential light through to plants.
- Put grow houses in compliance for the first time by controlling UV and HEV Blue Light Radiation “At the Source” in compliance with new OSHA, UL CSA and IEC standard in the United States and around the world. Safe Grow Lights (SGL) products work on many fixture models and can be retrofitted to existing installations.
- Developed the first handheld, N.I.S.T. traceable, radiometer for the grow industry. It measures light hazards in UV and HEV Blue Light range from 200 to 500 nm, confirming the room’s safety and proving mandatory compliance with regulations.

## 2005 to 2017

- ***Founded UV Testing Labs LLC an N.I.S.T. certified testing lab.***
- Tested UV/ ozone, advanced oxidation, lamps and systems to prequalify the performance of UV disinfection systems in compliance with UL, ETL, CSA, IEC and CE regulations for UV,

Ozone, EMC, RF and other regulatory compliance issues.

- Provided expert consultation to a start-up company Healthy Sole LLC, to design, test and develop a new UV-C disinfection system.
- Designed the first residential shoe sole disinfection system 2014.
- Developed the first commercial shoe sole disinfection systems for Hospitals, Pharma, Labs, Food processing, Packaging areas, Clean rooms and the Agriculture industry.
- Received several patents in the United States and worldwide.
- Developed the best odor and disinfection control system for medical, grow and other industries using UVC LLC's Advanced Oxidation Technologies.

## **2004**

- Consulted with water treatment companies to improve water quality, using UVC and Ozone treatment systems.
- Developed systems to increase shelf life and reduce food poisoning in
  - Fish industry
  - Poultry and food processing industry
  - Retail frozen food industry
- Other industries include
  - Water garden industry, ponds
  - Pharmaceutical industry, product sanitation, and packaging,
  - Horticulture industry, germicidal disinfection of consumables and reduction of diseases in grows
  - Buildings, developed some of the first HVAC disinfection systems to reduce HAIs and surface disinfection (clean rooms).
  - Developed systems to disinfect air and surfaces in clean rooms

## **2000 to 2003**

- Developed and installed UV-C/ozone disinfection systems for the wine, beer, and food processing industries.
- Developed and introduced to the White House and the Defense Department the TK911 for Anthrax protection of postal workers after the 9/11 attack on the United States. (The first "Trap and Kill" system that worked for Anthrax)
- Consulted, developed, and manufactured disinfection and sterilization products and controls for water treatment, waste treatment, food

processing, product packaging, pollution control and disinfection of equipment and systems. Foster Farms, Petaluma farms and many others.

- Consulted, developed and manufactured “Green Technologies” systems for water treatment, pollution control, sewage treatment and surface disinfection industries by using copper and other intervention technologies.
- Developed systems using ozone and advanced oxidation.
- Developed UV and packaging sterilization systems for the food, Pharma and packaging industries to increase shelf life of products

## 1999

- **Founded UVC LLC**, a technology company created to develop, manufacture, consult, and create private-label products for the UV and germicidal and sterilizing industries, worldwide.
- Signed a 7-year contract with International Environmental Corp. to develop, manufacture and private label UV disinfection and sterilization products for IEC, Carrier, REEM, RUUD, Williams and other companies in the HVAC industry.
- Developed, patented and manufactured the first Waterproof/ Submersible Shatter Proof ETL listed UV-C germicidal lamp and system.
- Developed products for the food processing, HVAC, water treatment, waste treatment, Pharmaceuticals industries and clean rooms.
- Developed and manufactured the first “Food Grade Safe” UV-C lamp disinfection system.
- Developed, manufactured, consulted and installed UV-C disinfection systems for the poultry industry and food processing industries including packaging, sanitation, air, water, waste treatment, raw, cooked and frozen foods.
- Developed, patented and manufactured the first rough service line of UV-C disinfection lamp.
- Developed and manufactured the first self-cleaning line of UV-C disinfection lamps for water, air and surface.
- Developed and manufactured a complete line of electronic ballasts technologies, named Smart Ballast Technology<sup>™</sup>
- Developed the first cold environment UV-C disinfection system that operates to -40 degrees F for the food processing industry.

## 1988 to 1998

- **Founded Steril Aire Inc.**, and acted as Chairman of the Board and Head of Research and Development. Steril Aire Inc. became a leader in HVAC UV-C sterilization for HVAC air and coil treatment.
- Acquired 2M private funding and grew the company.
- Developed all Steril Air products until company was sold in 1998 to its employee shareholders.

## 1988 to 1984

- Developed and manufactured the first High Output UV-C lamp disinfection system for air, fluids, coil treatment and surface disinfection.
- Developed products with copper and other materials for surface disinfection.
- Invented and patented the first high output, low pressure, UV-C germicidal disinfection lamps for HVAC, surface treatment, water treatment and waste treatment.
- Developed the first electronic ballast for UV-C disinfection lamps.
- Developed deployable aircraft drop or “haul in” isolation tents for germ warfare, outbreaks, pandemics and bioterrorism.
- Developed the first battery powered/solar powered portable UV-C water treatment system for deployment and epidemics.
- Developed a 12 DC volt (and battery powered) UV-C water treatment system for emerging countries and emergency situations.

## 1976

- **Founded Factory Electronics**, an electronics company for UV germicidal lamps and systems.
- Patented the first high-output UVC germicidal treatment system for HVAC air disinfection.

## Patents

Brad has several patents and patent-pending projects underway, worldwide, in the fields of UV and other disinfection processes.