

An innovator delivering automated AI-based solution that detects, removes, and destroys airborne pathogens faster than current industry standards: **iatrixAir**

Indoor air pollution has a serious impact on one's health, both immediately and in the long term. Just as well-maintained air quality can be beneficial for your health; poor quality air from sources including dust, fumes, and airborne pathogens such as CV-19 can affect your health negatively. To counter this problem, there are various companies delivering improved indoor air quality solutions, but iatrixAir stands out from the rest. iatrixAir® automates indoor air quality in commercial-public restrooms and high school, college, and major league sports locker rooms through its patent-pending cellular-based air sensor gateway and air exchanger that detects, removes, and destroys airborne pathogens faster than industry standards. iatrixAir sells its products to restroom/locker room contractors as a subscription with all services included for a low monthly fee.

Advent and growth of iatrixAir

iatrixAir was started before COVID-19 with a mission to improve indoor air quality during our sleep. However, as COVID-19 swept across the world's economies, causing much debate and confusion on how to address and manage this pandemic, iatrixAir discovered two nuggets of information that could start to address this 1,000-year-old unsolved problem.

Two hundred leading experts and scientists wrote a letter to the WHO that these pathogens, which were previously thought to be droplets, traveling less than 5 feet, were actually aerosolized and can travel much further and linger longer in the air. Person-to-person transmission in closed or less ventilated spaces was the main culprit, not necessarily surfaces! Additionally, HVAC systems found in homes or offices were designed with energy savings in mind, with little focus on maintaining safe and healthy air or preventing pathogens.

iatrixAir was motivated by these nuggets of information, a bit of common sense and pivoted to design a solution for enclosed spaces that would remove and inactivate on first pass, these pathogens in enclosed spaces. For its first market, iatrixAir chose the space that is thought to be less hygienic: commercial restrooms and high school, college, and major league sports locker rooms to prove its solution. The company's Marketing CMO, Henry Arttime, then coined the phrase, Faster is Safer, which describes best iatrixAir's approach.

Fostering innovation at iatrixAir

For a company to be one of the most *'innovative,'* its employees must think like innovators, and feel they have an outlet for sharing their observations and ideas. When the TSR asked Marc McConnaughey, CEO of iatrixAir about this practice in his company he stated that *"We are trying to disrupt two large, existing multibillion markets being*

Marc McConnaughey, CEO

Meet the leader behind the success of iatrixAir

Marc McConnaughey, CEO of iatrixAir has 35+ years in the science of light or photonics with senior or C-Suite assignments in Europe and Asia with roles in product management, marketing/ sales, technology/ engineering and operations. iatrixAir is his fourth startup.





Our intelligent sensor array, edge processing technology and cloud-based analytics allow you to monitor real-time air quality 24/7/365.”

floor air purifiers and HVAC systems with a new approach using existing and new technologies to solve this 1,000-year-old problem of airborne pathogens. Here are some examples of our innovation: At first, we placed the sensors in the air exchanger but with our prototype noticed that the air exchanger is where the air is purified which distorted the sensor readings by 30-40% or more so we designed a separate sensor gateway to be placed across the restroom from the air exchanger to have true air quality measurements.”

He furthermore added that “During a meeting in Las Vegas, an industry expert told us that we needed to make the sensor more mission critical, so we changed how often the air quality is measured from 5 minutes to 10 seconds. Also, Steve Hutchcraft, our SVP who was a VP at Carrier and President of Amana directed the project to use cellular as WIFI is not reliable and we wanted to have a mission critical performance to our solution. Steve also pushed the total space concept as most of the product offerings only use square feet but actually

the total space must be calculated. Our design firm, Ciro Design also has made many improvements to the original design. These are just a few of the innovations that the team has come up with. We are very open by design, not so secretive and encourage feedback from not only our team members but our suppliers, customers, and investors.”

Filling the void

Most HVAC systems for homes and businesses are designed to save energy as these systems use 30% of the total energy costs of a home or business. So, these centralized HVAC systems are not designed to provide safe and healthy air and retrofitting these HVAC systems can cost thousands of dollars depending on the level of performance of inactivating pathogens.

With CV-19, there are now many options to treat the air, including stand-alone air purifiers or installation in HVAC systems which spew out billions of reactive ions and oxidants into the air. The jury is still out on the effectiveness of these chemical-based solutions as well as the side effects that these approaches bring. Also, most of these solutions do not consider the dynamics of the total space or volume of the enclosed space in their calculations. It’s like saying you will achieve 40MPG with your car, but the fine print says only if you drive 20 MPH.

iatrixAir is not in favor of placing more “chemicals” in the air. Common sense is to take pollutants or pathogens out of the air as fast as possible in these enclosed



spaces such as restrooms and locker rooms. The company’s design approach is similar to what is installed on a Boeing or Airbus Jet, which exchanges, disinfects the cabin air every 300 to 500 seconds completely and pushes the air down in the cabin, not up. iatrixAir is bringing this approach to all spaces at much lower costs plus near real-time detection with cloud analytics, first-pass inactivation, and near real-time information and alerts in a completely automated solution at a reasonable price with everything included. No more worries about turning on, servicing, or wondering if the air is healthy and safe. Automated Indoor Air Quality—that’s iatrixAir’s approach.

Path ahead for iatrixAir

iatrixAir will ship its AeroTru3 automated indoor air quality solution in Q1-2023 for commercial restrooms and sports locker rooms, and in the next six to nine months, it will build and install 10 alpha units and then 50 beta units at various customer sites. So, iatrixAir will fully launch phase 1 by early 2023. The company will then roll out different phases of the solution and additional services throughout 2023. One example: is a large digital signage that displays the indoor air quality of a space that is cloud connected. iatrixAir wants to make air quality as visible as possible so that we can start to trust the air again. As for future technology, these airborne pathogens are invisible so if we can use powerful light technologies to make these airborne pathogens visible in some way, we can more effectively predict and eliminate these airborne pathogens.