

Kathryn Colonna Worrilow, Ph.D.

Founder and CEO, LifeAire Systems

Dr. Kathryn C. Worrilow, Founder and CEO of LifeAire Systems, received her doctorate in Anatomy and Cell Physiology from the University of Virginia School of Medicine and completed her postdoctoral fellowship in Reproductive Physiology and Infertility at the University of Pennsylvania School of Medicine. She served as the Scientific Director of In Vitro Fertilization Programs for over 20 years and has performed extensive work specific to molecular signaling between the sperm and oocyte, the contribution of the paternal genome to the embryo, and the impact of ambient air on successful human embryogenesis and preimplantation toxicology. Her work, with that of her colleagues, led to the development and design of the LifeAire Systems patented air purification technology and System, Aire~IVF®. The transformational technology offered by the LifeAire System is now being used in the protection of patients and residents from healthcare acquired infections and can be employed in the comprehensive protection of the living cell in cell therapy in life sciences and biopharma.



LifeAire Systems is dedicated to improving patient care. Although this proprietary System was developed specifically for the human embryo, LifeAire Systems is excited and positioned to offer their technology to improve patient care along a continuum of care - from infants in the NICU and the child in the PICU to the elderly in long term care facilities. The LifeAire System's proprietary technology has been tested and confirmed to provide a 9-log reduction of airborne pathogens, such as clostridium difficile, MRSA, pneumonia, pseudomonas, influenza and others, each responsible for hospital acquired infections in operating rooms, intensive care units, burn units, pharmacies, and long-term care facilities, thereby improving patient outcomes and healthcare economics while reducing overall cost. The transformational technology also offers a paradigm shift in the life sciences industry in its support of all living cell cultures developed for gene therapy, regenerative cell medicine, STEM cell and similar applications. The research that led to the identification of the optimal airborne metrics for the human embryo is directly applicable to the successful in vitro culture of all living cells. The team at LifeAire Systems is proud of the contribution its air purification technology is making to provide clean, contaminant-free air for health, wellness and life – impacting wellness and patient care across of continuum of care.

Dr. Worrilow has authored over 60 scientific papers and chapters, served as an invited editor and reviewer for leading textbooks and journals, and has been invited to speak both nationally and internationally. She has been invited to serve as a member of the International WELL Building Institute (IWBI) Health Equity Advisory Board. As an advocate of science education and the role of science in our community, she enjoys serving as a member of the Advisory Board of Women in STEM in the Lehigh Valley and on the Advisory Board of LaunchBox Penn State University - Lehigh Valley. She also enjoyed her past position on the Board of Trustees of The Da Vinci Science Center of Allentown, Pennsylvania. Her greatest joy and pride are with her family, husband, Charles, and her twin sons, William and Charles, junior.