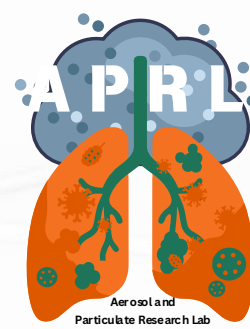


# Aerosol & Particulate Research Laboratory



COLLEGE OF ENGINEERING  
CHEMICAL, ENVIRONMENTAL  
& MATERIALS ENGINEERING



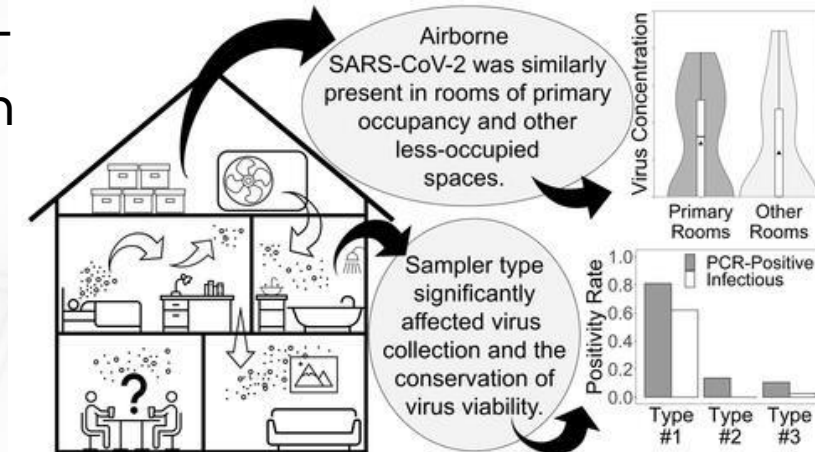
**Prof. Chang-Yu Wu**

- Air Pollution Control
- Bioaerosol
- Health Engineering
- Air Quality
- Incineration
- Environmental Nanotechnology
- Environmental and Occupational Health
- Particle Toxicology
- Engineering Education

Dr. Chang-Yu Wu at the University of Miami researches aerosol science to address health and environmental challenges. His work includes COVID-19 aerosol transmission, bioaerosol control, mercury emission reduction, and lunar dust mitigation. His innovations improve air quality and worker safety, influencing global health guidelines and advancing environmental protection.

## Transmission of Respiratory Pathogens

- Detect viable SARS-CoV-2 aerosols with Bio-Spot VIVAS
- Infectious Omicron detected in the air



## AirDNA

- Environmental DNA degradation dynamics to estimate its airborne persistence and dispersion capabilities.



## Aerosol Toxicity

- Toxicological interactions and health effects of bioaerosols and aerosols

