Resolution Urging the University of Arkansas to Conduct Audits of Campus HVAC Systems

Submitted by Bret Schulte

Faculty Senator and Associate Professor

School of Journalism and Strategic Media

Fulbright College of Arts & Sciences

University of Arkansas

WHEREAS, a growing body of scientific research shows that the COVID-19 pandemic is, in large part, the result of airborne transmission;

WHEREAS, an international assembly of 239 researchers published an [appeal](https://watermark.silverchair.com/ciaa939.pdf?token=AQECAHi208BE49Ooan9kkhW_Ercy7Dm3ZL_9Cf3qfKAc485ysgAAArEwggKtBgkqhkiG9w0BBwagggKeMIICmgIBADCCApMGCSqGSIb3DQEHATAeBglghkgBZQMEAS4wEQQMZsmIVQ5QdzTZHelJAgEQgIICZFp_Qk7VdlPBXde6beZzSZxtJjbnb1fbWCrpNEW6Jv9gay0Aqj31q87xSCxLMEzXdoHaZXErjS_jwxHOtmkPYLS3G_ZgTJcnzzNIaatH5FgfHEm1X0_Vu6a-ejMPHBkdkgYji9QDAdIw_o1HBchK1do6XlbSXJu8fXLtH6t7lYosvby620oUG67z1FjAOm6nO3YqnirxgYge5IFtGRgWZkCGtWeeJvQ32U1BxULLGrzaiZc3m8HpG2tU5P_mL8Ayg5W8ZEusr1EOi3DzBA2QeRuoHaQgbN4YO6kN2UX9iBUjv4AuxcjnbwQcYlyF4VqXMuPXeYwrs38SDNuKAYAJlKAgu47EDm0TjLY2iASwB_vayuCZT-n8NiERV9_6Nhc_3RaW19gMzqkL2UCr2NwXQWiujoXa9I0Qawan1o4fFUkAsnVaWFApVmuAiyaSVmOcAxBaEYzakmakav3C61ZoX02Mr65Cro_x-s3GScApqXBHvA_M4XHIcnKWgI3GqFoUyo8tjqtlmvGjycnLYTbjwfRPPuozVdRwRFLrK-X6M5OFLrGWt3krkbyHDuwVdVoSmwlrFG9IS5Iw1CQ9-A43h5OmlVeKslDzu6SGyMJsHtUf0otQ--wU2O9i0DYq1I9zrDxnwA_UkdQAZ6-sqR6Mx3zEUS-nN6Zl5d9ftk1N0n8QTftFc8NqgVO4bMsrRJcihwNqVfId2-q6GQpjTBbSTH-NSGzYU35Xcs_rr0r7Vk9YaU2aXlnAUr43AV5A4OetPAPaheQSiilZs7vDyrPGgUKX5Z_ThVycMyXiECuiUfPUHw8Tsw) on July 6, 2020 to the World Health Organization in the journal *Clinical Infectious Diseases* stating that “beyond any reasonable doubt that viruses are released during exhalation, talking, and coughing in microdroplets small enough to remain aloft in air” and that “at typical indoor velocities a 5µ droplet will travel tens of meters, much greater than the scale of a typical room” and thus “poses the risk that people sharing such environments can potentially inhale these viruses, resulting in infection and disease;”

WHEREAS, these researchers describe the problem of transmission as “especially acute in indoor or enclosed environment, particularly those that are crowded and have inadequate ventilation relative to the number of occupants and extended exposure periods.”

WHEREAS, these researchers state “airborne transmission appears to be the only plausible explanation for several superspreading events investigated which occurred under such conditions;”

WHEREAS, two studies published in *Clinical Infectious Diseases* in August 2020 support the findings, stressing the significance of airborne transmission (aerosols) of COVID-19, including the discovery that patients can exhale millions of viral RNA particles per hour;

WHEREAS, as of Sept. 2, 2020, the United States has suffered more than 6 million cases of COVID-19, resulting in at least 185,000 deaths;

WHEREAS, the University of Arkansas has re-opened its campus for the Fall 2020 semester, bringing together thousands of students with faculty and staff on a campus with dozens of buildings operating with HVAC systems of various ages and specifications;

WHEREAS, university employees deserve recognition for the months of work already performed on mitigating virus spread through HVAC systems;

WHEREAS, university employees could benefit from the assistance of outside and independent contractors;

WHEREAS, the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) has released guidance on the operation of HVAC systems to reduce the risk of spreading COVID-19 in indoor spaces, including the installation of filters, sealed in place, that are ranked with a [Minimum Efficiency Reporting Value (MERV) of 13, and preferably 14](https://www.ashrae.org/technical-resources/filtration-and-disinfection-faq);

WHEREAS, the same organization of experts believes [germicidal light](https://www.ashrae.org/file%20library/technical%20resources/covid-19/filtration-and-disinfection-faq.pdf) could be an effective tool for killing airborne coronaviruses;

WHEREAS, the same organization promotes high ventilation rates, fresh air combined with conditioned air, to “[help dilute COVID-19 or other infectious aerosol concentrations indoors”;](https://www.ashrae.org/technical-resources/healthcare-faq)

WHEREAS, local environmental energy firms such as Entegrity provide audits of HVAC systems to assess ventilation rates and filtration standards that can assist in University efforts already underway to mitigate spread;

WHEREAS, the health and safety of UA employees and students are at-risk of super spreader events after the UA Board of Trustees’ decision to re-open campus;

NOW, THEREFORE BE IT RESOLVED that the University of Arkansas Faculty Senate requests that the UA administration conduct an audit of HVAC systems on campus detailing progress in efforts to mitigate COVID-19 infections by airborne transmission;

FURTHERMORE, BE IT RESOLVED that said audit be conducted as swiftly as possible and published for the public, with specifics of each building’s current HVAC system and progress on air-purification measures;

FURTHERMORE, BE IT RESOLVED that the University appropriate the resources necessary to update HVAC systems with recommended filtration and ventilation specs and thereby safeguard the lives of employees and the students entrusted to their care.