

Publications, Conference Presentations and Related Materials based on HUD grants #NJLHH0202-09 and # NJHHU0019-13

Peer-reviewed Articles

1. Tsoulou, I. Senick, J. Kim, S., Mainelis, G. (2021). Residential Indoor Air Quality Interventions through a Social-Ecological Systems Lens: A Systematic Review. *Indoor Air*. <http://doi.org/10.1111/ina.12835>
2. Secondo, L., Sagona, J., Calderon, L., Wang, Z., Plotnik, D., Senick, J., Sorensen Allacci, M., Wener, R., Andrews, C.J., Mainelis, G. (2021) Estimating lung deposition of fungal spores using actual airborne spore concentrations and physiological data. *Environmental Science & Technology*. <https://doi.org/10.1021/acs.est.0c05540>
3. Thomas Myers, N., Calderón, L., Pavilonis, B., Wang, Z., Xiong, Y., Sorensen Allacci, M., Plotnik, D., Senick, J., Gong, J., Krogmann, U., Andrews, C. J., Mainelis, G. (2020). Presence and variability of culturable bioaerosols in three multi-family apartment buildings with different ventilation systems in the Northeastern US. *Indoor Air*, Volume 30, Issue 5, September. <https://doi.org/10.1111/ina.12743>
4. Thomas, N., Calderón, L., Senick, J., Sorensen Allacci, M., Plotnik, D., Guo, M., Yu, Yi, Gong, J., Andrews, C. J., Mainelis, G.. (2019). Investigation of Indoor Air Quality Determinants in a Field Study using Three Different Data Streams. *Building and Environment* 154, 281–295. <https://doi.org/10.1016/j.buildenv.2019.03.022>
5. Wang, Z., Calderón, L., Patton, A., Sorensen Allacci, M., Senick, J., Wener, R., Andrews, C.J., Mainelis, G. (2016). Comparison of Real-time Instruments and Gravimetric Method when Measuring Particulate Matter in a Residential Building. *Journal of the Air & Waste Management Association*, 66 (11) 1109-1120. <https://doi.org/10.1080/10962247.2016.1201022>
6. Patton, A., Calderon, L., Xiong, Y., Wang, Z., Senick, J., Sorensen Allacci, M., Plotnik, D., Wener, R., Andrews, C. J., Krogmann, U., Mainelis, G. (2016). Airborne Particulate Matter in Two Multi-Family Green Buildings: Concentrations and Effect of Ventilation and Occupant Behavior. *International Journal of Environmental Research and Public Health*, 13, 144, <https://doi.org/10.3390/ijerph13010144>

Conference Presentations

1. Senick, J., Sorensen Allacci, M., He, R., Mainelis, G., Jones, P. (2021, May 19-23). Co-production of Community-based Air Quality Education Intervention to Reduce Exposures for Health Promotion and Environmental Justice. *EDRA 52 (Environmental Design Research Association), Just Environments: Transdisciplinary Border Crossings*. Virtual Conference, Detroit, MI.
2. Senick, J., Andrews, C., Wang, Nora, Phelan, Patrick, Wener, R. (2019, May 22-26). Humanizing Building Technology and Experience: a Collaborative Forum for Re-envisioning Sustainable, Healthy Buildings and Occupants. *EDRA 50 (Environmental Design Research Association)*, Brooklyn, NY.
3. Thomas, N., Calderón, L., Guo, M., Sorensen Allacci, M, Plotnik, D., Senick, J., Gong, J., Andrews, C.J., Mainelis, G. (2016, October 17-21). Rutgers, The State University of New Jersey. An Integrative, Non-Invasive and Cost-Effective Study of Residents' Health, Indoor

- Air Quality and Infrastructure Defects, *Platform presentation at the 35th Conference of the American Association for Aerosol Research*. Portland, Oregon.
4. Mainelis, G., Calderon, L., Thomas, N., Guo, M., Raja, P., Sorensen Allacci, M., Plotnik, D., Senick, J., Gong, J., and Clint, A. (2016, September 4-9) Feasibility of combining airborne pollutant measurements with spatially resolved infrared thermography to develop a novel tool for indoor air quality investigations, *Platform presentation at the 22nd European Aerosol Conference*. Tours, France.
 5. Mainelis, G., Thomas, N., Calderon, L., Guo, M., Sorensen Allacci, M., Plotnik, D., Senick, J., Gong, J., and Clint, A. (2016, June 13-16) Incorporating different data streams for innovative and efficient housing hazard detection, *Platform presentation at NEHA 2016 AEC and HUD Healthy Homes Conference*. San Antonio, TX.
 6. Sagona, J., Calderón, L., Wang, Z., Senick, J., Sorensen-Allacci, M.A., Plotnik, D., Wener, R., Andrews, C. J., and Mainelis, G. (2015, October 18-22) Application of different models to estimate inhalation exposures to mold spores in a multi-apartment residential green building, *Platform presentation at the 25th Annual Meeting of the International Society for Exposure Assessment*. Las Vegas, NV.
 7. Patton, A, Calderón, L., Xiong, Y., Wang, Z., Senick, J., Sorensen Allacci, M., Plotnik, D., Wener, R., Andrews, C. J., Krogmann, U., and Mainelis, G. (2015, October 18-22) Exposure to Airborne Particulate Matter in Multi-family Green Buildings, *25th Annual Meeting of the International Society for Exposure Assessment*. Las Vegas, NV.
 8. Sorensen Allacci, M., Senick, J., Hewitt, E., Mainelis, G., Xiong, Y. (2015, October 15). Understanding and influencing resident energy behaviors: Two multi-family case studies / three perspectives. *BuildingEnergy NYC. Northeast Sustainable Energy Association*. NYC.
 9. Thomas, N., et al. (2015, October 12-16). Investigation of the correlation between indoor air quality (IAQ) parameters and spatial thermal imaging in two multi-apartment residential buildings in northeastern US. *American Association for Aerosol Research, First Place Award Student Poster Competition*. Minneapolis, MN.
 10. Sagona, J., Calderón, L., Xiong, Y., Wang, Z., Senick, J., Sorensen Allacci, M., Plotnik, D., Wener, R., Andrews, C. J., Krogmann, U., and Mainelis, G. (2015, October 12-16) Comparison of different models to estimate inhalation exposures to mold spores in a multi-apartment residential green building, *34th Annual Conference of the American Association for Aerosol Research*. Minneapolis, MN.
 11. Patton, A, Calderón, L, Xiong, Y., Wang, Z, Senick, J., Sorensen Allacci, M., Plotnik, D., Wener, R., Andrews, C. J., Krogmann, U., and Mainelis, G. (2015, October 12-16) Airborne Particulate Matter Exposure in Green Multi-family Buildings, *Abstracts of the 34th Annual Conference of the American Association for Aerosol Research*. Minneapolis, MN.
 12. Sorensen Allacci, M., Senick, J., Plotnik, D. (2015, June 30). Acknowledging culture within cultures: Behavioral interventions for improving health outcomes in green buildings. *2015 Global Health Research Symposium*. Robert Wood Johnson Medical School, Piscataway, NJ.
 13. Sorensen Allacci, M., Xiong, Y., Calderón, L., Hewitt, E., Ding, J., Senick, J., Mainelis, G., Andrews, C., Krogmann, U. (2013, September 11). How Healthy is Green? Evaluating Green Housing Environments for their Urban Health Implications. *International Colloque Dynamiques Urbaines et Enjeux Sanitaires / Urban Dynamics and Health*. Paris, France.
 14. Andrews, C., Senick, J., Sorensen Allacci, M., Wener, R. (2013, May 29-31). Building Environments as Dynamic Participants in Occupant Health, *EDRA44 Providence – Healthy*

Children and Family Study Summary Report (Environmental Design Research Association), Providence, RI.

15. Mainelis, G., Wang, Z., Calderón, L., Andrews, C.J., Wener, R., Senick, J., Sorensen Allacci, M., and Shin, J.Y. (2012, October 28-November 1) Do Green Buildings Improve Indoor Air Quality? *Platform presentation at the 22nd Annual Meeting of the International Society of Exposure Science*. Seattle, WA.
16. Mainelis, G., Wang, Z., Calderón, L., Andrews, C.J., Wener, R., Senick, J., Sorensen Allacci, M., Shin, J.Y. (2012, October 8-12) Investigation of personal and environmental factors affecting indoor air quality in a green residential building, *Platform presentation at the 31st Annual Meeting of the American Association for Aerosol Research*. Minneapolis, MN.
17. Senick, J., Andrews, C., Sorensen Allacci, M., Wener, R. (2012, May 30-June 2). Context & Prediction of Building Efficiency & Behavioral Outcomes in Green Buildings. *EDRA 43 Seattle – Emergent Placemaking* (Environmental Design Research Assoc.). Seattle, WA.
18. Sorensen Allacci, M., Andrews, C., Senick, J., Wener, R., Mainelis, G., Sweeney, S., Plotnik, D. (2012, April 10). Expanding the Impacts of Green and Active Living Design in Low Income Housing. *National Health Promotion Summit: Prevention, Promotion, Progress*. Washington, DC.
19. Mainelis, G., Xiong, Y., Wang, Z., Krogmann, U., Andrews, C.J., Wener, R., Senick, J., Shin, J.Y. (2011, October 3-7) Investigation of bioaerosols and other indoor air quality parameters in two green residential buildings in the northeastern US, *Platform presentation at the 30th Annual Meeting of the American Association for Aerosol Research*. Orlando, FL.

Related Products

1. He, R., Han, T., Bachman, D., Carluccio, D., Jaeger, R., Zhang, J., Thirumurugesan, S., Andrews, C., Mainelis, G. (2020): Evaluation of two low-cost PM monitors under different laboratory and indoor conditions, *Aerosol Science and Technology*. 55:3, 316-331, <https://doi.org/10.1080/02786826.2020.1851649>
2. Kim, S., Li, M., Senick, J., Mainelis, G. (2020). Designing to Engage Children in Monitoring Indoor Air Quality: A Participatory Approach. In *Proceedings of the Interaction Design and Children Conference*, pp 323-334. <https://dl.acm.org/doi/proceedings/10.1145/3392063>
3. Kim, S., Senick, J., Mainelis, G. (2018). Sensing the Invisible: Understanding the Perception of Indoor Air Quality Among Children in Low-Income Families. *International Journal of Child-Computer Interaction*. IJCCI122. <https://doi.org/10.1016/j.ijcci.2018.12.002>
4. Rutgers Center for Green Building (2018) *Improving Air Quality in Your Home*. http://rcgb.rutgers.edu/wp-content/uploads/2021/05/RCGB_Tenants.pdf2.
5. Rutgers Center for Green Building (2018) *Improving Air Quality: A Guide for Property Owners*. http://rcgb.rutgers.edu/wp-content/uploads/2021/05/RCGB_Property-Owners.pdf