

Doris A. Betancourt, Microbiologist in EPA's National Risk Management Research Laboratory

Air and Energy Management Division

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Area of expertise:

- Identifying fungal and bacterial microbiomes in communities with high incidence of respiratory illnesses.
- Implementing new methodologies to characterize and identify mold in indoor environments using conventional microbiological methods and molecular techniques, Polymerase Chain Reaction (PCR) and Next Generation Sequencing (NGS).
- Testing antimicrobial efficacy of new bioremediation technologies to eliminate mold and bacteria from indoor environments.
- Implementing new methodologies for the safe disposal of biocontaminated materials.

Select Publications:

Bradham, K, C. Croghan, P. Egeghy, S. Clifton, K. Isaacs, D. Stout, K. Thomas, N. Tulve, E. Ulrich, D. Whitaker, S. Vesper, **D. Betancourt** and T. Dean. 2017. [Field Collection Methods for an EPA Pilot Study Evaluating Personal, Housing, and Community Factors Influencing Children's Potential Exposures to Indoor Contaminants at Various Lifestages \(EPA Pilot Study Add-On to the Green Housing Study\)](#). U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-17/064.

Phelps, D., N.E. Brinkman, S. P. Keely, E.M. Anneken, T.R. Catron, **D. Betancourt**, C.E. Wood, S.T. Espenschied, J.F. Rawls and T. Tal. 2017. Microbial colonization is required for normal neurobehavioral development in zebrafish. *Scientific Reports* 7:11244

Kim, J., L. Harvey, A. Evans, G. Byfield, **D. Betancourt**, and T. Dean. [Biological Responses of Raw 264.7 2016. Macrophage Exposed to Two Strains of Stachybotrys chartarum Spores Grown on Four Different Wallboard Types](#). *Inhalation Toxicology*. Taylor & Francis, Inc., Philadelphia, PA, 28(7):303-312.

Betancourt, D.A., T.R.Dean, J.Kim and J. Levy. 2015. [Genome sequence of Stachybotrys chartarum 51-11](#). *Genome Announcements*. American Society for Microbiology, Washington, DC, 3(5):e01114-1115

Dean, T.R. and **D.A. Betancourt**. 2014. [Microbial Resistant Test Method Development](#). U.S. Environmental Protection Agency, Cincinnati, OH, EPA/600/R-14/152

Betancourt, D.A., K. Krebs, S.A. Moore, and S.M. Martin. 2013. Microbial Volatile Organic Compounds Emissions from *Stachybotrys chartarum* growing on gypsum wallboard and ceiling tile. *BMC Microbiology* 13:283

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Education:

- Ph.D., North Carolina State University, Raleigh, NC; Microbiology, 2002
- M.S., North Carolina State University, Raleigh, NC; Microbiology, 1977
- B.S., University of Puerto Rico, San Juan, Puerto Rico; Biology, 1974