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Education

University of Michigan, Ann Arbor, Michigan	B.S. (1977)	Zoology and Psychology
University of Michigan, Ann Arbor, Michigan	M.S. (1978)	Biology (Botany)

Research and Professional Experience

- 2006 – present    **Senior Research Fellow**, Environmental Health Sciences Div., School of Public Health and Health Sciences, University of Massachusetts-Amherst.  
Propose and direct aerobiology research projects; assist other P.I.s with bioaerosol exposure assessment aspects of their research. Supervise and train laboratory staff and students in laboratory techniques, specific protocols, and biosafety. Assist in designing and teaching UMass Intro. to Aerobiology and Indoor Environment courses. Perform analyses (cultural, microscopic, immunochemical, etc.) of IAQ and aerobiological samples. Assist in teaching graduate and undergraduate students as needed.
- 2007 - present    **Instructor**, Department of Environmental Health Harvard University School of Public Health, Boston.  
Lecture in courses (Introduction to Aerobiology) and Continuing Education Workshops.
- 2000 - present    **Co-Director**, Aerobiology Instruction and Research, LLC, Amherst, Massachusetts  
An aerobiological consulting firm specializing in indoor fungal contamination, educational workshops (pollen and fungal spore identification), and lab analyses for pollen and fungi.
- 2003 - 2009        **Environmental Consultant (Aerobiologist)**, Massachusetts Department of Public Health, Bureau of Environmental Health Assessment, Boston.  
Provide advice on bioaerosol investigations. Assist with interpretation of field investigation and laboratory results.
- 2001 - 2010        **Bioaerosol Consultant**, Environmental Health & Engineering, Newton, Massachusetts.  
Advise on bioaerosol aspects of building investigations. Assist with interpretation of field findings and laboratory results. Assist with aerobiological education of field personnel. Provide on-site analyses of samples; advice on microbial remediation.
- 1995 - 2007        **Research Associate and Instructor**, Department of Environmental Health Harvard University School of Public Health, Boston.  
Responsible for, or assist in oversight of, laboratory and field aspects of numerous aerobiology research projects, including the coordination of activities with various P.I.s that use the Environmental Microbiology Lab. Supervise and train laboratory staff and

students in laboratory techniques, specific protocols, and biosafety. Advise graduate students on various laboratory protocols for their thesis projects. Part of a team designing and teaching Intro. to Aerobiology and Advanced Aerobiology courses. Help design exposure assessment and laboratory components of research proposals, assist with manuscript writing. Perform analyses (cultural, microscopic, immunochemical, etc.) of samples. Present seminars, lectures, to various Harvard programs and courses (Occupational Health Program, Div. of Engineering and Applied Sciences, etc.), and at other institutions (Columbia University, Mailman School of Public Health)

- 1993 - 1995     **Research Associate**, Department of Environmental Health, Harvard University School of Public Health, Boston.  
Laboratory manager of Environmental Microbiology Laboratory; oversee day-to-day operation of the laboratory, including the coordination of equipment use and space. Oversee laboratory and field aspects of various aerobiology research projects. Assist with research design, proposal and manuscript writing. Assist graduate students with laboratory work. Supervise and train research assistants. Perform analyses (cultural, microscopic, immunochemical, etc.) of samples.
- 1984 - 1992     **Research Associate**, Department of Internal Medicine, Allergy Division, University of Michigan, Ann Arbor, Michigan.  
Perform analyses (cultural, microscopic, immunochemical, etc.) of samples. Help design exposure assessment and laboratory components of research proposals, assist with manuscript writing. Supervise Research Assistants.
- 1979 - 1984     **Research Assistant**, Department of Internal Medicine, Allergy Division, University of Michigan, Ann Arbor, Michigan.  
Perform field sampling and laboratory analyses for bioaerosol research studies. Supervise student laboratory assistants.

#### Recently Funded Research and Contracts

- 2008 - 2013     **Principle Investigator**, *Allergens in Inner-City Schools and Childhood Asthma*, (NIH, \$142,367) on subcontract from Brigham and Women's Hospital, Wanda Phipatanakul, Prime P.I.
- 2010 – 2012     Co-Investigator, *Community Action for a Renewed Environment–Healthy Environment Healthy Springfield*, (EPA OAR IO-10-04, \$9,300 direct), C. Rogers, UMass subcontract P.I.
- 2009 – 2013     **Co-Investigator**, *Predicting Regional Allergy Hotspots in Future Climate Scenarios* (EPA R834359, \$39,395 direct), Prime P.I. K. Stinson, Harvard Forest, UMass subcontract P.I., C. Rogers.
- 2009 - 2010     **Principal Investigator**, *Hawaii Airborne Pollen Concentrations* (CDC contract through TKC Global Solutions, P.O. JR5000116 to Aerobiology Instruction and Research, LLC, \$15,590).
- 2008 - 2010     **Co-Investigator**, *Pollen and Suicide*, (NIMH, \$90,000) on subcontract from Univ. of Maryland, Christine A. Rogers, UMass P.I.
- 2004 - 2009     **Principle Investigator**, *Epidemiology of Home Allergens and Asthma*, (NIH/NIAID, \$177,554) on subcontract from Brigham and Women's Hospital, Diane Gold, Prime P.I.

#### Professional Activities and Service

- 2013 – present     **Associate Editor**, *Aerobiologia*, International Journal of Aerobiology  
2007 - present     **Pioneer Valley Asthma Coalition**, member

2006 - present **Expert Aeromycologist**, proficiency test evaluator, American Industrial Hygiene Association, EMPAT proficiency testing  
 2003 - present **Board of Directors**, member, founding committee member, Pan-American Aerobiology Certification Board (PAACB)  
 1998 - 2013 **Editorial Board**, *Aerobiologia*, International Journal of Aerobiology  
 2007 – 2010 **Bioaerosols Committee**, American Conference of Governmental Industrial Hygienists  
 2004 - 2006 **Indoor Air Quality Advisory Committee**, Mass. Department of Public Health  
 1998 - 2003 **Aerobiology Committee Member**, Am. Academy of Allergy Asthma and Immunol.

Manuscript Peer Reviews for: *Aerobiologia*, *Annals of Allergy Asthma and Immunology*, *Atmosfera*, *Environmental Health Perspectives*, *Environmental Science and Technology*, *Grana*, *Journal of the American Biological Safety Association*, *Journal of Environmental Management*, *Journal of Immunological Methods*, *Science of the Total Environment*, *Water Research*.

Proposal Reviews for: Natural Sciences and Engineering Research Council of Canada.

### Memberships and Activities

International Association for Aerobiology (IAA)

**Executive Council**, 2000 – 2004

**Organizing Committee** member, 2002 meeting, Montreal, Canada

Michigan Botanical Club (MBC)

**Secretary**, Huron Valley Chapter, 1991-1992

Mycological Society of America (MSA)

Pan-American Aerobiology Association (PAAA)

**President**, 2003 - 2005

**Secretary/Treasurer**, 1998 – 2003, 2005 - present

**Annual Meeting Organizer**, 1991 (Ann Arbor, Mich.), 1997 (Cambridge, Mass), 2008 (Amherst), 2012 (organizing committee Merida, Mexico)

### Selected Teaching/Workshop Experience

Introduction to Aeroallergen Identification, faculty. One-day workshops given annually at the American Academy of Allergy Asthma and Immunology annual meetings (1982 through 2001) and American College of Allergy Asthma and Immunology annual meetings (1984 through 2002).

Bioaerosols: Health Effects, Exposure Assessment and Control, speaker. University of Michigan, Center for Occupational Health & Safety Engineering, 22-24 Oct 1989.

Airborne Pollen and Fungus Spore Identification, faculty and co-organizer. A Three-Day Workshop. University of Michigan, Towsley Center for Continuing Medical Education, 1991, 1992.

Industrial Hygiene for Non-Industrial Hygienists, speaker. Harvard University School of Public Health, Center for Continuing Professional Education, 26-30 Jun 1995.

Exposure Assessment for Bioaerosols in Indoor Environments, speaker. Harvard University School of Public Health, Center for Continuing Professional Education, 16-18 Oct 1996.

Orientation to Indoor Air Quality, speaker. Harvard University School of Public Health, Center for Continuing Professional Education, 10-13 May 1999.

Advanced Pollen and Fungal Spore Identification, course director and faculty. American Academy of Allergy Asthma and Immunology, a half-day workshop, 1999 through 2001.

Hands-On Measurement and Diagnostics: Basic tools for evaluating the indoor environment, speaker. Harvard University School of Public Health, Center for Continuing Professional Education, 11 May 2000.

Pollen and Fungal Spore Identification Workshop and Burkard Sampler Training, Co-director. Three-day workshops presented once or twice per year, Aerobiology Instruction and Research, 2001 - 2013.

EH506, Advanced Seminar in Aerobiology, faculty. Harvard University School of Public Health, Spring 2003, Winter 2004.

EH256, Introduction to Aerobiology, faculty, one of team of three. Harvard University School of Public Health, 1995 through 2012.

Fungal Spore Workshop, Primary faculty member, with D. Stępańska, A. Grinn-Gofroń, A. Sulborska, at 5<sup>th</sup> European Symposium on Aerobiology, 5 Sep 2012, Krakow, Poland.

#### Selected Speaker/Faculty Invitations

Sixth Annual Occupational Safety and Health Institute, University of California at Berkeley, San Francisco, California. Speaker: *On-site Evaluations*. 9 – 11 Aug 1993.

AA98, 3<sup>rd</sup> Advanced Aerobiology Course, faculty. Riva del Garda, Italy, 6-12 Sep 1998.

AA2000, 4<sup>th</sup> Advanced Aerobiology Course, faculty. Bologna, Italy, 10-14 Jul 2000.

AA2002, 5<sup>th</sup> Advanced Aerobiology Course, faculty. Univ. Montreal Biol. Station, Canada, 2-5 Aug 2002.

American Law Firm Association Client Conference: Mold. Atlanta, Georgia. Invited Speaker: *The Anatomy of Fungi*. 23-24 May 2002.

Medical College of Georgia, Continuing Education, Current Views in Allergy and Asthma series (correspondence course). Recorded presentation: *Toxigenic Fungi*. Jan 2004.

Laikon Hospital, 25<sup>th</sup> Anniversary Celebration of the Allergy Division, Athens, Greece. Invited Speaker: *Fungi as a Source of Inhalant Allergens*. Jan 2004.

International Palynological Congress, Granada, Spain. Invited Speaker: *Identification of Fungal Spores*. Jul 2004.

Massachusetts Health Officers Association, 2004 Annual Educational Conference, Hyannis Massachusetts. Speaker: *Indoor Fungal Exposure and Health*. 4 Nov 2004.

DRiEaz Restorative Drying Symposium, May 2005, Orlando FL, *Fungi, Allergens, and Health*.

Comprehensive Industrial Hygiene: Practical Applications of Basic Principles, HSPH Ctr. for Cont. Prof. Educ. *Indoor Fungi: Assessment, Health Effects, & Remediation*; June 2006, 2007, and 2008.

VA New England Health Care System; Indoor Air Quality, Mold and Infection Control Risk Assessment (ICRA) Issues in a Medical Center; *Indoor Fungi: Assessment and Remediation*, Bedford, MA, 26 Jun 2009.

European Society for Aerobiology, Krakow, Poland. Keynote speaker: *Collecting and identifying airborne fungal spores: A review of new technologies vs. traditional approaches*, 5<sup>th</sup> European Symposium on Aerobiology, 3-6 Sep 2012.

Veterans Administration - New England Health Care System; Indoor Air Quality (IAQ) Symposium; *Indoor Fungi: Basic Mycology and Assessment*, Bedford, MA, 21 Sep 2012.

#### Peer-Reviewed Publications

Saavedra-Delgado AM, Matthews KP, Pan PM, Kay DR, **Muilenberg ML**: Dose-response studies of the suppression of whole blood histamine and basophil counts by prednisone. *J Allergy Clin Immunol* 1980;66(6):461.

Burge HP, Solomon WR, **Muilenberg ML**: An evaluation of indoor plantings as allergen exposure sources. *J Allergy Clin Immunol* 1982;70(2):101.

- Solomon WR, Burge HA, **Muilenberg ML**: Allergen carriage by atmospheric aerosol. I. Ragweed pollen determinants in smaller micronic fractions. *J Allergy Clin Immunol* 1983;72(5):443.
- Habenicht HA, Burge HA, **Muilenberg ML**, Solomon WR: Allergen carriage by atmospheric aerosol. II. Ragweed pollen determinants in submicronic atmospheric fractions. *J Allergy Clin Immunol* 1984;74(1):64.
- Portnoy J, Chapman J, Burge H, **Muilenberg M**, Solomon W: Epicoccum allergy: skin reaction patterns and spore/mycelium disparities recognized by IgG and IgE ELISA inhibition. *Ann Allergy* 1987;59:39.
- Burge HA, Simmons EG, **Muilenberg M**, Hoyer M, Gallup J, Solomon W: Intrinsic variability in airborne fungi: implications for allergen standardization. In: *Advances in Aerobiology*. Birkhauser Verlag Basel, 1987:143.
- Muilenberg ML**. Aeroallergen assessment by microscopy and culture. In: Solomon W, ed. *Immunology and Allergy Clinics of North America*. 1989;9(2):245-267.
- Muilenberg ML**, Skellenger WS, Burge HA, Solomon WR: Particle penetration into the automotive interior; I. Influence of vehicle speed and ventilatory mode. *J Allergy Clin Immunol* 1991;87:581-5.
- Muilenberg ML**, Burge HA: Filter cassette sampling for bacterial and fungal aerosols. In: Samson RA (ed.) *Health Implications of Fungi in Indoor Environments*. CBS, Baarn, Netherlands. 1995.
- Ko G, Burge HA, **Muilenberg M**, Rudnick S, First M: Survival of Mycobacteria on HEPA filter material. *J Am Biol Safety Assoc* 1998;3(2):65.
- Chew GL, Burge HA, Dockery DW, **Muilenberg ML**, Weiss ST, Gold DR: Limitations of a home characteristics questionnaire as a predictor of indoor allergen levels. *Am J Respir Crit Care Med* 1998;157:1536-1541.
- Chew GL, Higgins KM, Gold DR, **Muilenberg ML**, Burge HA: Monthly measurements of indoor allergens and the influence of housing type in a northeaster US city. *Allergy* 1999;54:1058-1066.
- Kitch BT, Chew G, Burge H, **Muilenberg ML**, Weiss ST, Platts-Mills TAE, O'Connor G, Gold DR. Socioeconomic predictors of high allergen levels in homes in the greater Boston area. *Environ Health Perspect* 2000; 108(4):301-307.
- Abrams L, Seixas N, Robins T, Burge H, **Muilenberg M**, Franzblau. Characterization of metalworking fluid exposure indices for a study of acute respiratory effects. *Appl Occup Environ Hyg* 2000 Jun;15(6):492-502.
- Dumyahn TS, Spengler JD, Burge HA, **Muilenberg M**. Comparison of the Environments of Transportation Vehicles: Results of Two Surveys. in Nagda NL, ed, *Air Quality and Comfort in Airliner Cabins*, ASTM STP 1393. American Society for Testing and Materials, West Conshohocken, PA, 2000.
- Vojta PJ, Randels SP, Stout J, **Muilenberg M**, Burge HA, Lynn H, Mitchell H, O'Connor GT, Zeldin DC. Effects of physical intervention on house dust mite allergen levels in carpet, bed, and upholstery dust in low-income homes. *Environ Health Perspect* 2001; 109(8):815-819.
- Milton DK, Alwis KU, Fiset L, **Muilenberg M**. Enzyme-linked immunosorbent assay specific for (1→6) branched, (1→3)-β-D-glucan detection in environmental samples. *Appl Environ Microbiol* 2001; 67(12):5420-5424.
- Durand KTH, **Muilenberg ML**, Burge HA, Seixas NS. Effect of sampling on the culturability of airborne fungi and bacteria sampled by filtration. *Ann Occup Hygiene Society* 2002; 46(1):113-118.
- Vojta PJ, Friedman W, Marker DA, Clickner R, Rogers JW, Viet SM, **Muilenberg ML**, Thorne PS, Arbes SJ Jr., Zeldin DC. First National Survey of Lead and Allergens in Housing: survey design and methods for the allergen and endotoxin components. *Environ Health Pers* 2002; 110(5):527-532.
- Chew GL, Rogers C, Burge HA, **Muilenberg ML**, Gold DR. Dustborne and airborne fungal propagules represent a different spectrum of fungi with differing relations to home characteristics. *Allergy* 2003; 58:13-20.

- Arbes SJ Jr., Cohn RD, Yin M, **Muilenberg ML**, Burge HA, Friedman W, Zeldin DC. House dust mite allergen in US beds: results of the First National Survey of Lead and Allergens in Housing. *J Allergy Clin Immunol* 2003; 111(2):408-414.
- Muilenberg ML**. Sampling Devices. In: Weber, RW, ed. *Immunology and Allergy Clinics of North America*. 2003;23(3):337-355.
- Arbes SJ Jr., Cohn RD, Yin M, **Muilenberg ML**, Friedman W, Zeldin DC. Dog allergen (Can f 1) and cat allergen (Fel d 1) in US homes: Results from the National Survey of Lead and Allergens in Housing. *J Allergy Clin Immunol* 2004; 114:111-117.
- Phipatanakul W, Gold DR, **Muilenberg ML**, Sredl DL, Weiss ST, Celedon JC. Predictors of indoor exposure to mouse allergen in urban and suburban homes in Boston. *Allergy* 2005, 60:697-701.
- Stark PC, Celedón JC, Chew GL, Ryan LM, Burge HA, **Muilenberg ML**, and Gold DR. Fungal levels in the home and allergic rhinitis by age five years. *Environ Health Perspect*. 2005 Oct;113(10):1405-9.
- Salo PM, Yin M, Arbes SJ Jr, Cohn RD, Sever M, **Muilenberg M**, Burge HA, London SJ, Zeldin DC. Dustborne *Alternaria alternata* antigens in US homes: Results from the National Survey of Lead and Allergens in Housing. *J Allergy Clin Immunol*. 2005 Sep;116(3):623-9.
- Rogers CA, Wayne PM, Macklin EA, **Muilenberg ML**, Wagner CJ, Epstein PR, and Bazzaz FA. Interaction of the onset of spring and elevated atmospheric CO<sub>2</sub> on ragweed (*Ambrosia artemisiifolia* L.) pollen production. *Environ Health Perspect*. 2006; 114:865-869.
- Chew GL, Wilson J, Rabito FA, Grimsley F, Iqbal S, Reponen T, **Muilenberg ML**, Thorne PS, Dearborn DG, Morley R. Mold and endotoxin levels in the aftermath of Hurricane Katrina: a pilot project of homes in New Orleans undergoing renovation. *Environ. Health Perspect*. 2006 Dec; 114(12):1883-1889
- Rao CY, Riggs MA, Chew GL, **Muilenberg ML**, Thorne PS, Sickel DV, Dunn KH, Brown C. Characterizing airborne molds, endotoxins and glucans in homes in New Orleans after Hurricanes Katrina and Rita. *Appl Environ Microbiol*. 2007 March; 73(5):1630-4
- Peters JL, Levy JI, **Muilenberg ML**, Coull BA, Spengler JD. Efficacy of integrated pest management in reducing cockroach allergen concentrations in urban public housing. *J Asthma*. 2007;44(6):455-60.
- Peters JL, **Muilenberg ML**, Burge HA, Rogers CA, Spengler JD. *Alternaria* measures in inner-city low-income housing by immunoassay and culture based analysis. *Ann Allergy Asthma Clin Immunol*. 2008;100(4):364-9.
- Sheehan WJ, Rangsihienchai PA, **Muilenberg ML**, Rogers CA, Lane JP, Ghaemghami J, Rivard DV, Otsu K, Hoffman EB, Israel E, Gold DR, Phipatanakul W. Mouse allergens in urban elementary schools and homes of children with asthma. *Ann Allergy Asthma Immunol*. 2009; 102(2):125-130.
- Pongracic JA, O'Connor GT, **Muilenberg ML**, Vaughn B, Gold DR, Kattan M, Morgan WJ, Gruchalla RS, Smartt E, Mitchell HE. Differential effects of outdoor versus indoor fungal spores on asthma morbidity in inner-city children. *J Allergy Clin Immunol*. 2010; 125(3): 593-599.
- Wolf J, O'Neill NR, Rogers CA, **Muilenberg ML**, Ziska LH. Elevated Atmospheric Carbon Dioxide Concentrations Amplify *Alternaria Alternata* Sporulation and Total Antigen Production. *Environ Health Perspectives*. 2010; 118(9):1223-8.
- Phipatanakul W, Bailey A, Hoffman EB, Sheehan WJ, Lane JP, Baxi S, Rao D, Permaul P, Gaffin JM, Rogers CA, **Muilenberg ML**, Gold DR. The School Inner-City Asthma Study: Design, Methods, and Lessons Learned. *J Asthma*. 2011; 48(10):1007-14.
- Muilenberg, ML**. Collecting and identifying airborne fungal spores: a review of new technologies vs. traditional approaches. *Alergologia-Immunologia/Allergology & Immunology* 2012; 9(2-3):92-94.

### Edited Books

**Muilenberg ML**, Burge HA, eds. *Aerobiology*. CRC/Lewis Publishers, Boca Raton FL, 1996.

### Chapters and Reviews

Burge HA, **Muilenberg ML**, Chapman J. Crop plants as a source for medically important fungi. In: Andrews JH, Hirano SS, eds. *Microbial Ecology of Leaves*, New York: Springer-Verlag, 1992:222-236.

**Muilenberg ML**. The outdoor aerosol. In: Burge HA, ed. *Bioaerosols*, Boca Raton: CRC Press, 1995:163-204.

**Muilenberg ML**. Indoor bioaerosol investigations. IN: Mandrioli P, Comtois P, Levizzani V. *Methods in Aerobiology*. Associazione Italiana de Aerobiologia, 1998:185-215.

**Muilenberg ML**. Pollen in indoor air: sources, exposures, and health effects. IN: Samet JM, Spengler J, McCarthy J. *Indoor Air Quality Handbook*, New York: McGraw-Hill, 2001.

**Muilenberg ML**. Bioaerosol Sampling and Analytical Techniques. In: *Air Sampling Technologies: Principles and Applications*. ACGIH, Cincinnati, Ohio. (online: <http://www.acgih.org/store/ProductDetail.cfm?id=2096>) 2009.

### Abstracts and Presentations (in part)

Skellenger WS, Burge HP, **Muilenberg ML**: Aeroallergen exposure within a moving vehicle. *J Allergy Clin Immunol* 1981;67(1).

Solomon WR, Burge HP, **Muilenberg ML**: Pollens of grass allies as potential allergens. *J Allergy Clin Immunol* 1981;67(1).

Burge HP, **Muilenberg ML**, Solomon WR: Alternaria allergens at the species level. *J Allergy Clin Immunol* 1981;67(1).

Burge HP, Solomon WR, **Muilenberg ML**: Evaluation of indoor plantings as allergen exposure sources. *J Allergy Clin Immunol* 1982;70(2):101.

Sanders G, Burge HA, **Muilenberg ML**, Solomon WR: Detection of cockroach antigen in house dust by ELISA inhibition. *J Allergy Clin Immunol* 1984;73(1)(Pt2):156.

Habenicht H, Burge H, **Muilenberg ML**, Solomon WR: Ragweed allergens in submicronic atmospheric aerosols. *J Allergy Clin Immunol* 1984;73(1)(Pt2):157.

Chapman J, Burge H, **Muilenberg M**, Solomon W: Fungus allergen exposure during Midwest fall crop harvest. *J Allergy Clin Immunol* 1986;77(1)(Pt2):200.

**Muilenberg M**, Pan P, Hoyer M, Burge H, Solomon W: Incident particulate sampling for indoor bioaerosols: the Burkard Personal spore trap. *J Allergy Clin Immunol* 1987;79(1)(Pt2):209.

Pan P, Hoyer M, **Muilenberg M**, Burge H, Solomon W: Characteristics of the SAS culture plate sampler for assessing indoor fungi. *J Allergy Clin Immunol* 1987;79(1)(Pt2):210.

Burge H, **Muilenberg M**, Hoyer M: Bioaerosol analysis of an imputed "sick" building. *J Allergy Clin Immunol* 1988;81(1)(Pt2):323.

**Muilenberg M**, Chapman N, Chapman J, Burge H: Exposure of farmers, their families and townspeople to viable bioaerosols. *J Allergy Clin Immunol* 1988;81(1)(Pt2):274.

Pan P, Burge H, Arscott P, **Muilenberg M**: Mite antigen prevalence in one northern and two Midwestern U.S. cities. *J Allergy Clin Immunol* 1989;83(1)(Pt2):262.

**Muilenberg M**, Burge H, Sweet T, Solomon W: *Penicillium* species in and out of doors in Topeka KS. *J Allergy Clin Immunol* 1990;85(1)(Pt2):247.

Soclof A, Chapman J, **Muilenberg M**, Burge H, Solomon W: Alternaria and Aspergillus species-specific IgG in farmers with varying exposure to fungi. *J Allergy Clin Immunol* 1990;85(1):247.

- Muilenberg M**, Sweet T, Burge H. The importance of species determination in assessment of airborne fungi. 4th International Conference on Aerobiology, International Aerobiology Association. Stockholm, Sweden, Aug 1990.
- Gell K, Burge H, **Muilenberg M**, Sweet T. Skin test reactivity to Penicillium and Alternaria extracts. *J Allergy Clin Immunol* 1992;89(1)(pt2).
- Muilenberg ML**, Sweet TM, Burge HA. A comparison of methods for estimating bacterial levels in machining oil mists. PanAmerican Aerobiology Association, Toronto, 1992.
- Sweet TS, **Muilenberg ML**, Pan PM, Su HJ, Burge HA. Filter cassette sampling for fungus aerosols. *J Allergy Clin Immunol* 1993;91(1)(Pt2):278.
- Muilenberg ML**, Burge HA, Sweet T. Hypersensitivity and exposure to acid-fast bacilli in coolant aerosols. *J Allergy Clin Immunol* 1993;91(1)(Pt2):311.
- Muilenberg M**, Burge H, Dahlstrom C, Dumyahn T, Spengler J. Airplane air quality: airborne bacteria and dust allergens. *J Allergy Clin Immunol* 1995; 95(1)(pt2).
- Burge H, Chew G, Muilenberg M, Gold D. Role of fungi in house dust ecosystems. *J Allergy Clin Immunol* 1995; 95(1)(pt2).
- Muilenberg ML**, Burge HA, Chew GL, Gold D. Relationship between levels of fungi in house dust and occupant's responses to home characteristics questions. *J Allergy Clin Immunol* 1996;97(1,pt3):222.
- Muilenberg M**, Dumyahn T, Forster D, Spengler J, Burge H. Airborne and dustborne fungi on airplanes, trains, buses, and subways. *J Allergy Clin Immunol* 1997; 99(1,pt2):S390.
- Muilenberg M**, Sabolefski M, Burge H. Efficacy of household cleaning products in controlling fungal growth and reducing *Alternaria* allergen concentrations. 6<sup>th</sup> International Congress on Aerobiology, 1998, Perugia, Italy.
- Chao HJ, Lee EJ, **Muilenberg ML**, Burge HA. Air quality, health, and working efficiency in office buildings. 6<sup>th</sup> International Congress on Aerobiology, 1998, Perugia, Italy.
- Rundell A, Newbury N, Kyung J, Rowe G, Tremblay D, Jeys T, Sanchez A, Primmerman C, Rogers C, **Muilenberg M**, Burge H. Statistical and temporal characterization of the total and fluorescent coarse aerosol. American Association for Aerosol Research, 1999, Tacoma WA.
- Newbury N, Jeys T, Brady R, Daney V, Decew A, Dicecca S, Kyung J, Rowe G, Rundell A, Sanchez A, Primmerman C, Reyes F, Sickenberger D, Smardzewski R, Rogers C, **Muilenberg M**, Burge H. A UV-Fluorescence based bio-aerosol detector. American Association for Aerosol Research, 1999, Tacoma WA.
- Muilenberg ML**. Surface contamination with *Stachybotrys* and other fungi combined with airborne concentrations: A building case study. Pan-American Aerobiology Association, 1999, Tucson AZ.
- Zeldin DC, Friedman W, **Muilenberg M**, Cohn R, Burge H. Factors associated with indoor exposure in the U.S.: Results from the First National Allergen Survey. APHA, 2001.
- Muilenburg ML**, Durand K, Burge H, Seixas N. Filtration sampling for fungi and bacteria: effect of sampling time on culturability. PanAmerican Aerobiology Association, 2001, Raleigh NC.
- Muilenberg ML**, Bloom S, Dilwali K. A new instrument for indoor air quality studies. The 7<sup>th</sup> International Congress on Aerobiology, Château Montebello, Canada. 5-9 Aug 2002.
- Arbes SJ, **Muilenberg M**, Burge H, et al. The relationship between bed dust mite allergen and asthma in the First National Survey of Lead and Allergens in Housing. *J Allergy Clin Immunol* 2002; 109(1):S357.
- Phipatanakul W, Gold DR, **Muilenberg M**, Sredl DL, Weiss ST, Celedon JC. Prevalence and predictors of indoor exposure to mouse allergen in metropolitan Boston. *J Allergy Clin Immunol* 2005; 115 (2 suppl 1), S96.
- Riggs M, Rao C, Van Sickle D, Cummings K, Brown C, Dunn K, Ferninands J, Callahan D, Pinkerton L, Deddens J, Moolenaar R, Thorne P, **Muilenberg M**, Chew G. This mold house: exposure assessment of flood-damaged homes in New Orleans. Society for Epidemiological Research. Seattle WA, *Am J Epidemiol*. 163(11):S30, suppl.S, 1 June 2006.



- Muilenberg ML**, Rogers CA, Maestretti R, Santiago T, Chew GL. Airborne Fungal Spore Concentrations in New Orleans Homes following Hurricane Katrina. International Aerobiology Association, Annual Congress, Neuchâtel, Switzerland, 21-25 Aug 2006.
- Muilenberg ML**, Rogers CA, Tam E. Geographic and temporal differences in airborne fungal concentrations in Hawaii. PanAmerican Aerobiology Association Annual Meeting; University Park Pennsylvania, USA, 8-13 Jun 2007.
- Sheehan WJ, Rangsithienchai PA, **Muilenberg ML**, et al. Allergens in urban elementary schools and homes of children with asthma. *J Allergy Clin Immunol* 121(2):S270. Mar 14-18, 2008 Philadelphia, PA, USA/
- Muilenberg ML**, Wolf, J., Ziska, L., & Rogers, C. A. (2008). *Alternaria* spore and allergen production under different CO<sub>2</sub> conditions. Paper presented at Aerobiology 2008. Annual Symposium of the Pan-American Aerobiology Association, Amherst, Massachusetts.
- Joy M, **Muilenberg ML**, Rogers CA. (2009) Studies on airborne fungal spores from eight historical and modern buildings in Amherst, MA. Kansas City, MO, 29 Jul-1 Aug 2009.
- Muilenberg M**, Rogers C, Davies S. (2009) Fungal concentrations in First Nations homes, James Bay, Ontario. Kansas City, MO, 29 Jul-1 Aug 2009.
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