

Richard E Peltier

Curriculum Vitae
Updated April 2017

Department of Environmental Health Science
175 Goessmann Laboratory
University of Massachusetts
Amherst, MA 01003-9303

Ph: 413.545.1317
Fa: 413.545.6536
rpeltier@umass.edu
<http://people.umass.edu/aerosollab>

EDUCATION:

Georgia Institute of Technology, School of Earth and Atmospheric Sciences Atlanta, GA
PhD – Atmospheric Chemistry, Dec 2007

Advisor: Rodney J. Weber

Dissertation entitled:

“Ambient Submicron Particle Composition in North America: Their Sources, Fate, and Impact”

Columbia University, Mailman School of Public Health New York, NY
Masters of Public Health – Environmental Health Sciences, Dec 2001

University of Massachusetts Amherst, MA
B.S. Biology, May 1997

PROFESSIONAL APPOINTMENTS:

- 2016- present Associate Professor, Department of Environmental Health Science, University of Massachusetts
- 2010-2016 Assistant Professor, University of Massachusetts, Amherst, Department of Public Health, Division of Environmental Health Science
Adjunct Assistant Professor, University of Massachusetts Civil and Environmental Engineering Department
- 2009-2010 *Pathway to Independence (K99) Postdoctoral Fellow*, NYU School of Medicine Department of Environmental Medicine, Tuxedo, NY
- 2007 – 2009 *NRSA Postdoctoral Fellow*, NYU School of Medicine, Department of Environmental Medicine, Tuxedo, NY

PUBLICATIONS:

In preparation

1. Huynh et al, Method development for ROS instrumentation.
2. Pant and Peltier, NYC Source Apportionment, In Prep for Atmospheric Measurements

Submitted/In revision/Accepted (not yet published)

1. Shakya, et al. Measurements of TSP, PM₁₀, PM_{2.5}, BC and Chemical Composition from an Urban Residential Location in Nepal, revisions submitted, *Aerosol and Air Quality Research*.
2. Shakya, et al. Near-road sampling of PM_{2.5}, BC, and fine particle chemical components in Kathmandu Valley, Nepal, revisions submitted at ACPD as acp-2016-1027

In press (43 articles in total)

- 2017 Pant, P., Habib, G., Marshall, J, and **Peltier RE**. PM_{2.5} exposure in highly polluted cities: A case study from New Delhi, India. *Environmental Research*, 156, 167-174, 2017.
- 2016 Shakya, KM, Noyes, A., Kallin, R, and **RE Peltier**. Evaluating the Efficacy of Cloth Facemasks in Reducing Particulate Matter Exposure. *J Exposure Science and Environmental Epidemiology*, 00, 1-6
- 2016 LaKind, JS, Overpeck, J, Breyse, PN, Backer, L, Richardson, SD, Sobus, J, Sapkota, A, Upperman, CR, Jiang, C, Beard, CB, Brunkard, JM, Bell, JE, Harris, R, Chretien, JP, **Peltier, RE**, Chew GJ, and Blount,

- BC. Exposure science in an age of rapidly changing climate, accepted, *J Exposure Science and Environmental Epidemiology*, 26(6), 1–10, 2016.
- 2016 Weitzman, M, Yusufali, AH, Bali, F,m Vilcassim, MJR, Ghandi, S., **Peltier, RE**, Nadas, A., Sherman, S., Lee, L., Hong, Z., Sherston, J., Park SH., and Gordon, T. Effects of hookah smoking on indoor air quality in homes *Tobacco Control* Published Online First: 26 October 2016. doi: 10.1136/tobaccocontrol-2016-053165
- 2016 Kiros, F, Shakya KM, Rupakheti, M, Regmi RP, Maharjan, R, Byanju RM Naja M, Mahata K, Kathayat B, and **RE Peltier**, Variability of Anthropogenic Gases: Nitrogen Oxides, Sulfur Dioxide, Ozone and Ammonia in Kathmandu Valley, Nepal, x: 1–14, *AAQR*, 2016
- 2016 Shakya KM, Rupakheti, M, Aryal, K, and **RE Peltier**, Respiratory Effects of High Levels of Particulate Exposure in a Cohort of Traffic Police in Kathmandu, Nepal, *J of Occup Envi Medicine* 58(6), e218-e225, 2016.
- 2016 P Pant, SK Guttikunda, **RE Peltier** Exposure to particulate matter in India: A synthesis of findings and future directions *Environmental Research* 147, 480-496, 2016.
- 2015 EN Liberda, LJS Tsuji, **RE Peltier** Mining in subarctic Canada: Airborne PM 2.5 metal concentrations in two remote First Nations communities *Chemosphere* 139, 452-460, 2015
- 2015 JE Mirowsky, **RE Peltier**, M Lippmann, GD Thurston, LC Chen, L Neas, D Diaz-Sanchez, R Laumbach, JD Carter and T Gordon. Repeated measures of inflammation, blood pressure, and heart rate variability associated with traffic exposures in healthy adults. *Environmental Health*, 14:66, 2015
- 2015 T. Fang, H. Guo, V. Verma, **R. E. Peltier**, and R. J. Weber. PM_{2.5} water-soluble elements in the southeastern United States: automated analytical method development, spatiotemporal distributions, source apportionment, and implications for health studies, *Atmos. Chem. Phys. Discuss.*, 15, 17189-17227, 2015
- 2015 Verma, V. Fang, T, Xu, L., **Peltier, RE**, Russell, AG, Ng, NL, and Weber, RJ. Organic Aerosols associated with the generation of Reactive Oxygen Species (ROS) by Water-soluble PM_{2.5}" *Environmental Science and Technology*, DOI: 10.1021/es505577w.
- 2014 Vilcassim, M. J., G. D. Thurston, **R. E. Peltier**, and T. Gordon (2014), Black Carbon and Particulate Matter (PM_{2.5}) Concentrations in New York City's Subway Stations, *Environ Sci Technol*, 48(24), 14738-14745.
- 2014 Zhou, S., M. Weitzman, R. Vilcassim, J. Wilson, N. Legrand, E. Saunders, M. Travers, L. C. Chen, **RE. Peltier**, and T. Gordon (2014), Air quality in New York City hookah bars, *Tob Control*.
- 2014 Fibiger DL, Hastings MG, Lew AF, **Peltier RE**. 2014. Collection of NO and NO₂ for Isotopic Analysis of NO_x Emissions. *Analytical Chemistry* 86(24): 12115-12121.
- 2014 Shakya KM, **Peltier RE**. 2015. Non-sulfate sulfur in fine aerosols across the United States: Insight for organosulfate prevalence. *Atmospheric Environment* 100(0): 159-166.
- 2014 Verma, V., Fang, T., Guo, H., King, L., Bates, J. T., **Peltier, R. E.**, Edgerton, E., Russell, A. J., and Weber, R. J.: Reactive oxygen species associated with water-soluble PM_{2.5} in the southeastern United States: spatiotemporal trends and source apportionment, *Atmos. Chem. Phys. Discuss.*, 14, 19625-19672, doi:10.5194/acpd-14-19625-2014, 2014.
- 2014 Cohen, MD, Vaughn, JM, Garrett, B, Prophete, C, Horton, L, Sisco, M, Kodavanti, UP, Ward, W, **Peltier, RE**, Zelikoff, JT, Ghio, A, Chen, LC. Acute High-level Exposure to WTC Particles Alters Expression of Genes Associated with Oxidative Stress, and Immune Function in the Lung. *J Immunotoxicology*, advance online 21 Feb 2014.
- 2013 Mirowsky J, Hickey C, Horton L, Blaustein M, Galdanes K, **Peltier RE**, Chillrud S, Chen LC, Ross J, Nadas A, Lippmann M, Gordon T. The effect of particle size, location and season on the toxicity of urban and rural particulate matter. *Inhal Toxicol*. 2013 Nov; 25(13):747-57.
- 2013 Shakya, KM, and **Peltier, RE**. Investigating Missing Sources of Sulfur at Fairbanks, Alaska *Environmental Science and Technology*, 10.1021/es402020b 25 July 2013.
- 2013 Vaughan, J.M., Garrett, B., Prophete, C., Horton, L., Sisco, M., Soukup, J.M., Zelikoff, J., Ghio, A., **Peltier, R.E.** Asgharian, B.E., Chen, L.C., and Cohen M.D. (2013) A Novel System to Generate WTC Dust Particles for Inhalation Exposures. *Journal of Exposure Assessment and Environmental Epidemiology* 2014 Jan-Feb;24(1):105-12.
- 2011 Kenneth S. Docherty, KS, Aiken, AC, Huffman JA, Ulbrich, IM, DeCarlo, PF, Sueper, D, Worsnop, DR, Snyder, DS, **Peltier, RE**, Weber, RJ, Grover, BD, Eatough, DJ, Williams, BJ, Goldstein, AH, Ziemann, PJ and JL Jimenez. The 2005 Study of Organic Aerosols at Riverside (SOAR-1): instrumental intercomparisons and fine particle composition, *Atmospheric Chemistry and Physics*, 11, 12387-12420, 2011
- 2011 **Peltier, RE** and Lippmann, M Spatial and seasonal distribution of chemical components of ambient air fine particulate matter (PM_{2.5}) in New York City from incineration, coal combustion, and biomass burning. *Journal of Exposure Science and Environmental Epidemiology* 2011 21(5) 473-483.

- 2011 **Peltier, RE** Cromar, KJ, Hu, J., Fan, ZH, and Lippmann, M. Spatial and seasonal distribution of aerosol chemical components in New York City: *Road dust and other tracers of traffic-generated air pollution* *Journal of Exposure Science and Environmental Epidemiology* 2011 21(5) 484-494.
- 2010 **Peltier, R.E.** and Lippmann, M. Residual oil combustion: 2. Distributions of airborne nickel and vanadium within New York City. *J Exposure Science and Environmental Epidemiology*, 2010: 20(4):342-350.
- 2009 Brown SS, Degouw JA, Warneke C, Ryerson TB, Dube WP, Atlas E, Weber RJ, **Peltier RE**, Neuman JA, Roberts JM, Swanson A, Flocke F, McKeen SA, Brioude J, Sommariva R, Trainer M, Fehsenfeld FC, and Ravishankara AR. Nocturnal Isoprene Oxidation over the Northeast United States in Summer and Its Impact on Reactive Nitrogen Partitioning and Secondary Organic Aerosol. *Atmospheric Chemistry and Physics* 2009: 9(9): 3027-3042.
- 2009 **Peltier, R.E.**, Hsu, S.I., Lall, R., Lippmann, M. Residual Oil Combustion: A Major Source of Airborne Nickel in New York City. *J Exposure Science and Environmental Epidemiology*, 2009: 19(6): 603-612.
- 2008 Dunlea, E.J., DeCarlo, P.F., Aiken, A.C., Kimmel, J.R., **Peltier, R.E.**, Weber, R.J., Tomlinson, J., Collins, D.R., Shinozuka, Y, McNaughton, C.S., Howell, S.G., Clarke, A.D., Emmons, L.K., Apel, E.C., Pfister, G.G., van Donkelaar, A., Martin, R.V., Millet, D.B., Heald, C.L., Jimenez, J.L. Evolution of Asian Aerosols during Transpacific Transport in INTEX-B. *Atmospheric Chemistry and Physics Discussions*, 2008, vol.8, pp. 15375-15461.
- 2008 Docherty, K. S., Elizabeth A. Stone, Ingrid M. Ulbrich, PF. DeCarlo, David C. Snyder, Schauer, J. J., **Peltier, R.E.**, Weber, R. J., Murphy, S. M., Seinfeld, J. H., Grover, B. D., Eatough, D. J., and Jimenez, J. L.: Apportionment of Primary and Secondary Organic Aerosols in Southern California during the 2005 Study of Organic Aerosols in Riverside (SOAR), *Environmental Science and Technology*, 42 (20), 7655–7662, 2008. 10.1021/es8008166.
- 2008 Hennigan CJ, Sullivan AP, Fountoukis CI, Nenes A, Hecobian A, Vargas O, **Peltier RE**, Hanks ATC, Huey LG, Lefer BL, Russell AG, and Weber RJ. On the Volatility and Production Mechanisms of Newly Formed Nitrate and Water Soluble Organic Aerosol in Mexico City. *Atmospheric Chemistry and Physics* 2008: 8(14): 3761-3768.
- 2008 **Peltier, R.E.**, A.H. Hecobian, R.J. Weber, A. Stohl, E.L. Atlas, D.D. Riemer, D.R. Blake, E. Apel, T. Campos, and T. Karl. Investigating the Sources and Atmospheric Processing of Fine Particles from Asia and the Northwestern United States Measured During INTEX B. *Atmospheric Chemistry and Physics*, 2008, 8, 1835-1853.
- 2008 de Gouw, J.A., C.A. Brock, C. Warneke, P.D. Goldan, W.C. Kuster, J.S. Holloway, B.M. Lerner, E.J. Williams, A.M. Middlebrook, B. Matthew, C.J. Senff, M. Trainer, F.C. Fehsenfeld, P.K. Quinn, T.S. Bates, E.L. Atlas, A. Stohl, A.P. Sullivan, **R.E. Peltier**, and R.J. Weber. Particulate Organic Carbon is Formed in Unexpectedly Large Amounts in Urban Pollution Plumes. *Journal of Geophysical Research*, 113, D08301, 10.1029/2007JD009243, 2008.
- 2007 Brock, C. A., Sullivan, A. P., **Peltier, R. E.**, Weber, R. J., Wollny, A., de Gouw, J. A., Middlebrook, A. M., Atlas, E. L., Stohl, A., Trainer, M. K., Cooper, O. R., Fehsenfeld, F. C., Frost, G. J., Holloway, J. S., Hübler, G., Neuman, J. A., Ryerson, T. B., Warneke, C., and Wilson, J. C.: Sources of particulate matter in the northeastern united states: 2. Evolution of chemical and microphysical properties, *J Geophysical Research*, 113, D08302, doi:10.1029/2007JD009241, 2007.
- 2007 **Peltier, R. E.**, Weber, R. J., and Sullivan, A. P.: Investigating a Method for Online OC Detection with a Particle-Into-Liquid Sampler, *Aerosol Science and Technology*, 41, 1117-1127, 10.1080/02786820701777465, 2007.
- 2007 Weber R.J., A. P. Sullivan, **R. E. Peltier**, A.. Russell, B.. Yan, M.. Zheng, Joost de Gouw, Carsten Warneke Charles. Brock, John S. Holloway, Elliot L. Atlas, and Eric Edgerton. A Study of Secondary Organic Aerosol Formation in the Anthropogenic -Influenced Southeastern USA. *Journal of Geophysical Research - Atmospheres*, *J. Geophys. Res.*, 112, D13302, doi:10.1029/2007JD008408, 2007.
- 2007 **Peltier, R.E.**, A.P. Sullivan, C.A. Brock, J.A. de Gouw, J.S. Holloway, C. Warneke, A.G. Wollny, and R.J. Weber. Fine Particle Composition Measured During ICARTT An Overview Of Inorganic Ions And Water Soluble Organic Carbon, *Atmospheric Chemistry and Physics* , 7, 3073-3112, 2007
- 2007 **Peltier, R. E.**, A. P. Sullivan, R. J. Weber, A. G. Wollny, J. S. Holloway, C. A. Brock, J. A. de Gouw, and E. L. Atlas (2007), No evidence for acid-catalyzed secondary organic aerosol formation in power plant plumes over metropolitan Atlanta, Georgia, *Geophys. Res. Lett.*, 34, L06801, doi:10.1029/2006GL028780.
- 2006 Heald, C. L., Jacob, D. J., Turquety, S., Hudman, R. C., Weber, R. J., Sullivan, A. P., **Peltier, R. E.**, Atlas, E. L., de Gouw, J. A., Warneke, C., Holloway, J. S., Neuman, J. A., Flocke, F. M. and Seinfeld, J. H. (2006).

- Concentrations and sources of organic carbon aerosols in the free troposphere over North America. *Journal of Geophysical Research - Atmospheres* 111:D23S47.
- 2006 Sullivan, A. P., **Peltier, R. E.**, Brock, C. A., de Gouw, J. A., Holloway, J. S., Warneke, C., Wollny, A. G. and Weber, R. J. (2006). Airborne measurements of carbonaceous aerosol soluble in water over northeastern United States: Method development and an investigation into water-soluble organic carbon sources. *Journal of Geophysical Research-Atmospheres* 111.
- 2006 Brown, S. S., Neuman, J. A., Ryerson, T. B., Trainer, M., Dube, W. P., Holloway, J. S., Warneke, C., de Gouw, J. A., Donnelly, S. G., Atlas, E., Matthew, B., Middlebrook, A. M., **Peltier, R.**, Weber, R. J., Stohl, A., Meagher, J. F., Fehsenfeld, F. C. and Ravishankara, A. R. (2006). Nocturnal odd-oxygen budget and its implications for ozone loss in the lower troposphere. *Geophysical Research Letters* 33.
- 2006 Neuman, J. A., Parrish, D. D., Trainer, M., Ryerson, T. B., Holloway, J. S., Nowak, J. B., Swanson, A., Flocke, F., Roberts, J. M., Brown, S. S., Stark, H., Sommariva, R., Stohl, A., **Peltier, R.**, Weber, R., Wollny, A. G., Sueper, D. T., Hubler, G. and Fehsenfeld, F. C. (2006). Reactive nitrogen transport and photochemistry in urban plumes over the North Atlantic Ocean. *Journal of Geophysical Research-Atmospheres* 111.
- 2006 Murphy, D. M., Cziczo, D. J., Froyd, K. D., Hudson, P. K., Matthew, B. M., Middlebrook, A. M., **Peltier, R. E.**, Sullivan, A., Thomson, D. S. and Weber, R. J. (2006). Single-particle mass spectrometry of tropospheric aerosol particles. *Journal of Geophysical Research-Atmospheres* 111.
- 2006 Brown, S.S., T. B. Ryerson, A. G. Wollny, C. A. Brock, **R. Peltier**, A. P. Sullivan, R. J. Weber, W. P. Dubé, M. Trainer, J. F. Meagher, F. C. Fehsenfeld, and A. R. Ravishankara Variability in Nocturnal Nitrogen Oxide Processing and Its Role in Regional Air Quality; *Science* 6 January 2006: 67-70
- 2003 Woessner, D., Janhga, S., Gordon, C., Edwards, D., Cowan, S., Reid, P., **Peltier, R.**, Llewellyn, D., Usselman, M. Value Added: Integrating NSBE Jr Chapters Into High School Mathematics and Science Curriculum. Proceedings of the 2003 American Society for Engineering Education Annual Conference & Exposition (1917) 2003.

PROFESSIONAL MEETINGS AND SYMPOSIA (73 presentations in total)

- 2016 RE Peltier, Investigator Indoor Air Exposures from Seasonal Hunting Activities: EPA STAR update, Reaearch Triangle Park, NC, 20 Sept 2016.
- 2016 RE Peltier Wood Heat and Air Quality , Franklin Regional Council of Governments Workshop, greenfield, MA 26 July 2016
- 2016 E Liberda, L Tsuji, and RE Peltier First Nations and Environmental Health: An Inhalation Exposure Case Study. . National Tribal Forum on Air Quality, Niagara Falls, NY, 17-19 May 2016
- 2015 Personal Exposure and Chemical Composition Analysis of Particulate Matter in Vietnam: A Pilot Study R. E. Peltier, W. Huynh, P. Pant, Intl Society of Exposure Science Annual Conference, Henderson, NV, Oct 2015.
- 2015 V. Verma, T. Fang, J. Bates, L. Xu³ H. Guo, R. E. Peltier, N. L. Ng, A. Russell, R. Weber, Reactive Oxygen Species Associated with Water-Soluble PM_{2.5} in the Southeastern United States – Implications for Health Effects of Ambient Atmospheric Aerosols Intl Society of Exposure Science Annual Conference, Henderson, NV, Oct 2015
- 2015 R. E. Peltier F. Kiros, K. M. Shakya, M. Rupakheti, R. Maharjan, K. Mahata, R. P. Regmi, R. M. Byanju Evaluating Passive Sampling Techniques for Trace Gases in Regional and Personal Sampling Studies in Nepal, Intl Society of Exposure Science Annual Conference, Henderson, NV, Oct 2015.
- 2015 W. Huynh, R. E. Peltier, P. Pant, New Methods of Measuring Reactive Oxygen Species Related to Aerosol Components Intl Society of Exposure Science Annual Conference, Henderson, NV, Oct 2015.
- 2015 K. M. Shakya, R. Peltier, P. Pant, F. Kiros, Solubility of Trace Elements in Particulate Matter, Intl Society of Exposure Science Annual Conference, Henderson, NV, Oct 2015.
- 2015 AR Noyes, R Kallin, KM Shakya, and RE Peltier Evaluating Efficacy of Protective Dust Masks used in Developing Nations. Intl Society of Exposure Science Annual Conference, Henderson, NV, Oct 2015.
- 2015 Pallavi Pant, Steven D.Kohl, John G. Watson, Judith C. Chow, Roy M. Harrison, Richard E. Peltier, Investigating Potential Sources of PM_{2.5} Chloride in New Delhi, India, The Second Workshop On Atmospheric Composition And The Asian Summer Monsoon (ACAM), Bangkok, Thailand, 8-10 June 2015
- 2015 W. Huynh, P. Pant, and R.E. Peltier, Chemical Composition Analysis of Particulate Matter in Vietnam: A Pilot Study, The Second Workshop On Atmospheric Composition And The Asian Summer Monsoon (ACAM), Bangkok, Thailand, 8-10 June 2015

- 2015 KM Shakya and RE. Peltier, Monsoonal Enhancements of PM_{2.5} Elements in the Kathmandu Valley, The Second Workshop On Atmospheric Composition And The Asian Summer Monsoon (ACAM), Bangkok, Thailand, 8-10 June 2015
- 2015 D Birkett, GSW Hagler, R Henry, RE Peltier. Analysis of long-term, high time-resolution measurement of gaseous and particulate pollution near the Port of New York and New Jersey. Air and Waste Management Association Annual Meeting, Raleigh, NC, 22 June 2015
- 2015 Huynh, W, P Pant, and RE Peltier, Development of a New Online Method for Measurements of Reactive Oxygen Species Associated with PM_{2.5}. Health Effects Institute Annual Meeting, Philadelphia, PA, 6 May 2015.
- 2015 W Huynh, P Pant and RE Peltier, Chemical Composition Analysis of Particulate Matter in Vietnam: A Pilot Study. Atmospheric Chemistry and Asian Monsoon biennial meeting, Bangkok, Thailand, 12 June 2015
- 2015 Shakya, KM, and Peltier, RE. Enhancements of PM_{2.5} elemental components during the monsoon season in Kathmandu Valley, Nepal. Atmospheric Chemistry and Asian Monsoon biennial meeting, Bangkok, Thailand, 12 June 2015
- 2015 P Pant, SD Kohl, JG Watson, JC Chow, RM Harrison, and RE Peltier. Investigating Potential Sources of PM_{2.5} Chloride in New Delhi, India. Atmospheric Chemistry and Asian Monsoon biennial meeting, Bangkok, Thailand, 12 June 2015
- 2014 Fang, T. Verma, V, Peltier, RE, Guo, H, King, L, Weber, RJ. Distribution of Ambient Atmospheric Water-soluble Metals in the Southeastern United States and Insights into Their Complexation States. American Association for Aerosol Research Annual Meeting, Orlando, FL, 20 Oct 2014.
- 2014 Shakya, K, Rupakheti, M, and RE Peltier. Investigating Air Pollution Exposures in a Cohort of Traffic Police in Kathmandu, Nepal. International Society of Exposure Science Annual Meeting. Cincinnati, OH, 12 October 2014
- 2014 Huynh, W, and RE Peltier, Development of a New Online Method for Measurements of Reactive Oxygen Species Associated with PM_{2.5}. International Society of Exposure Science Annual Meeting. Cincinnati, OH, 12 October 2014
- 2014 J Schmale, S Kang, R Peltier, M Sprenger, J Guo, Y Li, Q Zhang. Snow Impurities on Central Asian Glaciers: Mineral Dust, Organic & Elemental Carbon. American Geophysical Union Annual Meeting, San Francisco, CA, 12/2014.
- 2014 MC McCarthy, SG Brown, JL DeWinter, S Bai, T O'Brien, D Vaughn, R Peltier, J Soltis, RA Field, SM Murphy, PT Roberts. Characterizing Air Toxics from Oil Field Operations in Los Angeles. American Geophysical Union Annual Meeting, San Francisco, CA, 12/2014.
- 2014 Peltier, RE, Turner, J, and Shakya, KM. Investigating Missing Sources of Sulfur, National Ambient Air Monitoring Conference, Atlanta, GA, August 2014
- 2014 Shakya, KM, and Peltier, RE. High Concentrations in the Himalayas, National Ambient Air Monitoring Conference, Atlanta, GA, August 2014
- 2014 Huynh, W., and RE Peltier, Development of a New Method for Measurements of Reactive Oxygen Species Associated with PM_{2.5} Health Effects Institute Annual Meeting, Alexandria, Virginia, 4 May 2014.
- 2014 Schmale, J., Kang, S., Peltier, RE: Long-range transported dissolved organic matter, ions and black carbon deposited on Central Asian snow covered glaciers, General Assembly European Geosciences Union (EGU), 27Apr 2014, Vienna, Austria.
- 2013 Shakya, KM, and Peltier, RE Investigating Missing Sulfur Sources at Fairbanks, Alaska. American Association for Aerosol Research Annual Meeting, Portland, OR, 30 Sep- 4 Oct, 2013.
- 2013 Peltier, RE "A technical introduction to air pollution health effects for SusKat" Keynote address, SusKat Data Workshop, Kathmandu, Nepal, 27-29 August
- 2013 Malcolm, EG, Hastings, MG, Morel, FMM, Sigman, DM, Peltier, RE, Fahringer, RH. Concentrations and Sources of Total and Methyl Mercury in Wet Deposition from Princeton, NJ, USA. The 11th International Conference on Mercury as a Global Pollutant. Edinburgh, Scotland 28Jul-2Aug 2013.
- 2013 Huynh, W., Browne, E., Arcaro, K., and Peltier, RE Developing New Methods to Measure Reactive Oxygen Species Related to Aerosol Componen, health Effects Institute Annual Meeting, San Francisco, CA, 14-16 April, 2013.
- 2013 Huynh, W, Brown, E, Arcaro, K, and Peltier, RE. Developing New Methods to Measure Reactive Oxygen Species Related to Aerosol Components, Society of Toxicology Annual Meeting, San Antonio, TX, 10-14 Mar, 2013.
- 2012 Peltier, RE. Fairbanks Air Quality Measurements, Fairbanks North Star Borough Air Quality Summit III, 06 Jan 2012.

- 2012 Peltier, RE., Wintertime Measurements of Ambient Aerosol in Alaska: High Time Resolution Chemical Components, National Air Quality Conference Ambient Monitoring 2012/US Environmental Protection Agency, Denver, CO, 14-17 May 2012
- 2012 Peltier, RE, Developing New Methods for Measurements of Reactive Oxygen Species Associated With PM_{2.5}, Health Effects Institute Annual Meeting, Chicago, IL, 12-16 April 2012
- 2012 Huynh, W and Peltier, RE Developing New Methods to Measure Reactive Oxygen Species Related to Aerosol Components , UM SPHHS Research Day, 3 Apr 2012
- 2010 Peltier, RE, Cromar, KR, Ma, Y., Fan, ZH, Lippmann, M. Spatial and Seasonal Distribution of Aerosol Chemical Components in New York City: Road Dust and Other Tracers of Traffic-Generated Air Pollution. American Association for Aerosol Research Annual Meeting, Portland, OR, Oct 20-24, 2010.
- 2010 Peltier, RE, Q Qu, J Niu, S Qu, X Li, X Guo, B Luo, L Zhang, K Ito, R Wildman, M Zhong, J Cao, H Liu, LC, Chen. Nickel is a Major Component Responsible for PM_{2.5}-Associated Cardiovascular Diseases. NIEHS-EPA Symposium on Air Pollution and Cardiovascular Disease, Seattle, WA, 20-22 June, 2010.
- 2010 Peltier, R.E., Lall, R., Chen, L.C., Devlin, R., and Gordon, T. Cellular Oxidative Response from Exposure to Size-Resolved Ambient Particulate Matter. American Association for Aerosol Research Specialty Conference: Air Pollution and Health. March 22-26, 2010.
- 2009 Lippmann, M., and Peltier R.E. Spatial And Temporal Distributions Of PM_{2.5} Components Within New York City. International Society of Exposure Science, Minneapolis, MN, Oct 2009.
- 2009 Peltier, R.E. and Lippmann, M. On the Sources of Ambient Respirable Particles Laden with Trace Metals: An Investigation of Aerosol Sources with High Fractions of Transition Metals in New York City. International Society of Environmental Epidemiology, Dublin, Ireland, August 22-26, 2009.
- 2009 JB Nowak, J Neuman, J Holloway, DD Parrish, J Degouw, C Warneke, TB Ryerson, CA Brock, AG Wollny, R Weber, RE Peltier, M Trainer, FC Fehsenfeld Airborn Observations of Ammonia in Aged Biomass Burning Plumes. American Geophysical Union Annual Meeting, San Francisco, CA, December 2009
- 2008 Peltier, R.E. and Lippmann, M. A Spatial and Seasonal Profile of Fine Particle Nickel in New York City: Estimating Exposures For Health Research. *American Association for Aerosol Research, Orlando, FL, Oct 20-24, 2008.*
- 2008 Docherty, K.S., Ulrich, I.M., DeCarlo, P., Aiken, A.C., Huffman, J.A., Cubison, M.J., Dunlea, E.J., Sueper, D., Kimmel, J.R., Peltier, R.E., Weber, R.J., Stone, E.A., Snyder, D.C., Schauer, J.J., Grover, B.D., Eatough, D.J., Williams, B.J., McKay, M., Goldstein, A., Jimenez, J.L. Characterization of Ambient Southern California Organic Aerosols during the 2005 Study of Organic Aerosol in Riverside (SOAR-1) campaign using Positive Matrix Factorization of High Resolution Aerosol Mass Spectra. *American Association of Aerosol Research, Orlando, FL, Oct 20-24, 2008.*
- 2008 Lippmann, M.L., and Peltier, R.E. Seasonal and Spatial Distributions of Nickel in New York City Ambient Air. *International Society for Environmental Epidemiology and International Society of Exposure Analysis. Pasadena, CA, 12 Oct – 16 Oct, 2008.*
- 2007 Dunlea, E., P. DeCarlo, A. Aiken, J. Kimmel, R. Bahreini, R. Peltier, R. Weber, J. Tomlinson, D. Collins, Y. Shinozuka, S. Howell, A. Clarke, L. Emmons, E. Apel, G. Pfister, A.v. Donkelaar, D. Millet, and J. Jimenez, Observations of Processed Asian Pollution with a High-Resolution Time-of-Flight Aerosol Mass Spectrometer (HR-ToF-AMS) from the C-130 Aircraft During the INTEX-B Field Campaign, *American Geophysical Union, Dec 10-14, San Francisco CA, 2007.*
- 2007 Hennigan, C.J., A.P. Sullivan, R.E. Peltier, R.J. Weber, C. Fountoukis, A. Nenes, D. Farmer, P. Wooldridge, and R.C. Cohen, Investigating the volatility of SOA in different urban environments, *American Association of Aerosol Research, Reno, NV, Sept. 24- 28, 2007.*
- 2007 Weber, R., R. Peltier, A. Hecobian, D. Blake, E. Atlas, D. Riemer, T. Karl, E. Apel, T. Campos, and A. Stohl, Contrast Between the Sources and Atmospheric Processing of Fine Particles from Asia and North America Measured During INTEX B, *American Geophysical Union, Dec 10-14, San Francisco CA , 2007.*
- 2007 Brock, C., J.d. Gouw, A. Wollny, R. Weber, R. Peltier, and A. Sullivan, What controls the relative abundance of organic and sulfate aerosol mass in the northeastern United States?, *American Association of Aerosol Research, Reno, NV, Sept. 24- 28, 2007.*
- 2006 Peltier, R., A. Sullivan, R.J. Weber, J.J. Schauer, and D. Snyder (2006), A method for online OC detection: The PILS-WSOC transformed to PILS-OC, *International Aerosol Conference, St Paul MN, Sept 10-15, 2006.*
- 2006 Weber, R.J., A. Sullivan, R. Peltier, C. Hennigan, A. Russell, B. Yan, M. Zheng, J.d. Gouw, C. Warneke, J. Holloway, E. Atlas, and E. Edgerton (2006), Secondary organic aerosol formation in metropolitan Atlanta GA, *International Aerosol Conference, St Paul MN, Sept 10-15, 2006.*

- 2006 Brock, C.A., A. Sullivan, R. Peltier, R.J. Weber, J. deGouw, T.S. Bates, T. Quinn, A.M. Middlebrook, D.M. Murphy, E. Atlas, A. Stohl, M. Trainer, O.R. Cooper, F.C. Fehsenfeld, J.S. Holloway, G. Hubler, P.K. Hudson, J.A. Neuman, T.B. Ryerson, C. Warneke, and J.C. Wilson, Chemical and microphysical evolution of aerosols transported from the east coast of United States, *American Geophysical Union, Dec 10-15, San Francisco CA*, 2006.
- 2006 Weber, R., Sullivan, A., Peltier, R., Hennigan, C., Yan, B., Zheng, M., Kaynak, B., Russell, A., Brock, C., de Gouw, J., Warneke, C., Holloway, J., Atlas, E., Edgerton, E. Investigating the Formation of Ambient Secondary Organic Aerosol in Southeastern USA. *American Geophysical Union, Dec 10-15, San Francisco CA*, 2006.
- 2006 de Gouw, J.A., C. Brock, C. Warneke, A.M. Middlebrook, W.C. Kuster, P.D. Goldan, B.M. Lerner, E.J. Williams, J.S. Holloway, F.C. Fehsenfeld, R.E. Peltier, A.P. Sullivan, R.J. Weber, T.B. Onasch, P.K. Quinn, T.S. Bates, and E.L. Atlas, Organic aerosol is formed in unexpectedly large amounts in urban plumes, *American Geophysical Union, Dec 10-15, San Francisco CA.*, 2006.
- 2005 Bahreini, R., B. Matthew, A.M. Middlebrook, F.C. Fehsenfeld, R. Peltier, R. Weber, K. Shulz, and P. Quinn, Comparisons of Aerosol Phase Sulfate, Nitrate, and Ammonium Concentrations Measured by an Aerodyne Aerosol Mass Spectrometer and a Particle Into Liquid Sampler, *American Geophysical Union, Dec 5-9, San Francisco CA*, 2005.
- 2005 Brock, C., A. Wollny, J.d. Gouw, C. Warneke, J. Holloway, A.M. Middlebrook, D. Murphy, A. Neuman, R. Peltier, and R. Weber, Transport and Evolution of Aerosol Plumes from Urban and Industrial Sources in the Eastern U.S., *American Geophysical Union, Dec 5-9, San Francisco CA*, 2005.
- 2005 Brown, S.S., T.B. Ryerson, A.G. Wollny, C.A. Brock, R. Peltier, A.P. Sullivan, R.J. Weber, W.P. Dube, M. Trainer, J. Meagher, F.C. Fehsenfeld, and A.R. Ravishankara, Variability in nocturnal nitrogen oxide processing and its role in regional air quality, *American Geophysical Union, Dec 5-9, San Francisco CA*, 2005.
- 2005 Hennigan, C., S. Sandholm, R.J. Weber, R. Peltier, G. Huey, R. Stickel, and S. Kim, Regional impact of the Ohio River Valley on boundary-layer SO₄ concentrations: Results from INTEX-NA, *American Geophysical Union, Dec 5-9, San Francisco CA*, 2005
- 2005 Middlebrook, A.M., B. Mathew, R. Bahreini, C. Brock, A. Wollny, J.d. Gouw, C. Warneke, J. Holloway, F.C. Fehsenfeld, R. Peltier, and R. Weber, Airborne Aerosol Mass Spectrometer Measurements of the Submicron Aerosol Chemical Composition Downwind of Sources, *American Geophysical Union, Dec 5-9, San Francisco CA*, 2005.
- 2005 Peltier, R., C. Hennigan, A. Sullivan, R. Weber, C. Brock, A. Wollny, J. Holloway, J. deGouw, and C. Warneke, Fine Particle Composition Measured During ICARTT – An Overview of Inorganic Ions and Water Soluble Organic Carbon, *American Geophysical Union, Dec 5-9, San Francisco CA*, 2005.
- 2005 T.J. Fortin, T.J., T.B. Ryerson, J.S. Holloway, J.A. Neuman, F. Flocke, A. Swanson, J.A. de Gouw, C. Warneke, L.G. Huey, D.J. Tanner, H. Stark, C.A. Brock, A.G. Wollny, R.J. Weber, R. Peltier, A. Sorooshian, J.H. Seinfeld, and F.C. Fehsenfeld, Characteristics and Chemistry of Power Plant Plumes: Conesville Case Study, *American Geophysical Union, Dec 5-9, San Francisco CA*, 2005.
- 2005 Wollny, A., C. Brock, O. Cooper, F.C. Fehsenfeld, J. DeGouw, P. Hudson, A.M. Middlebrook, D. Murphy, A. Stohl, C. Warneke, R. Peltier, and R. Weber, Chemical and microphysical properties of particles in aged plumes from forest fire in Alaska and western Canada, *American Geophysical Union, Dec 5-9, San Francisco CA*, 2005.
- 2005 Heald, C L, Jacob, D J, Park, R J, Turquety, S, Hudman, R C, Weber, R J, Peltier, R, Sullivan, A, Russell, L M, Huebert, B J, Seinfeld, J H, Liao, H Modeling the Sources of Organic Carbon Aerosol in the Free Troposphere. *American Geophysical Union, Dec 5-9, San Francisco CA*, 2005.
- 2005 Middlebrook, A.M., B. Mathew, C. Brock, A. Wollny, J.d. Gouw, C. Warneke, J. Holloway, F.C. Fehsenfeld, R. Peltier, and R. Weber, Major Sources of Submicron Aerosol Mass above the Northeastern United States Inferred from Airborne Aerosol Mass Spectrometer Measurements during ICARTT, *American Association of Aerosol Research, Austin TX, Oct 17-21*, 2005.
- 2005 Peltier, R., C. Hennigan, A. Sullivan, R. Weber, C. Brock, and A. Wollny, Fine Particle Composition Measured During ICARTT – An Overview of Inorganic Ions and Water Soluble Organic Carbon, *American Association of Aerosol Research, Austin TX, Oct 17-21*, 2005.
- 2005 Sullivan, A., R. Peltier, and R. Weber, A Method for Airborne Measurements of Water-Soluble Organic Carbon: PILS-TOC results from the NOAA WP-3D during ICARTT, *American Association of Aerosol Research, Austin TX, Oct 17-21*, 2005.

- 2005 Brock, C., A. Wollny, R. Peltier, R. Weber, J. Holloway, A. Middlebrook, P. Hudson, D. Murphy, A. Neuman, L. Huey, Transport and evolution of an urban aerosol plume from the east coast of the United States, *European Geophysical Union, Vienna, Austria*, 2005.
- 2005 Wollny, A.G., Brock, C.A, O.R. Cooper, F. C. Fehsenfeld, J.A.d. Gouw, P. K.Hudson, B.M. Matthew, A. M. Middlebrook, D.M. Murphy, C. Simons, A. Stohl, C. Warneke, R. Peltier, R.J. Weber, and J.C. Wilson, Chemical and microphysical properties of particles in aged forest fire plumes from Alaska and western Canada observed over the Northeastern U.S., *European Geophysical Union, Vienna, Austria*, 2005.
- 2004 de Gouw, J.A., C. Warneke, A. Stohl, O.R. Cooper, P.K. Hudson, D.M. Murphy, C.A. Brock, F. Flocke, F.C. Fehsenfeld, J.S. Holloway, B. Matthew, A.M. Middlebrook, A. Neuman, J. Nowak, R. Peltier, J. Roberts, T. Ryerson, A. Swanson, M. Trainer, R. Weber, and A. Wollny, Long-range transport of smoke from 2004 forest fires in Alaska and western Canada, *American Geophysical Union, Dec 6-10, San Francisco, CA*, 2004.
- 2004 Middlebrook, A.M., B.M. Matthew, C.A. Brock, A. Wollny, J.A.d. Gouw, C. Warneke, F.C. Fehsenfeld, R. Peltier, and R. Weber, Preliminary Results of Aerosol Chemical Composition Measurements Above the Northeastern U. S. with an Aerodyne Aerosol Mass Spectrometer, *American Geophysical Union, Dec 6-10, San Francisco, CA*, 2004.
- 2004 Peltier, R., C. Hennigan, A. Sullivan, R.J. Weber, C. Brock, and A. Wollny, Initial Results of Airborne Measurements of PM1.0 Inorganic Ions and Water Soluble Organic Carbon During the New England Air Quality Study, Summer 2004, *American Geophysical Union, Dec 6-10, San Francisco, CA*, 2004.
- 2003 Peltier, R.E. Weber, R., A. Sullivan, Y. Ma, and K. Meier, Measurements of particle inorganic and organic chemical composition with the particle-into-liquid sampler (PILS), *Particulate Matter: Atmospheric Sciences, Exposure and the Fourth Colloquium on PM and Health, American Association of Aerosol Research, Pittsburgh, PA, March 31-April 4*, 2003.
- 2003 Peltier, RE., Gordon, C., Wood, M., Llewellyn, D., Usselman, M., Kingsley, G. When Graduate School Isn't Enough – How K-12 Partnerships Enhance Graduate Education. Proceedings of the American Association for the Advancement of Science. February 16th, 2003; (and as poster session: Celebrate Teaching Symposium, Georgia Institute of Technology. March 26th, 2003)
- 2002 Llewellyn, D., Usselman, M., Gordon, C., Peltier, R. Ready, Aim, Teach. Proceedings of the Professional and Organizational Development Annual Meeting. October 15th, 2002

HONORS AND AWARDS:

- 2017 US-UK Fulbright award to the University of York, UK.
- 2013 Elected to Delta Omega Honorary Society (Rho chapter)
- 2012 HEI Rosenblith New Investigator Award
- 2008 Dissertation Initiative for the Advancement of Climate Change Research (DISCCRS) Scholar
- 2006 John Bradshaw Award (for novel instrumentation development)
- 2005 Air and Waste Management Association (Georgia) Scholarship
- 2005 EAS Chair's Special Service Award
- 2002 Student and Teacher Enhancement Partnership (STEP) Fellowship, Georgia Tech
- 2000 Dean's Scholarship, Columbia University
- 1997 Senior Leadership Award, University of Massachusetts

RESEARCH GRANTS AND CONTRACTS

Currently Administered

- | | | |
|--|----------------|-----------|
| <i>EPA STAR (RD83560501)</i> | 5/2014-4/2018 | \$700,000 |
| "Subsistence Hunting and Associated Activities of Native North Americans in Remote Communities" | | |
| Role: Principle Investigator | | |
| Study follows indoor air exposures in indigenous populations, including interventions strategies to mitigate exposures. | | |
| <i>Worldwide Universities Network RDG</i> | 1/2016-12/2016 | ~\$56,000 |
| "Air Sensors Everywhere" | | |
| Role: Principle Investigator | | |
| To establish a framework for DIY small pollution sensor approaches, with a focus on interventions in the developing world. | | |

<i>Institute for Advanced Sustainability Sciences</i>	1/2016-12/2018	~\$56,000
“AOD and Source Composition in South Asia”		
Role: PI		
Assessment of optical properties of aerosol and chemical speciation in South Asia.		
Past Funding		
<i>NIH (1K99ES017291)</i>	9/2009-12/2010	\$180,000
“Investigating Health Effects from Exposure to Organic Carbon and Nickel Aerosol”		
Role: PI		
A Pathway to Independence training award which transitions junior researchers towards independent research careers.		
<i>NIH (1R00ES017291)</i>	10/2010-9/2014	\$747,000
“Investigating Health Effects from Exposure to Organic Carbon and Nickel Aerosol”		
Role: PI		
Activation phase of K99 award to study aged aerosol effects in a murine model of atherosclerosis		
<i>Fairbanks North Star Borough (contract 111-0404)</i>	12/2010-12/2011	\$345,565
“Exploratory Research of Wintertime Aerosol Chemical Composition at a Ground Location in Fairbanks, Alaska”		
Role: PI		
Investigation of wintertime aerosol physicochemical composition in a subarctic community.		
<i>Canadian Institutes of Health Research (contract)</i>	1/2011-6/2012	\$237,300 (CAD)
“Human Airborne Particulate Mine Tailings Exposure in the Mushkegowuk Territory: The Victor Diamond Mine”		
Role: Co-PI		
Measurements of airborne metals in a remote aboriginal location in Northern Ontario thought to be affected by fugitive emissions from a large mining facility.		
<i>Health Effects Institute (Rosenblith Award)</i>	9/2012-10/2015	\$300,000
“Development of an online method for semi continuous measurements of reactive oxygen species formation associated with PM _{2.5} exposure.”		
Role: PI		
To design and build a novel air quality instrument based on a measure of in vitro ROS induction.		
<i>Sonoma Technology Inc (contract)</i>	11/2012-6/2014	\$33,503
“Investigating Aerosol Chemical Elements at an active Oilfield at Baldwin Hills, California”		
Role: PI		
Measurement of hourly metals in a remote industrial location in Los Angeles, CA		
<i>EMBARQ-India</i>	4/2015-12/2015	\$10,000
“Estimation of commuter exposure to air pollutants and associated health risks in New Delhi, India”		
Role: PI		
Measurements of personal exposures across a number of microenvironments in India.		
<i>Climate and Health Research Network (contract)</i>	8/2015-1/2016	\$26,643
“Speciation of PM pollution in Delhi and National Capital Region (NCR) using chemical markers and receptor modelling”		
Role: PI		
Measurement of chemical components of aerosol from surrounding region in Delhi, India		
<i>International Center for Integrated Mountain Development (contract)</i>	9/2015-12/2015	\$43,625
“Health Impacts of air pollution in the Kathmandu Valley, Nepal”		

Role: Co-PI

A cohort study with traffic police exposure to air pollution on streets of Kathmandu.

Under Review or Pending

NSF 7/2018-6/2021 \$649,000

“Engaging Low Income Students in Environmental Sensors Everywhere”

Role: Lead PI

Engaging at risk STEM students by implementing ‘Making’ as a central theme to retention and persistence.

INVITED TALKS

- 2017 Peltier, RE, “Engaging Environmental Health Research with Low Cost Technologies”. University of Cape Coast (Ghana) Faculty Lecture, April 20, 2017.
- 2016 Peltier, RE, ‘Intervention Strategies in the Developing World to Improve Human Health’ Institute for Advanced Sustainability Studies Invited Speaker, Potsdam, Germany. 23 May 2016.
- 2016 Peltier, RE, ‘Air Sensors Everywhere’. University of Ghana Seminar Series, Accra, Ghana 26 May 2016
- 2015 Peltier, RE “NHRC Dissemination Event”, Address to Nepal Health Minister, Annapurna Conference Center, Kathmandu, Nepal, 9 Oct 2015
- 2015 Peltier, RE “Up in the Air: Effects of Airborne Particulates on Human Health”, University of Dhaka, Dhaka, Bangladesh, 06 Oct 2015
- 2015 Peltier, RE “Up in the Air: Tiny Particles and Big Problems” Provost Newman’s Dinner Program, Amherst, MA 10 April 2015.
- 2014 Peltier, RE “New Methods and Approaches to Understand Particle Health Effects” Environmental Science and Engineering Seminars, Harvard University, 09 May 2014
- 2013 Peltier, RE “The Importance of Air Pollution on Human Health” High Level Update on Atmospheric Research in Nepal (Cabinet level address for Nepali government), Soaltee Conference Center, Kathmandu, Nepal, 26 Aug
- 2013 Nora Harrington Lecturer (30th Annual Event), Elms College, “Up in the Air: Air Pollution and Health Effects”, April 22
- 2011 Peltier, RE “Bridging the gap between public health and aerosol chemistry: improving health through old technology”, Invited seminar, University of Toronto, 18 Oct 2011
- 2011 Peltier, RE “Bridging the gap between public health and aerosol chemistry: improving health through old technology”, Invited seminar, Brown University, 9 Nov 2011
- 2009 Peltier, R.E. Field measurements of aerosol chemical composition: Investigating results of organic carbon over Atlanta, and nickel and vanadium in New York City. Visiting Scientist Lecture Seminar, United States Environmental Protection Agency, RTP, NC, 17 Mar 2009.
- 2008 Peltier, R.E. A Seasonal and Spatial Profile of Fine Particle Nickel in New York City: Estimating Exposures for Health Research. *Gordon Research Conference – Mechanisms of Toxicity*. July 28, 2008.

MULTI-INVESTIGATOR MEASUREMENT FIELD CAMPAIGNS:

- 2013 Southeastern Center for Air Pollution and Epidemiology, Atlanta, GA
- 2012 Oilfield emissions study (ground site), Sonoma Technology, Inc, Los Angeles, CA
- 2006 MIRAGE/MILAGRO (C130 aircraft), Veracruz, Mexico
- 2006 INTEX-B (C130 aircraft), Seattle, WA
- 2006 TexAQS-II (P3 aircraft and ground site), Houston, TX
- 2005 Study of Organic Aerosol in Riverside (ground site), Riverside, CA
- 2004 New England Air Quality Study – ITCT Intercontinental Transport and Chemical Transformation (NEAQS2004), Portsmouth, NH
- 2003 Partnership for Environmental Research and Community Health (ground site), Pensacola, FL

SERVICE TO THE PROFESSION:

Disciplinary Service

- 2017-current Deputy Editor in Chief, J Exposure Science and Envir Epidemiology
- 2011-2017 Associate Editor, J Exposure Science and Envir Epidemiology
- 2011 American Thoracic Society Assembly on Environmental and Occupational Health Program Committee
- 2012 Session Chair, International Society of Exposure Science Annual Meeting (Baltimore, MD)
- 2015 Chair a booth engaging stakeholders in using small pollution sensors in pedagogy, International Society of Exposure Science Annual Conference, Henderson, NV, Oct 2015

Peer reviewing services: Aerosol Science and Technology, J Air and Waste Management, Atmospheric Environment, Atmospheric Chemistry and Physics Environmental Engineering Science, Environmental Pollution, Environmental Science and Technology, J Exposure Sci and Envir Epidemiology, J Geophysical Research, Inhalation Toxicology, Talanta, Toxicology.

Grant Reviewing services:

NOAA Climate Sciences Program, Canadian United States Environmental Protection Agency (EPA STAR Panel R1 in 2013, Panel K1 in 2015), Union of Concerned Scientists, and Dissertation Initiative for Climate Change Research

SERVICE TO THE UNIVERSITY:

- 2017 SPHHS Research Office professional staff search
- 2017 SPHHS Strategic Planning Committee
- 2017 SPHHS Personnel Committee
- 2017 SPHHS Public Health Undergraduate Advisory Committee
- 2016 SPHHS Strategic Planning Committee
- 2016 SPHHS Personnel Committee
- 2016 SPHHS Public Health Undergraduate Advisory Committee

- 2016 EHS Curriculum Committee (Chair)
- 2016 EHS Bylaws Committee
- 2016 EHS Faculty Search Member
- 2015 EHS Curriculum Committee (Chair)
- 2015 CHC 'Meet the Professor' discussion
- 2015 EHS Faculty Search member
- 2015 Undergraduate Research Conference Session Chair

- 2014 SPHHS CEPH accreditation review team (research)
- 2014 DPH Curriculum Committee (Chair)
- 2014 EHS/CHC Faculty Search
- 2014 EHS Curriculum Committee (Chair)
- 2014 SPHHS Human Subjects Review

- 2013 SPHHS Executive Council (special member, new space planning)
- 2013 SPHHS CEPH accreditation review team (research)
- 2013 SPHHS Human Subjects review
- 2013 DPH Curriculum Committee (Chair)
- 2013 'Meet the Professor' career presentation, Department of Public Health
- 2013 EHS Curriculum Committee (Chair)
- 2013 EHS/CHC Faculty Search (member)

- 2012 EHS Admissions Committee
- 2012 EHS Curriculum Committee (Chair)
- 2012 EHS Curriculum Committee (Chair)

- 2012 EHS Faculty Search (Chair)
- 2012 DPH Curriculum Committee (Chair)
- 2012 SPHHS Internal IRB
- 2012 K-Club member/mentor

- 2011 EHS Admissions Committee (Chair)
- 2011 EHS Curriculum Committee (Chair)
- 2011 EHS Personnel Committee
- 2011 EHS Faculty Search (Chair, 1st search; member 2nd search)
- 2011 SPHHS Bylaws Committee
- 2011 K-Club member/mentor

- 2010 EHS Admissions Committee
- 2010 EHS Faculty Search
- 2010 ‘Meet the Professor’ career presentation, Department of Public Health

TEACHING AND MENTORING:

Didactic Teaching Experience – semester/year offered (number enrolled)

University of Massachusetts – Primary Instructor (>400 course number is graduate level)

- 2017 EHS565, Environmental Health Practices, 42 students
- 2016 PH203, Intro to Environmental Health Science, 202 students
- 2016 EHS690X, Exposure Assessment, 12 students

- 2016 EHS565, Environmental Health Practices, 32 students
- 2015 EHS562, Air Quality Methods, 9 students

- 2015 PH303, Intro to Environmental Health, 150 students
- 2015 PH565, Environmental Health Practices, 29 students

- 2014 PH565, Environmental Health Practices, 23 students

- 2013 PH562, Air Quality Methods, 15 students
- 2013 PH565, Environmental Health Practices, 32 students

- 2011 PH390X, Intro to Environmental Health, 31 students
- 2012 PH303, Intro to Environmental Health, 165 students
- 2012 PH303H, Honors Intro to EHS, 12 students

- 2011 PH396H (Honors Ind Study, Huynh)
- 2012 PH196H (Ind Study, Smith)

University of Massachusetts – Non-primary instructor as guest lecturer

- 2012 PH562, Air Quality Methods, 20 students
- 2012 PH562, Air Quality methods, 18 students
- 2012 EnvSci 194A, Environmental Science Intro Seminar, 100 students
- 2012 EnvSci 194A, Environmental Science Intro Seminar, 95 students
- 2014 EnvSci 194A, Environmental Science Intro Seminar, 102 students
- 2015 EnvSci 194A, Environmental Science Intro Seminar, 102 students
- 2016 EnvSci 194A, Environmental Science Intro Seminar, 102 students

- 2011 EnvSci504A, Air Pollution and Climate Change Biology, 45 students

Other Institutions

NYU, Environmental Hygiene Methods, NYU, Environmental Health Science New York University, Environmental Chemistry, Spring 2009	Course Director Course Director Course Director
Columbia University, Environmental Urban Planning, Spr 2001 New York University, Aerosol Science, Fall 2008 Columbia University, Environmental Planning, Spr 2001 New School University, Environmental and Earth Science, Spr 2001	guest lecturer guest lecturer guest lecturer guest lecturer

Mentoring

University of Massachusetts

Academic Advisor:

2012	Jeffrey Barowsky,	MPH
2014	Andrea Garon,	MPH
2014	Boning Liu (CEE)	PhD Defense committee member
2017	Whitney Huynh	withdrawn
2017	Filimon Kiros	MS
2017	Randa Kallin	CHC Honors Thesis Advisor, Chair
2015	Alyssa Noyes	CHC Honors Thesis Advisor, Chair
2015	Elizabeth Pongratz	CHC Honors Thesis Advisor, Member
2012-16	Dr. Kabin Shakya	Postdoctoral Fellow Mentor (currently Asst Prof, Villanova U)
2014-	Dr. Pallavi Pant	Postdoctoral Fellow Mentor

Georgia Institute of Technology

2005	Research project mentor, Andrea Thompson
2006	Research project mentor, Julie Simon
2006	Research project supervisor, Abigail Wintemute

NYU School of Medicine, Department of Environmental Medicine

2010	Research project mentor, Olufunke Bakare MS 2010
2010	Research project mentor, Jaime Mirowsky MS 2010
2013	PhD Committee Member (Reader), Jaime Mirowsky 2017
2017	PhD Committee Member (Reader), Ruzmyn Vilcassim

MEDIA COVERAGE AND OTHER SERVICE:

2011	Press Interview, WFCR (NPR affiliate), Aired 3/30/2011
2011	Press Interview, WWLP-21 (NBC affiliate), Aired 9/1/2011
2011	Radio Interview, WHMP, "Bill Newman Show", Aired 9/27/2012
2011	Op/Ed, Springfield Republican "Danger in the Air", Published 10/10/2011
2012	Project Profile, Research/Next webpage at UMass
2013	Press Interview, WWLP-21 (NBC affiliate), Aired 1/31/2013
2013	Press Interview, http://www.golocalworchester.com/news/use-of-cancer-causing-carcinogens-on-the-decline-umass-report/ (online local news), Posted 6/8/2013
2013	UMass News Feature, 06 Jan 2014
2014	Feature story, Springfield Republican, 23 July 2014
2014	Feature story, Hampshire Daily Gazette, 29 July 2014 (picked up by AP)
2014	Press interview, BU News Service
2014	UMass News Video Feature "Air Pollution Research in Nepal" (www.youtube.com/watch?v=j4Ip4KI7sj8)

- 2014 Radio Interview, 'Academic Minute', WAMC, National Public Radio, Broadcast nationally 1/8/15
- 2015 5 press interviews (newspaper, television) on Nepal earthquakes
- 2016 Newspaper interview, Valley Advocate on rise of e-cigarettes.
- 2016 ResearchNext University Profile on small sensor work.
- 2016 "That Cloth Mask for Smoggy Days? A Paper One Works Better". NY Times, 22 August 2016.
- 2016 'Millions rely on cheap cloth masks that may provide little protection against deadly air pollution' The Conversation, September 14, 2016 (also translated into French)
- 2016 'Can we rely on DIY air pollution sensors?', The Conversation, December 1, 2016

- 2013 *Pro bono* commenting on Environmental Assessment on proposed raising of Bayonne Bridge (New York Harbor) on behalf of Clean Ports Initiative and Ironbound Community District
- 2013 *Pro bono* consulting, Zea Mays Printmaking (Florence, MA), Occupational Exposure in Artistry

PROFESSIONAL MEMBERSHIPS:

- 2003-2015 American Association for Aerosol Research
- 2010- International Society of Exposure Science
- 2010-12 International Society for Environmental Epidemiology
- 2006-07 European Geophysical Union
- 2004-07 American Geophysical Union
- 2010-12 New York Academy of Science
- 2008 AAAS/Science Program for Excellence in Science
- 2006-10 Air and Waste Management Association
- 2010-11 American Thoracic Society
- 2013-15 Society of Toxicology (Full Member)