COLLEGE OF PUBLIC HEALTH CURRICULUM VITAE

Thomas M. Peters
August 6, 2014

I. EDUCATION AND PROFESSIONAL HISTORY

A. Education (least to most recent)

Institution	Dates Attended	Field of Study	Degree Obtained	Degree Date
University of Florida, Gainesville, Florida	1984-1990	Environmental Engineering	BS	1990
University of Florida, Gainesville, Florida	1990-1992	Environmental Engineering	MS	1992
University of North Carolina at Chapel Hill, Chapel Hill, NC	2000-2004	Industrial Hygiene/ Aerosol Physics	PhD	2004

Certification/Licensure (least to most recent)

Board	Date
Certified Industrial Hygienist (CIH; 10112CP), American Board of Industrial Hygiene	June 2012

B. Professional and Academic Positions (least to most recent)

Position Title	Dates of Service	Location/Institution
Graduate Research Assistant	1990-1992	University of Florida, Gainesville, FL
Research Aerosol Engineer/Scientist	1993-2000	RTI International, Research, Triangle Park, NC
Graduate Research Assistant	2000-2004	University of North Carolina at Chapel Hill, Chapel Hill, NC
Assistant Professor	2004-2010	University of Iowa, Iowa City, IA
Associate Professor	2010-Present	University of Iowa, Iowa City, IA

C. Honors, Awards, Recognitions, and Outstanding Achievements (least to most recent)

Year	Title
1989	Florida Consulting Engineers Scholarship
1990	Air Pollution Control Scholarship, EPA
1991	Engineer-in-Training
2000	Graduate Assistants in Areas of National Need Fellowship, Department of Education
2001	Graduate Assistants in Areas of National Need Fellowship, Department of Education
2002	Training Award, NIOSH
2003	FY2001 EPA Scientific and Technology Achievement Award: Level 1
2003	Runner-up “Best Poster in Show Award”, AIHce
2003	Training Award, NIOSH
2004	Bernard G. Greenberg Award for Excellence in Doctoral Research
2005	New Investigator Research Award, College of Public Health
2008	“Best Aerosol Poster in Show Award”, AIHce
2009	“Best Aerosol Poster in Show Award”, AIHce
2009	“Best Poster in Session Award”, AIHce – Graduate Student Session
2009	“Best Poster in Session Award”, AIHce – Graduate Student Session
2010	David Swift Memorial Award for “Best Aerosols Paper Published in Journal of Occupational and Environmental Hygiene”
2010	“Best Paper Award”, Michigan Industrial Hygiene Society
2010	“Best Poster in Session Award”, AIHce – Graduate Student Session
2010	“Best Poster in Show Award”, AIHce
2011	Leadership Award, AIHce
2011	“Best Poster in Show Award”, AIHce
2013	"Best Poster in Session Award" AIHce - Graduate Student Session

Year	Title
2013	Distinguished Lecture Award, Association of Environmental Engineering & Science Professors
2013	UIowa Inventor Award
2014-Present	UIowa Inventor Award

II. TEACHING

A. Teaching Assignments on a semester-by-semester basis (least to most recent) (*classroom, seminar, teaching lab*)

1. University of Iowa

Semester/Year	Course Title/Number	Semester Hours	# Students	Role	Percent Responsible
1990	EPA short courses on Industrial Source sampling		30	Co-Instructor	25%
1991	Atmospheric Dispersion Modeling	3	10	Co-Instructor	20%
1991	EPA short courses on Industrial Source sampling		30	Co-Instructor	25%
1992	EPA Air Pollution Control		40	Co-Instructor	25%
1992	EPA short courses on Industrial Source sampling		30	Co-Instructor	25%
2001	Introduction to Aerosols	4	12	Co-Instructor	20%
2002	Introduction to Aerosols	4	12	Co-Instructor	20%
2003	Air Pollution Control	3	5	Co-Instructor	10%
2004	Industrial Hygiene 1	3	4	Co-Instructor	25%
Fall 2005	175:221 Aerosol Technology	3	13	Instructor	100%

Semester/Year	Course Title/Number	Semester Hours	# Students	Role	Percent Responsible
Spring 2006	175:220 Occupational and Environmental Epidemiology	3	5	Co-Instructor	50%
Spring 2006	52:235 Air Pollution Control	3	3	Co-Instructor	10%
Fall 2006	175:221 Aerosol Technology	3	8	Instructor	100%
Spring 2007	175:220 Occupational and Environmental Epidemiology	3	13	Co-Instructor	50%
Fall 2007	175:221 Aerosol Technology	3	8	Instructor	100%
Fall 2007	175:230 Occupational Health	3	20	Co-Instructor	50%
Spring 2008	175:220 Occupational and Environmental Epidemiology	3	6	Co-Instructor	50%
Fall 2008	175:220 Occupational and Environmental Epidemiology	3	6	Instructor	10%
Fall 2008	175:221 Aerosol Technology	3	11	Instructor	100%
Fall 2008	175:230 Occupational Health	3	16	Co-Instructor	50%
Spring 2009	175:220 Occupational and Environmental Epidemiology	3	3	Co-Instructor	10%
Fall 2009	175:221 Aerosol Technology	3	15	Instructor	100%
Spring 2010	175:233 Control of Occupational Hazards	3	10	Co-Instructor	80%
Fall 2010	175:221 Aerosol Technology	3	15	Instructor	100%

Semester/Year	Course Title/Number	Semester Hours	# Students	Role	Percent Responsible
Spring 2011	175:232 Physical Agents	3	10	Co-Instructor	33%
Fall 2011	175:231 Industrial Hygiene Fundamentals	3	10	Co-Instructor	50%
Spring 2012	175:233 Control of Occupational Hazards	3	10	Instructor	80%
Fall 2012	175:221 Aerosol Technology	3	13	Instructor	100%
Spring 2013	175:232 Physical Agents	3	12	Co-Instructor	33%
Fall 2013	OEH:6440 Aerosol Technology	3	11	Instructor	100%
Spring 2014	OEH:6440 Control of Occupational Contaminants	3	8	Instructor	80%

B. Students Advised

Graduate Students

Name	Degree Objective	Role
Hill, Barry	MS	
Sawvel, Eric	PhD	
Saleh, Sabah	MS	
Riss, Adam	MS 2007	
Ott, Darrin	PhD 2007	
Ramakrishna, Ajith Kumar Benede	MPH 2007	
Johnson, Ron	MS 2007	
Cyrs, William	MS 2009	
Beyer, John	MS 2010	
Vosburgh, Donna	PhD 2010	
Cena, Lorenzo	PhD 2011	

Dissertations/Thesis

Name	Degree Objective	Role
Farnoud, Amir	PhD	Committee Member
Kim, Jong	PhD	Committee Member
Huang, Min	PhD	Committee Member
Tanwongwa, Yuthana	MS 2003	Mentor
Patel, Ashish	MS 2007	Committee Member

Parker, Lindsay	MS 2007	Committee Member
Foo, Mow Yee	PhD 2007	Committee Member
Adhikary, Bhupesh	PhD 2008	Committee Member
Sun, Kainan	PhD 2008	Committee Member
Nor	MS 2008	Committee Member
Krause, Kerry	MS 2009	Committee Member
Lewandowski, Piotr	PhD 2009	Committee Member
Persoon, Carolyn	PhD 2010	Committee Member
Wei, Chao	PhD 2010	Committee Member
Newnum, Justin	MS 2010	Committee Member
Anderson, Kim	MS 2010	Committee Member
Huang, Min	MS 2010	Committee Member
Ellickson, Daniel	MS 2011	Committee Member
Krzystowczyk, Jacob	MS 2011	Committee Member
Hibbs, Matt	MS 2011	Committee Member
Humann, Michael	PhD 2011	Committee Member
Hamed, Rania	PhD 2011	Committee Member

C. Other Teaching Contributions (least to most recent)

1. Grand Rounds, Journal Clubs, Seminars

Year(s)	Title	Location
2003	Ventilation engineers may have all their ducts in a row, but can they account for all the feathers?	Environmental Sciences and Engineering Department, University of North Carolina, Chapel Hill
2008-Present	Industrial Hygiene Student Journal Club	Department of Occupational and Environmental Health, University of Iowa

2. Other Contributions to Institutional Programs

Year(s)	Title	Location

3. Teaching Committees

Year(s)	Committee Name	Location

4. Formal Study to Improve Teaching Abilities

Year(s)	Committee Name	Location
2002	College Teaching full semester course	University of North Carolina at Chapel Hill
2005	Evaluation of video taped teaching	Center for Teaching and Learning, University of Iowa

Year(s)	Committee Name	Location
2006	Summer Camp for Faculty Workshop	University of Iowa
2011	How to lead discussions	The University of Iowa

5. Continuing Education Talks

Year(s)	Title	Location
2005-2007	The FUN of aerosols: fine, ultrafine, and nano particles	American Industrial Hygiene
2010	The FUN of aerosols: fine, ultrafine, and nano particles	American Industrial Hygiene
2010	Ventilation to control occupational contaminants	Heartland Center

D. Course Materials (least to most recent) (syllabi, instructional web pages, computer lab materials) (Description only - *full materials to be included in promotion dossier*)

2005-2006 Developed exposure assessment portion of new course entitled Occupational and Environmental Epidemiology
Prepared syllabus, course lessons, website, and problem sets.

2005-2006 Developed new course entitled Aerosol Technology
Prepared syllabus, course lessons, website, and lab materials.

2007-2008 Revised Industrial Hygiene portion of Occupational Health course

2009-2010 Revised Control of Occupational Contaminants course

2011-2012 Revised Industrial Hygiene Fundamentals course

E. Students Advised

Graduate Students

Name	Degree Objective	Outcome
Darrin Ott *"Passive sampling of ambient coarse particulate matter"* (Milford Barnes Award for Academic Excellence)	PhD	PhD Aug 2007
Adam Riss *"Design and evaluation of an inlet conditioner to dry particles for an aerodynamic particle sizer"* (2006 Clyde Berry Award Winner; 2006 Iowa Gov. Safety Conf. Award Winner)	MS	MS May 2007
Ajith Kumar Benede Ramakrishna	MPH	MPH Dec 2007

Ron Johnson *"Airborne particles in the manufacturing and handling of nano-structured lithium titanate"* (2010 David Swift Memorial Award for "Best Aerosols Paper Published in Journal of Occupational and Environmental Hygiene" Michigan Industrial Hygiene Society "Best Paper Award")	MS	MS Dec 2007
William Cyrs *"Surface collection efficiency of polycarbonate membrane filters"* (2009 Best Poster in Session at AIHce)	MS	MS May 2009
Donna Vosburgh *"Personal exposure assessment of nanoparticles in workplace environments"* (2009 Best Aerosol Poster in Show at AIHce; 2009 Best Poster in Session at AIHce)	PhD	PhD Dec 2010
Lorenzo Cena *"Methods for the industrial hygiene evaluation of carbon nanotubes"* (2008 Clyde Berry Award Winner; 2008 Best Aerosol Poster in Show at AIHce; 2010 "Best Poster in Show Award" AIHce; "Best Poster in Session Award AIHce" – Graduate Student Session; 2011 "Best Poster in Show" at AIHce)	PhD	PhD May 2011
Sabah Saleh *"A device to validate concentration measured by direct reading instruments for aerosols"*	MS	MS Dec 2011
Guannan (Bela) Huang *"Evaluation of airborne particle emissions from commercial products containing carbon nanotubes"*	MS	MS May 2012
Barry Hill *"Field portable x-ray fluorescence for rapid analysis of titanium dioxide on air filters"*	MS	MS Aug 2012
Eric Sawvel *"Passive sampling of ambient coarse particles in Cleveland, OH"*	PhD	PhD Dec 2013
Jessica Mills *"Comparison of the DiSCmini aerosol monitor to a handheld condensation particle counter and a scanning mobility particle sizer for submicrometer sodium chloride and metal aerosols"* (2012 Iowa Gov. Safety Conf. Award Winner; 2012 3M IH Scholarship Recipient)	MS	MS May 2013

Russell Sawvel *"Recirculating air pollution control devices to improve air quality in swine farrowing facilities"*	MS	MS May 2014
Levi Mines "Use of nanospun material as diffusion media in personal samplers"	MS	On-going
Sam Jones "Evaluation of a low-cost aerosol sensor to assess workplace exposures"	MS	On-going
Ryan Grant "Community exposures from sand mining and related activities"	MS	On-going

Professional/Postdoctoral Students

Name	Degree Objective	Outcome
Auromeet Saha *"Passive sampling to identify spatial distribution of coarse particles in Cleveland and Chicago"*	Post-doctoral	Complete
Dane Boysen *"Nanoparticle generation with a nebulizer-impactor system"*	Post-doctoral	Complete
Andy Ault "*Single particle SEM-EDX analysis of iron-containing coarse particulate matter in an urban environment: sources and distributions of iron within Cleveland, Ohio*"	Post-doctoral	Complete
Jae Hong Park	Post-doctoral	On-going
Sinan Sousan	Post-doctoral	On-going

Dissertations/Thesis

Name	Degree Objective	Role	Outcome
Yuthana Tanwongwa	MS in Environmental Engineering	Mentor	MSEE 2003
Lindsay Parker	MS in Occupational and Environmental Health	Committee Member	MS 2007
Ashish Patel	MS in Occupational and Environmental Health	Committee Member	MS 2007
Mow Yee Foo	PhD in Pharmacy	Committee Member	PhD 2007
Kainan Sun	PhD in Occupational and Environmental Health	Committee Member	PhD 2008
Piotr Lewandowski	PhD in Civil and Environmental Engineering	Committee Member	PhD 2009
Bhupesh Adhikary	PhD in Civil and Environmental Engineering	Committee Member	PhD 2008
Nor	MS in Occupational and Environmental Health	Committee Member	MS 2008

Kerry Krause	MS in Occupational and Environmental Health	Committee Member	MS 2009
Chao Wei	PhD in Civil and Environmental Engineering	Committee Member	PhD 2010
Min Huang	MS in Civil and Environmental Engineering	Committee Member	MS 2010
Carolyn Persoon	PhD in Civil and Environmental Engineering	Committee Member	PhD 2010
Kim Anderson	MS in Occupational and Environmental Health	Committee Member	MS 2010
Justin Newnum	MS in Occupational and Environmental Health	Committee Member	MS 2010
Michael Humann	PhD in Occupational and Environmental Health	Committee Member	PhD 2011
Rania Hamed	PhD in Pharmacy	Committee Member	PhD 2011
Daniel Ellickson	MS in Occupational and Environmental Health	Committee Member	MS 2011
Matt Hibbs	MS in Occupational and Environmental Health	Committee Member	MS 2011
Jacob Krzystowczyk	MS in Occupational and Environmental Health	Committee Member	MS 2011
Jong Kim	PhD in Occupational and Environmental Health	Committee Member	PhD 2011
Min Huang	PhD in Civil and Environmental Engineering	Committee Member	PhD 2012
Kelsie Reeve	MS in Occupational and Environmental Health	Committee Member	MS 2012
Amir Farnoud	PhD in Pharmacy	Committee Member	PhD 2013
Kim Anderson	PhD in Occupational and Environmental Health	Committee Member	PhD 2013
Benjamin Getschman	MS in Occupational and Environmental Health	Committee Member	MS 2013
Adrianne Horne	MS in Occupational and Environmental Health	Committee Member	MS 2013
Madeleine Hornick	MS in Occupational and Environmental Health	Committee Member	MS 2013
William Leach	MS in Occupational and Environmental Health	Committee Member	MS 2013
Brita Kilburg	PhD in Occupational and Environmental Health	Committee Member	On-going
Man Yu	PhD in Civil and Environmental Engineering	Committee Member	On-going
Robert Bullard	PhD in Civil and Environmental Engineering	Committee Member	On-going
Margaret Sietsema	PhD in Industrial Hygiene at University of Chicago	Committee Member	On-going

F. Other Advising/Mentoring

Name	Position	Role	Outcome

Miller Li (2004)	Summer Student	Lab Assistant	developed new standard operating procedure
Will Cyrs (2005-2007)	Staff	Lab Assistant	assisted on various projects; became MS student in Industrial Hygiene
Tyler Gunn (2005-2008)	Staff	Lab Assistant	developed image analysis routines for particle measurement; received Iowa Research Experience for Undergraduates Scholarship to support work
Aditya Stanam (fall 2012)	Human Tox. Student	Rotating Student	characterized a spark generator for use in toxicity testing; wrote a review article on toxicity studies that have used spark discharge to generate metal particles
Marisa Saloman Beltran (fall 2013)	Human Tox. Student	Rotating Student	characterized diffusion stages of a personal aerosol collector and spectrometer (PACS)

III. SCHOLARSHIP

A. Publications or Creative Works (least to most recent)

1. Peer-Reviewed Papers

1. Peters TM, Chein HM, Lundgren DA, Keady PB. (1993) Comparison and combination of aerosol size distributions measured with a low pressure impactor, differential mobility particle sizer, electrical aerosol analyzer, and aerodynamic particle sizer. *Aerosol Sci. Technol, 19*, 396-405.

2. Peters TM, Chein HM, Lundgren DA, Berntsen J. (1994) Sub-micron aerosol generator development for EPA's Human Exposure Laboratory. *Aerosol Sci. Technol, 20*, 51-61.

3. Chein HM, Peters TM, Lundgren DA. (1996) High-output generation of aerosol with narrow size distributions. *Inhalation Tox, 8*, 709-722.

4. Heist DK, Tolocka MP, Vanderpool RW, Peters TM, Chen FL, Weiner RW. (2001) Changes in operating procedures for achieving aerosol concentration uniformity for PM2.5 and PM10 samplers. *Aerosol Sci. Technol, 34*, 430-432.

5. Peters TM, Vanderpool RW, Weiner RW. (2001) Design and calibration of the WINS impactor. *Aerosol Sci. Technol, 34*, 389-397.

6. Peters TM, Gussman RA, Kenny LC, Vanderpool RW. (2001) Evaluation of PM2.5 separators used in speciation samplers. *Aerosol Sci. Technol, 34*, 422-429.

7. Vanderpool RW, Peters TM, Natarajan S, Gemmill DB. (2001) Evaluation of the loading characteristics of the EPA WINS PM2.5 separator. *Aerosol Sci. Technol, 34*, 444-456.

8. Noble CA, Vanderpool RW, Peters TM, McElroy FF, Gemmill DB, Wiener RW. (2001) Federal reference and equivalent methods for measuring fine particulate matter. *Aerosol Sci. Technol, 34*, 457-464.

9. Peters TM, Norris GA, Vanderpool RW, Gemmill DB, Weiner RW, Murdoch RW, McElroy FF, Pitchford M. (2001) Field performance of PM2.5 reference method samplers. *Aerosol Sci. Technol, 34*, 433-443.

10. Peters TM, Boundy M, Leith D. (2001) Influence of upstream flow characteristics on filter efficiency. *Filtration & Separation, 38*(10), 40-47.

11. Peters TM, Vanderpool RW, Weiner RW. (2001) Methodology for measuring PM2.5 separator characteristics using an Aerosizer. *Aerosol Sci. Technol, 34*, 398-406.

12. Tolocka MP, Peters TM, Vanderpool RW, Chen FL, Weiner RW. (2001) On the modification of the low flow-rate PM10 dichotomous sampler inlet. *Aerosol Sci. Technol, 34*, 407-415.

13. Vanderpool RW, Peters TM, Natarajan S, Tolocka MP, Gemmill DB, Weiner RW. (2001) Sensitivity analysis of the USEPA WINS PM2.5 separator. *Aerosol Sci. Technol, 34*, 465-476.

14. Rosati JA, Brown JS, Peters TM, Leith D, Kim CS. (2002) A polydisperse aerosol inhalation system designed for human studies. *J. Aerosol Sci, 33*(10), 1433-1446.

15. Peters TM, Volkwein JC. (2003) Analysis of sampling line bias on respirable mass measurement. *Appl Occup Environ Hyg, 18*(6), 458-465. PMID: 12746069

16. Peters TM, Leith D. (2003) Concentration measurement and counting efficiency of the aerodynamic particle sizer 3321. *J. Aerosol Sci, 34*(5), 627-634.

17. Peters TM, Leith D. (2004) Measurement of particle deposition in industrial ducts. *J. Aerosol Sci, 35*(4), 529-540.

18. Peters TM, Leith D. (2004) Modeling large-particle deposition in bends of exhaust ventilation systems. *Aerosol Sci. Technol, 38*, 1171-1177.

19. Peters TM, Leith D. (2004) Particle deposition in industrial duct bends. *Ann Occup Hyg, 48*(5), 483-490. PMID: 15240335

20. Volckens JA, Peters TM. (2005) Counting and particle transmission efficiency of the Aerodynamic Particle Sizer (APS 3321). *J. Aerosol Sci, 36*(12), 1400-1408.

21. Peters TM, Ott D, O'Shaughnessy PT. (2006) Comparison of the Grimm 1.108 and 1.109 portable aerosol spectrometer to the TSI 3321 aerodynamic particle sizer for dry particles. *Ann Occup Hyg, 50*(8), 843-850. PMID: 17041244

22. Peters TM, Heitbrink WA, Evans DE, Slavin TJ, Maynard AD. (2006) The mapping of fine and ultrafine particle concentrations in an engine machining and assembly facility. *Ann Occup Hyg, 50*(3), 249-257. PMID: 16361396

23. Peters TM. (2006) Use of the aerodynamic particle sizer to measure ambient PM10-2.5: the coarse fraction of PM10. *J Air Waste Manag Assoc, 56*(4), 411-416. PMID: 16681206

24. Heitbrink WA, Evans DE, Peters TM, Slavin TJ. (2007) Characterization and mapping of very fine particles in an engine machining and assembly facility. *J Occup Environ Hyg, 4*(5), 341-351. PMID: 17454502

25. Vanderpool RW, Byrd LA, Wiener RW, Hunike ET, Labickas M, Leston AR, Tolocka MP, McElroy FF, Murdoch RW, Natarajan S, Noble CA, Peters TM. (2007) Laboratory and field evaluation of crystallized DOW 704 oil on the performance of the Well Impactor Ninety-Six fFine particulate matter fractionator. *J Air Waste Manag Assoc, 57*(1), 14-30. PMID: 17269226

26. Peters TM. (2007) Update to “Reconciliation of coarse mode sea-salt aerosol particle size measurements and parameterizations at a sub-tropical ocean receptor site" regarding the use of Aerodynamic Particle Sizers in marine environments. *J. Geophysical Research-Atmospheres, 112*(D4).

27. Ott DK, Peters TM. (2008) A shelter to protect a passive sampler for coarse particulate matter, PM10-2.5. *Aerosol Sci. Technol, 42*(4), 299-309.

28. Peters TM, Riss AL, Holm RL, Singh M, Vanderpool RW. (2008) Design and evaluation of an inlet conditioner to dry particles for real-time particle sizers. *J Environ Monit, 10*(4), 541-551. PMID: 18385876

29. Ott DK, Cyrs W, Peters TM. (2008) Passive measurement of coarse particulate matter, PM10-2.5. *J. Aerosol Sci, 39*(2), 156-167.

30. Ott DK, Kumar N, Peters TM. (2008) Passive sampling to capture spatial variability of PM10-2.5. *Atmospheric Environ, 42*(4), 746-756.

31. Evans DE, Heitbrink WA, Slavin TJ, Peters TM. (2008) Ultrafine and respirable particles in an automotive grey iron foundry. *Ann Occup Hyg, 52*(1), 9-21. PMID: 18056626

32. Peters TM, Elzey S, Johnson R, Park H, Grassian VH, Maher T, O'Shaughnessy P. (2009) Airborne monitoring to distinguish engineered nanomaterials from incidental particles for environmental health and safety. *J Occup Environ Hyg, 6*(2), 73-81. PMID: 19034793

33. Kumar N, Nixon V, Sinha K, Jiang X, Ziegenhorn S, Peters TM. (2009) An optimal spatial configuration of sample sites for air pollution monitoring. *J Air Waste Manag Assoc, 59*(11), 1308-1316. PMID: 19947112

34. Sheehan M, Peters TM, Cena L, O'Shaughnessy PT, Gussman RA. (2009) Enhanced nanoparticle production with a nebulizer-cyclone aerosol generator. *Aerosol Sci. Technol, 43*, 1091-1098.

35. Klosener J, Peters TM, Dodd AA, Thorne PS, Robertson LW, Luthe G. (2009) Innovative application of fluoro-tagging to trace airborne particulate and gas-phase polybrominated diphenyl ether exposures. *Chem. Research Toxicology, 22*(1), 179-186.

36. Heitbrink WA, Evans DE, Ku BK, Maynard AD, Slavin TJ, Peters TM. (2009) Relationships among particle number, surface area, and respirable mass concentrations in automotive engine manufacturing. *J Occup Environ Hyg, 6*(1), 19-31. PMID: 18982535

37. O'Shaughnessy PT, Donham KJ, Peters TM, Taylor C, Altmaier R, Kelly KM. (2010) A task-specific assessment of Swine worker exposure to airborne dust. *J Occup Environ Hyg, 7*(1), 7-13. PMID: 19904655

38. Boysen D, Peters TM. (2010) Impactor designed to increase mass output rate of nanoparticles from a pneumatic nebulizer. *J. Aerosol Sci, 41*(2), 170-179.

39. Crys WD, Boysen DA, Casuccio G, Lersch T, Peters TM. (2010) Nanoparticle collection efficiency to the surface of capillary pore membrane filters. *J. Aerosol Sci, 41*, 655-664.

40. Persoon C, Peters TM, Kumar N, Hornbuckle KC. (2010) Spatial distribution of airborne polychlorinated biphenyls in Cleveland, Ohio and Chicago, Illinois. *Environ Sci Technol, 44*(8), 2797-2802. PMID: 20384374

41. Schmoll LH, Peters TM, O'Shaughnessy PT. (2010) Use of a condensation particle counter and an optical particle counter to assess the number concentration of engineered nanoparticles. *J Occup Environ Hyg, 7*(9), 535-545. PMID: 20614365

42. Cena L, Anthony R, Peters TM. (2011) A personal nanoparticle respiratory deposition (NRD) sampler. *Environ. Sci. Technol, 45*(15), 6483-6490.

43. Vosburgh DJ, Boysen DA, Oleson JJ, Peters TM. (2011) Airborne nanoparticle concentrations in the manufacturing of polytetrafluoroethylene (PTFE) apparel. *J Occup Environ Hyg, 8*(3), 139-146. PMID: 21347955

44. Cena LG, Peters TM. (2011) Characterization and control of airborne particles emitted during production of epoxy/carbon nanotube nanocomposites. *J Occup Environ Hyg, 8*(2), 86-92. PMID: 21253981

45. Kumar N, Chu AD, Peters TM, Willis R. (2011) Satellite remote sensing for developing time-space resolved estimates of ambient particulate in Cleveland, OH. *Aerosol Sci. Technol, 45*, 1090-1108.

46. O'Shaughnessy PT, Peters TM, Donham KJ, Altmaier R, Taylor C, Kelly K. (2012) Assessment of swine worker exposures to dust and endotoxin during hog load-out and power washing. *Ann. Occ. Hyg, 56*(7), 843-851.

47. Peters TM, Anthony T, Taylor C, Altmaier R, Anderson K, O'Shaughnessy PT. (2012) Distribution of particle and gas concentrations in swine gestation confinement animal feeding operations. *Ann. Occ. Hyg, 56*(9), 1080-1090.

48. Huang GB, Park JH, Cena LG, Shelton BL, Peters TM. (2012) Evaluation of airborne particle emissions from commercial products containing carbon nanotubes. *J. Nanoparticle Res., 14*, 1231.

49. Cena L, Ku BK, Peters TM. (2012) Evaluation of Nylon Mesh Screens as Diffusion Media for Nanoparticles. *J. Aerosol Sci., 46*(2), 214-221.

50. Mukerjee S, Willis RD, Walker JT, Hammond D, Norris GA, Smith LA, Welch DP, Peters TM. (2012) Seasonal effects in land use regression models for nitrogen dioxide, coarse particulate matter, and gaseous ammonia in Cleveland, Ohio. *Atmos. Pollution Res., 3*, 352-361.

51. Ault AP, Peters TM, Sawvel EJ, Casuccio GS, Willis RD, Norris GA, Grassian VH. (2012) Single particle SEM-EDX analysis of iron-containing coarse particulate matter in an urban environment: sources and distributions of iron within Cleveland, Ohio. *Environ. Sci. Technol, 46*(8), 4331-4339.

52. Mills JB, Park JH, Peters TM. (2013) Comparison of the DiSCmini aerosol monitor to a handheld condensation particle counter and a scanning mobility particle sizer for submicrometer sodium chloride and metal aerosols. *J. Occup. Environ. Hyg, 10*(3), 250-258.

53. Vosburgh D, Klein T, Sheehan M, Anthony T, Peters TM. (2013) Design and evaluation of a personal diffusion battery. *Aerosol Sci. Technol, 47*(4), 435-443.

54. Koehler K, Peters TM. (2013) Influence of analysis methods on interpretation of hazard maps. *J. Occup. Envir. Hyg., 57*(5), 558-570.

55. Hirth S, Cena LG, Cox G, Tomovic Z, Peters TM, Wohllenben W. (2013) Scenarios and methods that induce protruding or released CNTs after degradation of composite materials. *J. Nanoparticle Res., 15*, 1504.

56. Park JH, Peters TM, Altmaier R, Sawvel RA, Anthony T. (2013) Simulation of air quality and cost to ventilate swine farrowing facilities in winter. *Computers and Electronics in Agriculture, 98*, 136-145.

57. Kim JS, Peters TM, O'Shaughnessy PT, Adamcakova-Dodd A, Thorne PS. (2013) Validation of an in vitro exposure system for toxicity assessment of air-delivered nanomaterials. *Toxicology in Vitro, 27*, 164-173.

58. Reeve KA, Peters TM, Anthony T. (2013) Wintertime factors affecting contaminant distribution in a swine farrowing room. *J. Occup. Environ. Hyg, 10*(6), 287-296.

59. Vosburgh DJ, Ku BK, Peters TM. (2014) Evaluation of a diffusion charger for measuring aerosols in a workplace. *Ann. Occup. Hyg.*.

60. Anthony T, Altmaier R, Park JH, Peters TM. (2014) Modeled effectiveness of ventilation with contaminant control devices on indoor air quality in swine farrowing facility. *J. Occup. Envir. Hyg, 11*, 434-449.

61. Park JH, Kim IA, Kim JS, Thorne PS, Grassian VH, Peters TM. (2014) Physicochemical characterization of simulated welding fumes from a spark discharge system *Aerosol Sci and Technol, 48*, 768-776.

62. Kim JS, Klosener J, Flor S, Peters TM, Ludewig G, Thorne PS, Robertson LW, Luthe G. (2014) Toxicity assessments of air-delivered particle-bound polybromaniated diphehyl ethers. *Toxicology, 317*, 31-39.

63. Byeon JH, Park JH, Peters TM, Roberts J. Neutralizing the biotoxicity of engineered nanoparticles via in situ passivation with biocompatible materials *Envir Sci Tech*. (Submitted)

64. Jing X, Park JH, Peters TM, Thorne PS. Toxicity assessment of spark-generated copper oxide nanoparticles in lung epithelial cells at the air-liquid interface *Particle Fibre Toxic*. (Submitted)

2. Non-Peer-Reviewed Papers (reports, proceedings, etc.)

3. Books/Monographs

4. Chapters

1. Peters TM, Volckens JA, Hering S. (2009) Impactors, cyclones, and other inertial and gravitational collectors.. In D. Leong (Eds.), *Air Sampling Instruments for Evaluation of Atmospheric Contaminants.*. Cincinnati, OH: American Conference of Governmental Industrial Hygienists, Inc.

2. Baron PA, Peters TM, Mazumder MK, Cheng YS. (2011) Direct-reading techniques using particle motion and optical detection.. In P. Baron (Eds.), *Aerosol Measurement*. New York, NY: J. Wiley.

3. Peters TM, Grassian VH. (2011) Engineered nanomaterials.. In V. Rose; B. Cohrssen (Eds.), *Patty's Industrial Hygiene* (6th ed., pp. 373-403). New York, NY: J. Wiley.

4. Peters TM. (2012) Managing risks in occupational environments.. In Shatkin, J.A. (Eds.), *Nanotechnology: Health and Environmental Risks*. Boca Raton, FL: CRC Press.

5. Electronic Publications

6. Abstracts

1. Peters TM, Chein H, Lundgren DA. (1992) Combining data from an APS and an EAA or a DMPS (DMA) to obtain aerosol mass distribution. *Proc. 11th Annual Meeting of the American Association of Aerosol Researchers. San Francisco, CA*.

2. Peters TM, Chein HM, Lundgren DA. (1992) Submicron aerosol generator development for EPA's human exposure laboratory. *Proc. 11th annual meeting of the American Association of Aerosol Researchers. San Francisco, CA*.

3. Peters TM, Lindstrom AB, Wiener RW. (1994) Development of a standardized airborne dust mite antigen collection method. *Proc. 4th International Aerosol Conference: sponsored by the American Association of Aerosol Researchers. Los Angeles, CA*.

4. Burton R, Peters TM, Lawrence J, Allen G, Koutrakis P. (1995) Characteristics of Washington, D.C. ambient aerosol as measured by a real-time particle sizing system, a micro orifice impactor, and integrated PM2.5 and PM10 samples. *Proc. 14th Annual Meeting of the American Association of Aerosol Researchers. Pittsburgh, PA*.

5. Chein HM, Peters TM, Lundgren DA. (1995) High-output generation of aerosol with narrow size distributions. *Proc. 14th Annual Meeting of the American Association of Aerosol Researchers. Pittsburgh, PA*.

6. Rodes CE, Peters TM, Lawless PA, Wallace L. (1996) Aerosol sampling biases in personal exposure measurements. *Proc. Joint SRA/ISEA Conference, Session K3 - Exposure to Particulate Matter, paper K3.03. New Orleans, LA*.

7. Rodes CE, Lawless PA, Peters TM. (1996) Biases in personal aerosol air exposure sampling. *Proc. A&WMA Conference Measurement of Toxic and Related Air Pollutants, Session 15 - Human Exposure. Research Triangle Park, NC*.

8. Peters TM, Vanderpool RW, Lawrence J, Abt E, Koutrakis P. (1996) Combination of aerodynamic particle sizer and scanning mobility particle sizer data in measuring ambient aerosols. *Proc. 14th Annual Meeting of the American Association of Aerosol Researchers. Pittsburgh, PA*.

9. Tolocka MP, Chen FL, Peters TM, Vanderpool RW, Wiener RW. (1999) Comparison of the standard and modified inlets for low flow rate samplers. *Proc. Air and Waste Management Association Meeting, paper 441. St. Louis, MO*.

10. Vette AF, Peters TM, Sheldon L. (2000) Comparisons of dual SMPS-APS systems to measure indoor-outdoor particle size distributions. *Proc. 10th Annual Conference of the International Society of Exposure Analysis. 2000. Monterey, CA*.

11. Peters TM, Vanderpool RW, Wiener RW. (2000) Incorporation of real-time methods into US EPA laboratory procedures for evaluation of size selective samplers. *Proc. European Aerosol Conference. Dublin, Ireland*.

12. Vanderpool RW, Peters TM, Natarajan S, Gemmill DB, Wiener RW. (2000) Performance and sensitivity analysis of the US EPA WINS fractionator for PM2.5 federal reference method. *Proc. Air and Waste Management Association Special Conference: PM2000. Charleston, SC*.

13. Peters TM, Gussman RA, Kenny LC, Vanderpool RW. (2000) Performance of size selectors used in PM2.5 speciation samplers. *Proc. Air and Waste Management Association Special Conference: PM2000. Charleston, SC*.

14. Peters TM, Leith D. (2002) A rapid measurement technique for determining particle penetration of industrial ductwork. *Proc. American Industrial Hygiene Association Meeting. San Diego, CA*.

15. Peters TM, Leith D. (2002) Aerosol collection in industrial ductwork bends. *Proc. 21st Annual American Association of Aerosol Researchers. Charlotte, NC*.

16. Peters TM, Volkwein JC. (2002) Analysis of sampling line bias on respirable mass measurement. *Proc. 21st Annual American Association of Aerosol Researchers Conference. Charlotte, NC*.

17. Tanwongwan Y, Peters TM, Leith D. (2002) The effect of turbulence on filter efficiency. *Proc. 21st Annual American Association of Aerosol Researchers Conference. Charlotte, NC*.

18. Peters TM, Leith D. (2003) Counting efficiency of the model 3321 aerodynamic particle sizer. *Proc. 22nd Annual American Association of Aerosol Researchers Conference. Aneheim, CA*.

19. Peters TM, Leith D. (2003) Particle deposition in industrial duct bends. *Proc. 22nd Annual American Association of Aerosol Researchers Conference. Aneheim, CA*.

20. Peters TM, Leith D. (2003) Particle deposition in industrial ducts. *Proc. American Industrial Hygiene Association Meeting. Dallas, TX*.

21. Peters TM. (2003) Ventilation engineers may have all their ducts in a row, but can they account for all the feathers? *In Environmental Sciences and Engineering Department Seminar. UNC, Chapel Hill, NC*.

22. (2004) Counting and particle transmission efficiency of the aerodynamic particle sizer (APS 3321). *Proc. 23rd Annual American Association of Aerosol Researchers Conference. Atlanta, GA*.

23. Peters TM, Leith D, Rappaport S. (2004) Developing a passive sampler for ultrafine particles. *Proc. 23rd Annual American Association of Aerosol Researchers Conference. Atlanta, GA*.

24. Peters TM, Leith D. (2004) Particle deposition in industrial duct bends *Proc. American Industrial Hygiene Association Meeting. Atlanta, GA*.

25. Peters TM, Ott D, O'Shaughnessy PT. (2005) Comparison of the Grimm Optical Particle Counter to the TSI Aerodynamic Particle Sizer. *Proc. American Industrial Hygiene Association Meeting, Anaheim, CA*.

26. Evans D, Heitbrink W, Peters TM, Maynard A. (2005) Nanoparticles in the workplace: lessons from the automotive industry. *Proc. 2nd International Symposium on Nanotechnology and Occupational Health, St. Paul, MN*.

27. Peters TM, Heitbrink W, Evans D, Maynard A, Slavin T. (2005) Particle concentration mapping in a diesel engine machining and assembly center. *Proc. 2nd International Symposium on Nanoparticles and Occupational Health, St. Paul, MN, 2005; St. Paul, MN*.

28. Peters TM. (2005) The practical aspects of nanoparticle measurement. *Proc. American Industrial Hygiene Association Meeting, Anaheim, CA*.

29. Peters TM, Riss A, Singh M. (2005) Use of the aerodynamic particle sizer (APS 3321) to measure ambient coarse particles, PM10-2.5. *Proc. 23rd Annual American Association of Aerosol Researchers, Austin, TX*.

30. Peters TM, Vanderpool RW, Natarajan S. (2005) Use of the Aerodynamic Particle Sizer to measure atmospheric coarse particulate matter. *Proc. Particulate Matter Supersites Program and Related Studies, Atlanta, GA*.

31. Ott D, Peters TM. (2006) A passive sampler to measure coarse ambient particles, PM10-2.5. *Proc. American Industrial Hygiene Association Meeting, Chicago, IL*.

32. Riss A, Peters TM, Singh M, Holm R. (2006) An inlet conditioner for the Model 3321 Aerodynamic Particle Sizer. *Proc. American Industrial Hygiene Association Meeting, Chicago, IL*.

33. Heitbrink W, Peters TM, Evans D. (2006) Characterization of fine and ultrafine particles in an engine machining and assembly center. *Proc. American Industrial Hygiene Association Meeting, Chicago, IL*.

34. Johnson RL, O'Shaughnessy PT, Maher T, Peters TM. (2007) Airborne particles in the manufacturing and handling of nano-structured lithium titanate. *Proc. American Industrial Hygiene Association Meeting. Philadelphia, PA*.

35. Peters TM, Ramakrishna A, Watt J, Olshansky B, Kline J. (2007) Cardiopulmonary effects from exposure to diesel exhaust *Proc. 26th Annual American Association of Aerosol Researchers, Reno, NV*.

36. Peters TM, Ramakrishna A, Watt J, Olshansky B, Kline J. (2007) Cardiopulmonary effects from exposure to diesel exhaust. *Presented at the J. and Lucille A. Carver College of Medicine and the College of Public Health Research Week*.

37. Ott D, Kumar N, Peters TM. (2007) Passive sampling to capture spatial variability of PM10-2.5. *Proc. 26th Annual American Association of Aerosol Researchers, Reno, NV*.

38. Willis RW, Vanderpool RW, Murdoch R, Long R, Grover B, Peters TM. (2008) Characterization of Ambient Coarse Particulate Matter in Birmingham, AL Using a Network of Passive Samplers. *Proc. American Geophysical Union, San Francisco, CA*.

39. Cyrs W, Cena L, Peters TM. (2008) Efficiency of Polycarbonate Filters for Nanoparticle Collection. *Proc. American Industrial Hygiene Association Meeting, Minnesota, MA*.

40. Kim JS, Luthe G, Flor S, Klosener J, Peters TM, Robertson LW, Thorne PS, Ludewig G. (2008) In vitro Study of the Air Delivery of Particle-bound PBDEs to Lung Cells. *Proc. Central States Society of Toxicology Annual Meeting, Kansas City, KS*.

41. Peters TM, Ramakrishna AB, Watt J, Olshansky B, Kline J. (2008) Noise or diesel exhaust exposure? It's all the same to heart rate variability. *Proc. American Thoracic Society. Toronto, ON*.

42. Ott D, Kumar N, Peters TM. (2008) Passive sampling to capture spatial variability of PM10-2.5 *Proc. 17th Annual Conference of the International Society of Exposure Analysis. Research Triangle Park, NC*.

43. Cena L, Cyrs W, Peters TM. (2008) Selecting a substrate suitable for detecting nanoparticles by transmission electron microscopy. *Proc. American Industrial Hygiene Association Meeting. Minnesota, MA. Awarded 'best aerosol poster in show'*.

44. O'Shaughnessy PT, Peters TM, Donham KJ, Altmaier R, Taylor C, Kelly K. (2009) A Task-Specific Assessment of Swine Worker Exposure to Airborne Dust. *(Abstract 84) American Industrial Hygiene Conference & Exposition, Toronto, Canada, May 30-June 4, 2009*.

45. Peters TM, Elzey S, Johnson R, Park H, Grassian V, Maher T, O'Shaughnessy PT. (2009) Airborne Monitoring to Distinguish Engineered Nanomaterials from Incidental Particles for Environmental Health and Safety *Presented at the College of Engineering Research Open House, University of Iowa, April 16*.

46. Cena LG, Peters TM. (2009) Characterization and control of airborne particles emitted during production of epoxy reinforced with carbon nanotubes. *Proc. Annual American Association of Aerosol Researchers, Minneapolis, MN*.

47. Cena LG, Peters TM. (2009) Characterization of coarse particulate matter using passive samplers. *Proc. National Ambient Air Monitoring Converence. Nashville, TN*.

48. Vosburgh D, Boysen DA, Peters TM. (2009) Exposure assessment of fume released during seam sealing of polytetrafluorethylene fabric. *Proc. American Industrial Hygiene Association Meeting. Toronto, ON. Awarded 'best poster in session' and 'best student aerosol poster'*.

49. Kim JS, Luthe G, Flor S, Klosener J, Peters TM, Robertson LW, Thorne PS, Ludewig G. (2009) In Vitro Study of the Air Delivery of Particle-bound PBDEs to Lung Cells. *Presented at the 48th Annual Meeting of the Society of Toxicology, Baltimore, Maryland, March 15-19, 2009, Abstract # 2016. Awarded Third Place Student Award in the In Vitro and Alternative Methods Specialty Section*.

50. Cyrs WD, Boysen DA, Peters TM. (2009) Nanoparticle collection efficiency to the surface of capillary pore membrane filters *Proc. Annual American Association of Aerosol Researchers, Minneapolis, MN*.

51. Cyrs WD, Boysen DA, Peters TM. (2009) Nanoparticle collection efficiency to the surface of capillary pore membrane filters. *Proc. American Industrial Hygiene Association Meeting. Toronto, ON. Awarded 'best poster in graduate student session'*.

52. Sawvel EJ, Boysen DA, Kumar N, Willis RD, Peters TM. (2009) Spatial variability of coarse particulate matter (PM10-2.5) in Cleveland, OH. *Proc. American Industrial Hygiene Association Meeting. Toronto, ON*.

53. Peters TM, Cena LG, Anthony T, Kim C. (2010) A sampling criterion for nanoparticles. *Proc. Annual American Association of Aerosol Researchers, Portland, WA*.

54. Cena LG, Peters TM, Anthony T, Shelton BL, Casuccio GS, Lersch TL. (2010) Characterization of airborne particles emitted during sanding of CNT nanocomposite Material. *Proc. Annual American Association of Aerosol Researchers, Portland, WA*.

55. Vosburgh D, Klein DT, Sheehan M, O'Shaughnessy PT, Peters TM. (2010) Evaluation of a personal diffusion battery. *Proc. American Industrial Hygiene Conference and Exhibition. Denver, CO*.

56. Cena LG, Peters TM. (2010) Evaluation of nylon net screens as diffusion media for nanoparticles. *Proc. American Industrial Hygiene Conference and Exhibition. Denver, CO. Awarded 'best poster in show' and 'best poster in graduate student session"*.

57. Kim JS, Adamcakova-Dodd A, Peters TM, O'Shaughnessy PT, Thorne PS. (2010) In vitro Dynamic Exposure Model (IVDEM) for Air Delivery of Nanomaterials to Cells. *Health Sciences Research Week, The University of Iowa, Iowa City, IA. Student award for best graduate and medical student poster*.

58. Thorne PS, Kim JS, Adamčaková-Dodd A, Peters TM, O'Shaughnessy PT. (2010) In vitro Dynamic Exposure Model (IVDEM) for Air Delivery of Nanomaterials to Lung Cells. *American Thoracic Society 2010 International Conference, New Orleans, LA*.

59. Sawvel EJ, Peters TM, Kumar N, Willis RD. (2010) Passive sampling to characterize spatial and compositional variability in coarse particulate matter. *Proc. American Industrial Hygiene Conference and Exhibition. Denver, CO*.

60. Sawvel E, Peters TM, Kumar N, Willis R, Norris G, Hammond D. (2010) Spatial variability of the composition of coarse particulate matter in Cleveland, OH. *Proc. Annual American Association of Aerosol Researchers, Portland, WA*.

61. Cena LG, Anthony T, Peters TM. (2011) A personal nanoparticle respiratory deposition (NRD) sampler *Proc. American Industrial Hygiene Conference and Exhibition. Portland, WA. Awarded 'best poster in show' and 'best poster in graduate student session'*.

62. Hill BK, Bunker KL, Casuccio GS, Pacolay B, Ott D, Ferreri MR, Peters TM. (2011) A sampling criterion for nanoparticles. *Proc. American Industrial Hygiene Conference and Exhibition. Portland, WA*.

63. Hibbs M, Peters TM, Anthony T. (2011) Capture velocity with slot entry to conical hood. *Proc. American Industrial Hygiene Conference and Exhibition. Portland, WA*.

64. Cena LG, Peters TM, Lersch TL, Casuccio G. (2011) Characterization of Composite Particles Containing Carbon Nanotubes by Scanning-Transmission Electron Microscopy. *Proc. American Industrial Hygiene Conference and Exhibition. Portland, WA*.

65. Park JH, Ault A, Grassian V, Peters TM. (2011) Characterization of Nanoparticles Generated by Spark Discharge to Simulate Welding Fume. *Proc. Annual American Association of Aerosol Researchers, Orlando, FL*.

66. Ault A, Peters TM, Sawvel E, Cassucio G, Willis R, Grassian V. (2011) Sources and distribution of iron within coarse particulate matter in Cleveland, Ohio. *Proc. Annual Geophysical Union, San Francisco, CA*.

67. Cena LG, Peters TM, Anthony T. (2011) Standardized method to evaluate airborne particle emissions from sanding nanocomposite materials. *Proc. 5th International Symposium on Nanoparticles, Occupational, and Environmental Health, Boston, MA*.

68. Hill BK, Peters TM. (2012) Field portable x-ray fluorescence for rapid analysis of titanium dioxide on air filters. *Proc. American Industrial Hygiene Conference and Exhibition. Indianapolis, IN*.

69. Mills JB, Peters TM, Park JH. (2012) Verification of the DiSCmini Personal Monitor for Welding Fume. *Proc. American Industrial Hygiene Conference and Exhibition. Indianapolis, IN*.

7. Other

1. Peters TM, Cena L. (2012) Personal nanoparticle respiratory deposition sampler and methods of using same, US Provisional Patent Application No: 61/599,683.

B. Areas of Research Interest/Current Projects

1. Mechanics of aerosols: sampling and transport, instrumentation, and filter design

2. Industrial ventilation: capture and control of workplace pollutants

3. Engineered nanomaterials and ultrafine particles: exposure assessment and health effects

C. Sponsored Research (*ALL grants*, least to most recent)
(if you are not the PI, state your role or contributions - in a few sentences)

1. Grants Received

Source Title P.I.	% Effort % Salary Support	Direct Funds Period of Funding
US DHHS/ CDC/ NIOSH Heartland Occupational and Health Education Research Center Zwerling *Program Director* Thomas M. Peters *IH Program Faculty*	8% 8%	$1,200,000 07/01/2004-06/30/2008
International Truck & Engine Corporation and UAW Ultrafine particles in heavy vehicle assembly and components manufacturing plants Heitbrink *Principal Investigator* Thomas M. Peters *Co-Investigator*	20% 20%	$68,533 10/15/2004-11/30/2005
Center for Health Effects of Environmental Contamination, University of Iowa Passive sampling of ambient air particulate matter Thomas M. Peters *Principal Investigator*	20% 0%	$25,000 01/01/2005-12/31/2005
New Investigator Research Award, College of Public Health, University of Iowa Airway and immune response to inhaled endotoxin and diesel exhaust particles in humans Thomas M. Peters *Principal Investigator*	10% 0%	$10,000 02/01/2005-02/28/2006
TSI, Incorporated, Shoreview MN Modification and evaluation of the APS3321 for ambient air monitoring Thomas M. Peters *Principal Investigator*	4% 4%	$40,000 04/01/2005-01/31/2007

Source Title P.I.	% Effort % Salary Support	Direct Funds Period of Funding
Heartland Center for Occupational Health & Safety, US DHHS/ CDC/ NIOSH Airways response to mixed exposure of endotoxin and diesel exhaust particles using exhaled breath condensate methodology Thomas M. Peters *Principal Investigator*	10% 0%	$14,760 06/30/2005- 06/30/2006
EPA/ NIOSH/ NSF Assessment methods for nanoparticles in the workplace Patrick T. O'Shaughnessy *Principal Investigator* Thomas M. Peters *Co-Investigator*	3% 3%	$399,906 07/01/2005- 06/30/2008
Biological Science Funding Program, University of Iowa Development of a passive sampler for assessing airborne nanoparticles Thomas M. Peters *Principal Investigator*	20% 0%	$30,000 02/01/2006- 01/31/2007
Center for Global and Regional Environmental Research, University of Iowa Real-time, personal sampling for airborne nanoparticles Thomas M. Peters *Principal Investigator*	5% 0%	$30,000 06/01/2006- 05/31/2008
Environmental Health and Science Resource Center, University of Iowa Relating cardiac function to diesel exhaust inhalation exposure Thomas M. Peters *Principal Investigator*	5% 0%	$8,500 06/01/2006- 03/30/2007
US EPA Development and field assessment of a shelter for a passive aerosol sampler Thomas M. Peters *Principal Investigator*	4% 4%	$20,887 01/30/2007- 10/01/2007

Source Title P.I.	% Effort % Salary Support	Direct Funds Period of Funding
UAW-GM Center for Human Resources Burn-off emissions in vehicle final assembly areas Heitbrink Thomas M. Peters *Co-Investigator*	1% 1%	$418,039 02/01/2007-05/30/2009
5 P30 ES05605-19 NIEHS Environmental Health Sciences Research Center Peter S. Thorne *Center Director* Thomas M. Peters *Career Development Assistant Professor*	10% 10%	$980,427 04/01/2007-03/31/2010
1K01OH009255-03 US DHHS/ CDC/ NIOSH Personal exposure to engineered nanoparticles Thomas M. Peters *Principal Investigator*	50% 50%	$300,000 09/01/2007-08/31/2010
Center for Health Effects of Environmental Contaminants, University of Iowa Predicting indoor and outdoor air quality by indirect methods Kumar *Principal Investigator* Thomas M. Peters		$30,000 09/01/2007-08/31/2008
5U50OH007548-10 Great Plains Center for Agricultural Health US DHHS/CDC/NIOSH Exposure assessment of workers in swine confinement buildings Patrick T. O'Shaughnessy *Principal Investigator* Thomas M. Peters *Co-Investigator*	10% 10%	$856,146 10/01/2007-09/30/2012
EP08D000289&am1 Amendment 1 US EPA Passive sampling to assess the spatial variability of PM10-2.5 in Cleveland, OH Thomas M. Peters *Principal Investigator*	5% 5%	$27,000 04/07/2008-06/30/2009

Source Title P.I.	% Effort % Salary Support	Direct Funds Period of Funding
5R01OH009290-03 US DHHS/ CDC/ NIOSH CFD investigation of particle inhalability in low wind speeds T. Renée Anthony *Principal Investigator* Thomas M. Peters *Co-Investigator*	10% 10%	$125,718 06/01/2008- 05/31/2013
An optimal spatial sampling design for the U.S. General Social Survey Kumar *Principal Investigator* Thomas M. Peters *Co-Investigator*	2% 2%	$780,000 01/01/2009- 12/31/2012
Heartland Center for Occupational Health & Safety, US DHHS/ CDC/ NIOSH A personal real-time ultrafine particle monitor Vosburgh *Co-Principal Investigator* Thomas M. Peters *Co-Principal Investigator*	5% 0%	$15,000 02/01/2009- 07/31/2010
EPA09D000166 US EPA Passive sample analysis and data interpretation Thomas M. Peters *Principal Investigator*	5% 5%	$32,000 02/01/2009- 01/31/2010
US EPA Passive sampling assessment of spatial variability of PM10-2.5 Cleveland Multiple Air Pollutant Study (CMAPS) Thomas M. Peters *Principal Investigator*	0% 0%	$47,856 06/01/2009- 05/30/2010
US DHHS/ CDC/ NIOSH Heartland Occupational and Health Education Research Center Patrick T. O'Shaughnessy *Principal Investigator* Thomas M. Peters *Director- Industrial Hygiene Program*	15% 15%	$1,574,524 07/01/2009- 06/30/2014

Source Title P.I.	% Effort % Salary Support	Direct Funds Period of Funding
EP10D000322 US EPA Laboratory determination of deposition velocity and coagulation for nano-CeO2 fuel additive Thomas M. Peters *Principal Investigator*	10% 10%	$53,917 04/08/2010- 09/30/2011
FA8650-10-2-6136 US Department of Defense, Air Force Evaluation of methods to control exposure to nanoparticles Thomas M. Peters *Principal Investigator*	10% 10%	$136,923 06/15/2010- 06/14/2011
Heartland Center for Occupational Health & Safety CDC/NIOSH A personal sampler for engineered nanoparticles Cena *Co-Principal Investigator* Thomas M. Peters *Co-Principal Investigator*	5% 0%	$15,000 07/01/2010- 06/30/2011
NIEHS through Applied Nanotech Holding, Inc. Method to evaluate release of engineered nanomaterial from commercial products Thomas M. Peters *Principal Investigator*	10% 10%	$46,250 07/01/2010- 06/30/2011
1R21OH009920 US DHHS/ CDC/ NIOSH Methods to assess personal exposures to airborne metallic nanoparticles Thomas M. Peters *Principal Investigator*	40%	$275,000 09/01/2010- 08/31/2013
EP11D000010 US EPA Analysis of Cleveland multiple air pollutant study (CMAPS) samples Thomas M. Peters *Principal Investigator*	10% 10%	$30,144 09/01/2010- 09/30/2011

Source Title P.I.	% Effort % Salary Support	Direct Funds Period of Funding
Center to Protect Workers' Rights/CDC Ergonomic and welding fume exposures during stud welding Nathan B. Fethke *Principal Investigator* Thomas M. Peters *Co-Investigator*	5% 5%	$131,081 07/01/2011- 08/30/2014
5U50OH007548-11 US DHHS/CDC/NIOSH Great Plains Center for Agricultural Health: Intervention to reduce exposures in concentrated animal feeding operations Fredric E. Gerr *Center Director* T. Renée Anthony *Principal Investigator* Thomas M. Peters *Co-Investigator*	11% 11%	$896,925 09/01/2011- 08/31/2016
US Department of Defense, Air Force through Spectral Energies Development of a personal aerosol collector and spectrometer (PACS) Thomas M. Peters *Principal Investigator*	13% 13%	$24,735 06/18/2013- 03/19/2014
NIEHS through University of Minnesota Midwest Emerging Technologies Public Health and Safety Training (METPHAST) Program Thomas M. Peters *Principal Investigator*	7% 7%	$40,010 08/01/2013- 07/31/2016
Supplement to P30 ES005605 NIEHS Exposure Assessment & Outreach to Engage the Public on Risk from Frac Sand Mining Peter S. Thorne *PI* Thomas M. Peters *Co-investigator*		$74,000 08/01/2013- 03/31/2014

Source Title P.I.	% Effort % Salary Support	Direct Funds Period of Funding
1R01OH010238-01A1 US DHHS/ CDC/ NIOSH A nanoparticle respiratory dose sampler for metal-based nanoparticles Thomas M. Peters *Principal Investigator* T. Renée Anthony Vicki Grassian	30% 30%	$1,209,000 09/01/2013- 08/31/2016
John Deere Aerosol Mapping and Low-Cost Monitoring Thomas M. Peters *Principal Investigator*	5% 5%	$89,918 10/18/2013- 10/16/2018

2. Grants Pending

Source Title P.I.	% Effort % Salary Support	Direct Funds Period of Funding
USAF Development of a personal aerosol collector and spectrometer Thomas M. Peters *PI*		$132,675 07/16/2014- 07/15/2016
US DHHS/ CDC/ NIOSH An inexpensive monitoring network to assess workplace exposures Thomas M. Peters *Multiple PI* Kirsten Koehler *Multiple PI* Geb Thomas	20% 20%	$1,111,000 09/01/2014- 08/31/2018

D. Invited Presentations

1. Conference Presentations/Posters (least to most recent)

Year	Title	Organization	Presentation Type
2004	Aerosol short course: physics, measurement, and sampling (Peters TM)	Boeing Corporation, Everett, WA	Oral Presentation

Year	Title	Organization	Presentation Type
2007	The FUN of Aerosols: Assessing Fine Ultrafine and Nano Particles in Workplace Atmospheres (Peters TM)	Molecular Foundry, Lawrence Berkeley National Laboratory, Berkeley, CA	Oral Presentation
2009	Airborne Monitoring to Distinguish Engineered Nanomaterials from Incidental Particles (Peters TM)	Air Force Workshop on Engineered Nanomaterials, Dayton, OH	Oral Presentation
2009	Airborne Monitoring to Distinguish Engineered Nanomaterials from Incidental Particles (Peters TM)	Nanomaterials Applications Center Colloquium, Austin, TX	Oral Presentation
2009	Physicochemical Characteristics of Nanoparticles in the Workplace and Implications for Occupational Exposure Limits (Peters TM)	Roundtable Session at the American Industrial Hygiene Conference and Exhibition	Oral Presentation
2009	Air Quality in American Subway Systems (Peters TM)	Subway Air Quality Workshop, Seoul, South Korea	Oral Presentation
2011	Future Needs in Air Sampling Instrumentation (Peters TM)	5th International Symposium on Nanoparticles, Occupational, and Environmental Health, Boston, MA	Oral Presentation
2011	Workplace Safety for Engineered Nanomaterials (Peters TM)	Moscow Nanotechnologies Retreat, Russia-US Bilateral Presidential Commission for Nanotechnologies, Moscow, Russia	Oral Presentation
2012	Evaluation of Measurement Methods to Assess Exposures to Nanomaterials (Peters TM)	3rd USAF ASC/AFRL Engineered Nanomaterials Environment, Safety, and Health Workshop	Oral Presentation
2013	Lessons from the Workplace: Hazards from Exposure to Engineered Nanomaterials (Peters TM)	Plenary session, 32nd Annual Conference American Association for Aerosol Research	Keynote/Plenary Address

Year	Title	Organization	Presentation Type
March 2014	Creative Use of Direct Reading Instruments: Modern Art for the Industrial Hygienist (Peters TM)	Environmental Research Center Invitated Visit, Univ of Michigan, Ann Arbor	Oral Presentation
July 2014	Creative Use of Direct Reading Instruments: Modern Art for the Industrial Hygienist (Peters TM)	NIOSH, Morgantown, WVa	Oral Presentation

IV. SERVICE

A. Offices/appointments held in professional organizations (least to most recent)

1. Editorships

Year	Organization	Position
2000-Present	Aerosol Science and Technology	
2000-Present	Annals of Occupational Hygiene	
2000-Present	Environmental Science and Technology	
2000-Present	Journal of Air and Waste Management Association	
2011-Present	Jounal of the Aerosol Science	
2012-Present	Aerosol and Air Quality Research	Editor

2. Review Panels

Year	Organization	Position
2004	Reviewed pre-proposals submitted by the various NIOSH intramural research laboratories, NORA Peer Review, Washington, DC	Panel Member
2004	Reviewed proposals submitted by several NIOSH intramural research laboratories, NORA Peer Review, Washington, DC	Panel Member

Year	Organization	Position
2008	"Thoracic Coarse Particle Components and Potential Public Health Impacts" in US EPA "Ambient Air Quality Monitoring and Health Research: Workshop to Discuss Key Issues", Research Triangle Park, NC	Expert Panelist
2008	Reviewed proposals submitted by several NIOSH intramural research laboratories, NORA Peer Review, Washington, DC	Panel Member
2009	Special emphasis panel for research conference grants, NIEHS	Panel Member
2011	EPA Review Panel – Washington, DC. Science To Achieve Results (STAR) grant review titled "Developing the Next Generation of Air Quality Measurement Technology."	
2011	Science To Achieve Results (STAR) grant review titled "Developing the Next Generation of Air Quality Measurement Technology.", EPA Review Panel, Washington, DC	Panel Member
2012	Served on panel for SBIR/STTR grant applications for NIH study section IMST12	

3. Departmental, Collegiate or University Service Positions

Year	Organization	Position
2001-2003	University of North Carolina	Ph.D. Student Representative to Faculty
2007-2008	Iowa Research Experience for Undergraduates Program	Mentor
2009-2011	Junior faculty group, Department of Occupational and Environmental Health, College of Public Health, University of Iowa	Organizer and Participant

Year	Organization	Position
2011-Present	SROP/McNair Scholars program, University of Iowa	Mentor
2011-Present	Faculty Council, College of Public Health, University of Iowa	OEH Representative
2011-2014	CPH Faculty Council, College of Public Health, University of Iowa	Chair 2012-2013

4. Professional Organizations (state and/or national)

Year	Organization	Position
1992-Present	Tau Beta Pi	Member
2001-Present	Aerosol Technology Working Committee, American Industrial Hygiene Association	Member
2001	Organized special issue of Aerosol Science and Technology (PM2.5 Federal Reference Method Sampler, Volume 34, Number 5), American Association for Aerosol Research	
2003	Aerosol Physics Working Group, American Association for Aerosol Research	Chair
2003	Membership Committee, American Association for Aerosol Research	Chair
2007-Present	Advisory Board for Ambient Air Quality Standards, Linn Co. Ambient Air Quality Group	Member
2007-Present	Aerosol Physics Working Group	Member
2008-Present	Nanotechnology Working Group, American Industrial Hygiene Association	Chair
2011-Present	Newsletter Committee, American Association for Aerosol Research	Member

Year	Organization	Position
2011	U.S. delegation to Moscow, Russia for Bilateral Presidential Commission on EHS for Nanotechnology, U.S. Department of State	Member
2012-Present	American Industrial Hygiene Association	Member of the Engineering Committee

B. Other Professional Service (least to most recent)

1. Referee Manuscripts/Journal Reviews

Year	Organization	Position

2. Organize Conference, Paper Session, etc.

Year	Organization	Position

3. Departmental, Collegiate or University Committees (other than teaching)

Year	Organization	Position
2005-Present	Accreditation Board for Engineering and Technology (ABET) reaccredidation of Industrial Hygiene program	Member
2006-Present	Nanoscience and Nanotechnology Institute (NNI@UI) Executive Committee, University of Iowa	Member
2007-Present	Committee to Hire a New Faculty Member in the Industrial Hygiene Program	Member
2007-2008	Education subgroup of the for the review of the College of Public Health's Strategic Plan, College of Public Health, University of Iowa	Member
2009-2010	Education subgroup for the review of the College of Public Health's Strategic Plan, College of Public Health, University of Iowa	Member
2011-Present	BS/MS Combined Degree Program	Taskforce Member

4. State Committees

Year	Organization	Position

5. National Committees

Year	Organization	Position
2011-Present	Advisory Board, University of Washington Center for Clean Air Research	Member
2011-2012	Task group to select release scenarios and methods for development targeted to common commercial use of products containing engineered nanomaterials, International Life Science Institute	Member
2011-2012	Workshop on safety aspects of nanosystems and infrastructure for sustainability, National Science Foundation	Member

6. Professionally Relevant Community Involvement

Year	Organization	Position

7. Professional Consulting

Year	Organization	Position
1998-2004	BGI, Inc.	Designed, implemented, and maintained software for serial communications with flow measurement devices and PM2.5 federal reference method samplers
2001-2002	Center for Disease Control, NIOSH	Modeled aerosol transport to a new personal respirable monitor
2008	Superprotonic, Inc.	Designed impactor to remove large droplets from nebulized aerosol

8. Other

Year	Organization	Position