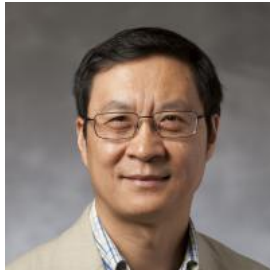


December 26, 2016



JUNFENG (JIM) ZHANG

CURRICULUM VITAE

DUKE UNIVERSITY

NSOE LSRC Rm. A309

308 Research Dr.
Durham, NC 27708
Office: 919-681-7782
Cell: 323-388-6366
Fax: 919-613-8061

Email: junfeng.zhang@duke.edu

Websites: <http://globalhealth.duke.edu/people/faculty/zhang-jim>
<http://sites.globalhealth.duke.edu/ebclab/>

DUKE KUNSHAN UNIVERSITY

No. 8 Duke Avenue

Kunshan, Jiangsu, China 215316

Office: +86-512 5777 9988

Cell: +189-1323-3695

Fax: +86-512 5772 8899

Email: junfeng.zhang@duke.edu

Website: www.dukekunshan.edu.cn

<http://sites.globalhealth.duke.edu/ebclab/>

I. EDUCATION

Degree	School	Date	Concentration
B.S.	Peking University, Beijing, China	1985	Applied Chemistry
M.S.	Peking University, Beijing, China	1988	Atmospheric Chemistry
M.S.	Rutgers University, New Brunswick, NJ	1991	Environmental Sciences
Ph.D.	Rutgers University and the University of Medicine and Dentistry of New Jersey, Piscataway, NJ	1994	Environmental Sciences and Public Health
Postdoctoral	East-West Center and UC-Berkeley Mentored by Kirk R. Smith, PhD	1994- 1995	

Special Training

Attended "Stand and Deliver" Workshop by Steve Adubato, PhD, consisting of six two-hour sessions on "Speak from the Heart", a UMDNJ effort of leadership development, 2005.

Attached one-day "Ready for Media" training at University of Southern California, with hand-on training on how to effectively communicate with the media and the public about scientific discoveries, 2012.

Honors and Awards

Outstanding Graduate 1985 (Highest Honors), by Peking University and numerous awards during undergraduate and graduate study at Peking University (1981-1988).

Second place of the National Best Books on Environmental Knowledge, Beijing, China. Book title: "A Treasure Box of Environmental Knowledge," 1990.

First place of the National Hongyu (Rainbow and Rain) Cup Contest of Poetry and Words in Beijing, China. Winning poem title: "Memory: A Serenade" 1992.

Second place, Contest of Student Paper Session, 39th Anniversary Conference of Air & Waste Management Association, Mid-Atlantic States Section, Atlantic City, NJ. Paper title: "Indoor AIR chemistry: ozone, aldehydes, and organic acids in residential air," 1993.

Distinguished Lectureship Award (for presenting a short course on Indoor Air Pollution and Exposure Assessment), presented by College of Environmental Sciences and Engineering, Nan Kai University, Tianjin, China, 2002.

For contributing to the award of the Nobel Peace Prize for 2007 to IPCC, presented by the Intergovernmental Panel on Climate Change (IPCC), 2007.

Honorary Member of Delta Omega, the honorary society for graduate studies in public health, 2008.

Excellence in Research Award for 2007-2008 by the Foundation of University of Medicine and Dentistry of New Jersey, 2008.

Excellence in Teaching Award for 2008-2009 by the Foundation of University of Medicine and Dentistry of New Jersey, 2009.

Inducted to the Stuart D. Cook Master Educators' Guild, University of Medicine and Dentistry of New Jersey, 2009.

Jerome J. Wesolowski Award, by International Society of Exposure Science, to recognize sustained and outstanding contributions to the knowledge and practice of human exposure assessment, 2012.

Distinguished Alumni Award, by the Graduate School-New Brunswick, Rutgers University, for outstanding achievement in the Physical and Mathematical Sciences, 2013.

Dennis M. Fenton Graduate Student Alumni Award, presented by the Cook Community Alumni Association, Rutgers University, 2013.

Fellow of American Association for the Advancement of Science (AAAS), 2013.

II. PROFESSIONAL BACKGROUND

Academic Appointments

Research and Teaching Assistant, Department of Technical Physics, Peking University, Beijing, China, 1985-1988.

Consultant, Environmental Protection Office of Peking University, Beijing, China, 1987-1989.

Executive Director of Management Training Program, Stone Company, Beijing, China, 1988-1989.

Air Pollution Analyst, Gibbs & Hill, Inc., NY 1990-1990

Research Assistant, Environmental and Occupational Health Sciences Institute 1989-1994.

Fellow (Research Associate), Program on Environment, the East-West Center, Honolulu, Hawaii, 1994-1995.

Lecturer, TH Huxley School of Environment, Earth Science and Engineering, Imperial College of Science, Technology and Medicine, London, UK, 2000-2001.

Assistant Professor, Department of Environmental and Community Medicine, University of Medicine and Dentistry of New Jersey - Robert Wood Johnson Medical School, 1995-2001.

Director, EOHSI International Environmental Health Center, Piscataway, New Jersey, USA, 2001- 2004.

Adjunct Research Professor, China National Environmental Monitoring Center, Beijing, China, 2000-2004.

(Secondary Appointment) Associate Professor, Department of Environmental and Occupational Medicine, Robert Wood Johnson Medical School – University of Medicine and Dentistry of New Jersey, 2001-2006.

Associate Professor of Department of Environmental and Occupational Health, School of Public Health – University of Medicine and Dentistry of New Jersey, 2001-2006.

Faculty member, Joint Graduate Program in Toxicology of UMDNJ and Rutgers University 2005-2010.

Member, Exposure Measurement and Assessment Division, Environmental and Occupational Health Sciences Institute jointly sponsored by University of Medicine and Dentistry of New Jersey and Rutgers- the State University of New Jersey, 2005-2010.

Graduate Faculty, Department of Environmental Sciences, Rutgers University, 1996-2010.
Member, the Cancer Institute of New Jersey, Piscataway, New Jersey, 2002- 2010.

Visiting/Guest Professor, College of Environmental Sciences and Engineering, Peking University, Beijing, China, 2004-present.

Faculty member, the Graduate School of Biomedical Sciences at University of Medicine and Dentistry of New Jersey, 1996-2010.

Professor of Environmental and Occupational Health, School of Public Health – University of Medicine and Dentistry of New Jersey, 2006-2010.

Chair and Acting Chair, Department of Environmental and Occupational Health, University of Medicine and Dentistry of New Jersey – School of Public Health 2006-2010.

Associate Dean for the Piscataway/New Brunswick Campus, Associate Dean for Global Public Health, University of Medicine and Dentistry of New Jersey – School of Public Health, 2008-2010.

Adjunct Professor, Department Environmental and Occupational Health, School of Public Health – University of Medicine and Dentistry of New Jersey, 2010-present.

Professor, Department of Preventive Medicine, University of Southern California, Los Angeles, CA, 2010-2013.

Professor, Nicholas School of the Environment and Duke Global Health Institute, Duke University, Durham, North Carolina, 2013-present.

Administrative Appointments

Chair and Acting Chair, Department of Environmental and Occupational Health, University of Medicine and Dentistry of New Jersey – School of Public Health 2006-2010.

Associate Dean for the Piscataway/New Brunswick Campus, Associate Dean for Global Public Health, University of Medicine and Dentistry of New Jersey – School of Public Health, 2008-2010.

Chair, the Piscataway/New Brunswick Campus Executive Committee, UMDNJ-School of Public Health, 2008-2010.

Chair, Executive Committee for the Piscataway/New Brunswick Campus, UMDNJ-School of Public Health, 2008 – 2010.

Professional Appointments

Member of Planning Committee and Workshop Coordinator for the Southeast Asian Environmental Health Research Workshop, sponsored by US National Institute of Environmental Health Sciences (NIEHS), University of Kebangsaan Malaysia, University of Putra Malaysia, Environmental & Occupational Health Science Institute, NJ, and University of Pittsburgh, PA, 01/01–05/01.

Conference Chair, of the Annual Conference of International Society of Exposure Analysis (ISEA) held in October 17-21, 2004 in Philadelphia, USA. 2002-2004.

Program Co-Chair, International Topical Meeting on Environmental Reliability and Risk Studies, Seoul National University, Seoul, South Korea, Sponsored by US National Science Foundation and co-sponsored by Rutgers University, Seoul National University, and UMDNJ, 02/05.

Member, Environmental and Occupational Health Sciences Institute (EOHSI), jointly sponsored by UMDNJ-Robert Wood Johnson Medical School and Rutgers University, 1995 - 2010.

Member of New Jersey Clean Air Council, advisory body for the State of New Jersey, 2005-2010.

Member of the International Advisory Committee (IAC) for the 10th International Healthy Building Conference in 2012 (HB2012), which is the official conference of the International Society of Indoor Air Quality and Climate (ISIAQ) and will take place in Brisbane, Australia, from 8-12 July 2012. 03/11-07/12.

Member of the Environmental Health Sciences Review Committee of the National Institute of Environmental Health Sciences (NIEHS), which has primary responsibility for reviewing applications for P30 Centers, institutional training grants, career awards, and other specialized program applications, June 2011 – August 2015.

Member of the Environmental Protection Agency (EPA) Clean Air Scientific Advisory Committee (CASAC) Oxides of Nitrogen (NO_x) Primary National Ambient Air Quality Standards (NAAQS) Panel, which will review and provide technical advice and policy assessments for NO_x. March 2013 – Present.

Member of the Special Scientific Committee on Unconventional Oil and Gas Development, Health Effects Institute. May 2014 – May 2015.

Teaching Responsibilities

Courses Taught at Duke University

- *Air Pollution: from Sources to Health Effects (ENVIRON 642)*, graduate level, spring 2014
- *Air Quality I: Sources, Fate and Transport of Pollutants ((ENVIRON 603)*, spring 2016
- *Air Quality II: Human Exposure and Health Effects (ENVIRON 604)*, spring 2016, fall 2016
- *Environmental Exposure Analysis (ENVIRON 780)*, Graduate level (co-teaching with Heather Stapleton), fall 2014, fall 2015.
- *Introduction to Global Health*, in Global Health Certificate Program jointly offered by Duke University (DGH) and Peking University Health Sciences Center, Summer 2013, Sumer 2015, Summer 2016
- *Research Independent Study (ENVIRON 393-71)*. Rui Liu (Fall 2014, Spring 2015), William Liakos III (spring 2015, fall 2015), Gopi Neppala (fall 2015, spring 2016, fall 2016)

Guest Lectured at Duke University

Health Education for 2nd Year Medical Students, fall 2013

Environmental Health (ENV537), Graduate/undergraduate, spring 2014, spring 2015, spring 2016

Environmental Toxicology and Chemistry (ENV360), Undergraduate, Spring 2014, spring 2015, spring 2016

Global Health Challenges (GH570), graduate, fall 2013, fall 2014, fall 2015,

China GATE-Energy and Environment, Executive Training Program, Spring 2014

Courses Taught at Rutgers University and University of Medicine and Dentistry of New Jersey

Indoor Air Quality, Graduate level elective, fall 2002, fall 2005, fall 2008

Introduction to Environmental Health, Graduate Level Core Course, spring 2002, spring 2003, spring 2005, spring 2007, Fall 2007,

Environmental Exposure Measurement and Assessment, Graduate Level Core Course, Fall 1996, Fall 1998, Fall, Fall 2001, Fall 2003, Fall 2005, Fall 2007

Atmospheric Chemistry, graduate level course, spring 1998, spring 2000

Air Pollution, part of Fundamental Concepts of Environmental Sciences (II), Graduate level. Spring 1998, spring 1999

Guest Lectured at Rutgers University and University of Southern California

Environmental Risk Assessment, Graduate level, Rutgers/UMDNJ

Principles of Air Pollution, Undergraduate level, Rutgers University

Air Sampling and Analysis, Undergraduate level, Rutgers University

Environmental Fate and Transport, Graduate/undergraduate levels, Rutgers University

Environmental and Occupational Toxicology, Graduate level, Rutgers University

Introduction of Global Public Health, Graduate level, Rutgers University

Case Studies in Global Health, Undergraduate level, 2011, 2012, University of Southern California (USC)

Environmental Health: The Growing Impact of Air Pollution on Health, Undergraduate level Intro to Global Health) 2010, 2011, 2012, and 2013, at USC

The Use of Biomarkers in Exposure Assessment, Graduate level, 2012, USC

Expousre Assessment in Environmental Epidemiology,

Graduate level, 2006-2009, Rutgers/UMDNJ and in 2012, 2013, USC

Exposure Assessment in Environmental Toxicology, Graduate level, 2006-2009, Rutgers/UMDNJ and 2012, 2013, USC

III. RESEARCH

Major Areas of Research Interest

Assessing human exposures to environmental contaminants and resulting health effects; developing and validating biological markers of contaminant exposure; understanding reactions among complex mixtures of air pollutants and health implications; assessing health risks associated with household use of chemicals and combustion devices; analyzing impacts of household combustion sources on health, energy and greenhouse gas contributions; developing methods for the measurement of trace-level toxic chemicals present in air, food, water, and dust.

Current Research Grants

1. ***Risk Assessment for Manufactured Nanoparticles Used in Consumer Products (RAMNUC)***
 RD83469301 US Environmental Protection Agency and UK National Environmental Research Council
 Role: PI Project period: 07/10-06/15 Grant amount: \$4,000,000
 Perfect effort: 20%
2. ***Respiratory Effects of Silver and Carbon Nanoparticles (RESAC)***
 U19ES007048-05 National Institute of Environmental Health Science (NIEHS)
 Role: PI, PD Project period: 09/10-08/15 Grant amount: \$5,000,000
 Perfect effort: 20%
3. ***Use of Exhaled Breaths Condensates to Assess Human Exposures and Response to Air Pollution***
 5P30ES007048-16 National Institute of Environmental Health Science (NIEHS)
 Role: Co-I Project period: 04/11-03/16 Grant amount: \$8,900,765
 Perfect effort: 5% (In-Kind)
4. ***Air Pollution Particle Effects on Human Antimycobacterial Immunity***
 R01ES0203821 US National Institute of Environmental Health Science (NIEHS)
 Role: Co-I Project period: 07/11-09/16 Grant amount: \$3,558,069
 Perfect effort: 15%
5. ***Prenatal Tobacco Smoke, Genetic and Epigenetic Changes, and Respiratory Health***
 1R01ES022216-01A1 National Institute of Environmental Health Science (NIEHS)
 Role: Co-I Project period: 09/13-08/18 Grant amount: \$2,439,475 (Zhang \$101,000)
 Perfect effort: 5%
6. ***Prospective Evaluation of Air Pollution, Cognition and Autism from Birth Onward***
 1R01ES023780 US National Institute of Environmental Health Science (NIEHS-NIH)
 Role: Co-I Project period: 07/14-04/18 Grant amount: \$3,000,000 (Zhang \$200,000)
 Perfect effort: 5%-10%
7. ***Health Assessment and Control Mechanisms for PM_{2.5} and Co-pollutants in the Built Environment***
 51420105010 National Natural Science Foundation of China
 Role: Co-PI Project period: 10/14-09/19 Grant amount: \$500,000 (Zhang portion \$200,000)
 Perfect effort: 10%
8. ***Effects of Air Pollution on Cardiopulmonary Disease in Urban and Peri-urban Residents in Beijing (AIRLESS)***
 8151101080 Peking University
 Role: PI -12/17 Grant amount: \$76,566 (DKU)
 Perfect effort:
9. ***The Combined Influence of Outdoor and Indoor Pollutants on Acute Respiratory Response of School Children in China***

Underwriters Laboratory (UL)
 Role: Co-I Project Period: 07/15-01/18 Grant amount: \$1,177,000 (total)
 Percent effort: 10% \$190,131 (DKU)
 \$150,559.00 (Duke)

Completed Research Grants

1. ***Investigation of Acid Aerosol Exposures in Metropolitan Settings: EOHSI Component (Microenvironmental Assessment)***
 CR#822050 Harvard University under EPA Cooperative Agreement
 Role: Co-PI Project period: 11/95-10/96 Grant amount: \$45,000
 Perfect effort: 10%
2. ***Reports of Pilot Study Results and Interim Full-scale Study Results Regarding Health Effects of Outdoor and Indoor Air Pollution in Four Chinese Cities***
 CR#822050 US Environmental Protection Agency
 Role: PI Project period: 9/96-12/97 Grant amount: \$33,554
 Perfect effort: 20%
3. ***NHEXAS - Comprehensive Population Based Study of Human Exposure to Contaminants in Multiple Media***
 CR#822050 Research Triangle Institute subcontract under EPA Cooperative Agreement
 Role: Co-I Project period: 9/93-9/98 Grant amount: \$964,002
 Perfect effort: 20%
4. ***Greenhouse Gases from Small Scale Combustion Devices in Developing Countries, East-West Center***
 CR#820243 under EPA Cooperative Agreement
 Role: PI Project period: 10/95-5/99 Grant amount: \$141,043
 Perfect effort: 30%
5. ***Lead-Based Paint Hazard Control in Priority Housing: New Jersey Assessment of Cleaning Techniques***
 NJLHR0023-97 US Department of Housing and Urban Development (HUD)
 Role: Co-I Project period: 09/97-03/00 Grant amount: \$852,816
 Perfect effort: 15%
6. ***Exposure Analyses for Toms River, N.J.: Current Conditions and Historical Reconstruction***
 NJLHR0023-97 N.J. Department of Health and Human Services
 Role: Co-I Project period: 05/98-04/00 Grant amount: \$453,720
 Perfect effort: 10%
7. ***Contributions of Outdoor Sources to Indoor Concentrations and Personal Exposures to Air Toxics,***
 The Mickey Leland National Urban Air Toxics Research Center
 Role: Co-I Project period: 12/97-11/00 Grant amount: \$1,476,260
 Perfect effort: 15%
8. ***Development of A Passive Sampler to Measure Exposures to Airborne Carbonyl Compounds,***
 Health Effects Institute (HEI)
 Role: PI Project period: 1/99-11/00 Grant amount: \$58,150
 Perfect effort: 10%
9. ***Effects of Exposure to Automobile Exhaust on Acrolein and Crotonaldehyde-derived DNA Adducts in Human Lymphocyte DNA***
 Subcontract from American Health Foundation under Health Effects Institute
 Research Agreement #98-2

Role: Co-I Project period: 1/00-6/01 Grant amount: \$46,297
 Perfect effort: 15%

10. Effect of CRA Loans for Lead Abatement

CDC

Role: Co-I Project period: 9/98-9/01 Grant amount: \$291,933
 Perfect effort: 20%

11. Southdown Quarry Exposure Study

#SR00-066 NJ Department of Environmental Protection #SR00-066

Role: Co- PI Project period: 9/00-9/01 Grant amount: \$521,981
 Perfect effort: 20%

12. Personal and Microenvironmental Measurements of Human Exposures to Multiple Aldehydes in Three Distinct Urban Areas

Health Effects Institute (HEI).

Role: PI Project period: 6/98-2/02 Grant amount: \$769,190
 Perfect effort: 30%

13. Effects of Exposure to Particulate Matter on Respiratory Health in Four Chinese Cities

US EPA

Role: PI Project period: 8/98-7/02 Grant amount: \$302,787
 Perfect effort: 30%

14. Health Effects of Exposures to VOCs, Ozone and Stress

NIOSH

Role: Co-I Project period: 10/99-9/02 Grant amount: \$1,311,431
 Percent effort: 15%

15. Hazardous Air Pollutant Mixtures: Measuring and Modeling Complex Exposure

R82792801 Subcontract from University of Minnesota under EPA Star Grant amount: \$142,331
 Project Period: 1/00-12/02

Role: PI
 Percent effort: 15%

16. Improvement of the PAKS- DNSH Method for the Collection and Analysis of Acrolein and Other Carbonyls

US Environmental Protection Agency

Role: PI Project period: 09/02-08/03 Grant amount: \$86,979
 Perfect effort: 20%

17. Preparation for Follow-up Study of Changes in Respiratory Health, in Relation to Changes in Outdoor Air Pollution Concentrations and Indoor Air Pollution Sources, in Four Chinese Cities

US Environmental Protection Agency.

Role: PI Project period: 5/02-9/03 Grant amount: \$63,500
 Perfect effort: 15%

18. Support for Carbonyls Analysis of the EPA Tampa Asthmatic Children Study, Research Triangle Institute.

US Environmental Protection Agency

Role: PI Project period: 8/02-6/04 Grant amount: \$49,000
 Perfect effort: 10%

19. Urban Hot Spot Mobile Source Exposure and Chemical Characterization.

Subcontract from Johns Hopkins University via US EPA

Role: PI Project period: 8/02-7/04 Grant amount: \$16,080

Perfect effort: 5%

20. Comparison of Continuous Ambient PM monitors. State of New Jersey Department of Environmental Protection.

State of New Jersey Department of Environmental Protection.

Role: Co-I Project period: 6/03 –12/04 Grant amount: \$54,460

Perfect effort: 5%

21. Supporting the 2004 Annual Conference of International Society of Exposure Analysis.

US Environmental Protection Agency

Role: PI Project period: 9/04-12/04 Grant amount: \$59,400

Perfect effort: 5%

22. Conference - International Society of Exposure Analysis.

National Institute of Health (NIEHS and NCI)

Role: PI Project period: 7/04-6/05 Grant amount: \$12,500

Perfect effort: 2%

23. Effect of Point Source Emissions on School Absenteeism in Three Communities in Warren County, NJ, with High Pediatric Asthma Rates

ATSDR

Role: Co-Investigator Project period: 9/02-8/05 Grant amount: \$367,154

Perfect effort: 5%

24. Validation of PAH Biomarkers for Quantifying Cancer Risk.

National Cancer Institute (NIH-NCI)

Role: Co-I Project period: 10/01-8/05 Grant amount: \$639,982

Perfect effort: 30%

25. Health Effects of Diesel Exhaust in Asthmatics: A Real-World Study in a London Street.

Health Effects Institute

Percent effort: 25% Project period: 10/02-06/06 Grant amount: \$745,383

26. Field Validation of Modified PAKS-DNSH Method for the Collection and Analysis of Acrolein and Other Carbonyls

US Environmental Protection Agency

Role: PI Project period: 05/05-04/09 Grant amount: \$94,721

Perfect effort: 20%

27. Personal and Ambient Exposures to Air Toxics in Camden

Health Effects Institute (HEI)

Role: Co-I Project Period: 12/03 – 11/06 Grant amount: \$864,437

Perfect effort: 10%

28. The effects of Diesel Exhaust and Stress on the Acute Phase Response and Symptoms in the Chemically Intolerant

US Department of Defense

Role: Co-I Project period: 8/03 – 12/06 Grant amount: \$1,523,062

29. Controlled Human Exposure-Response Study to Environmental Levels of Hydrogen Sulfide.

American Petroleum Institute and other Partners

Role: Co-I Project period: 1/01-3/07 Grant amount: \$980,000
 Perfect effort: 15%

30. Support for Carbonyls Analysis of the EPA's Detroit Exposure and Aerosol Research Study (DEARS)

Subcontract from Research Triangle Institute

Role: PI Project period: 5/04-6/07 Grant amount: ~ \$476,000
 Perfect effort: 10%

31. Diabetic Susceptibility to the Procoagulant Effects of Air Pollution

Environmental and Occupational Health Sciences Institute (through a pilot project of NIEHS Center grant to the institute).

Role: Co-I Project period: 4/06-12/07 Grant amount: \$20,000
 Perfect effort: 5%

32. Relation between Airborne Pollen Concentrations and Daily Cardiovascular Hospital Admissions

Role: Co-I Project period: 07/07 -06/08 Grant amount: \$20,000
 Perfect effort: 5%

33. Cardiovascular Effects of Fresh Particles in Genetically Susceptible Subjects

US Environmental Protection Agency

Role: Co-I Project period: 10/04 -09/08 Grant amount: \$1,521,398
 Perfect effort: 15%

34. Assessment of Health Risk Associated with Synthetic Turf

Gifts from private donors via the Foundation of UMDNJ.

Role: PI Project period: 02/08/12/08 Grant amount: \$12,000
 Perfect effort: 5%

35. Validation of Diesel Exhaust Biomarkers. US Environmental Protection Agency

R832097 US EPA STAR grant

Role: PI Project period: 05/05-04/09 Grant amount: \$572,497
 Perfect effort: 25%

36. Triggering of Myocardial Infarction by Ambient Fine Particles and Fine Particulate Components

R832097 American Heart Association

Role: PI Project period: 07/07 -06/10 Grant amount: \$195,000
 Perfect effort: 5%

37. Molecular and Physiological Responses to Drastic Changes in PM Concentration and Composition

4760-RFPA05-3/07-3/07-2 Health Effects Institute

Role: PI Project period: 07/07-12/10 Grant amount: \$610,670
 Perfect effort: 20%

38. Diesel Exhaust Particle Effects on Human Immunity to Mycobacterium tuberculosis

1R21ES016928 NIEHS – NIH

Role: Co-Investigator Project period: 9/08 - 8/11 Grant amount: \$429,000
 Perfect effort: 5%

39. Response to Drastic Changes in Air Pollution: Reversibility and Susceptibility

5R01ES015864 National Institute of Environmental Health Sciences

Role: PI Project period: 1/08- 11/12 Grant amount: \$1,178,867
 Perfect effort: 15%

40. Thai Fogarty ITREOH Center

1D43TW007849 National Institutes of Health-Fogarty International Center/ NIEHS/ CDC

Role: Co-PI Project period: 05/07-12/12 Grant amount: \$706,250
 Perfect effort: 5%

41. *Impact of Air Pollution Reductions during the Beijing Olympics on Pre-term Birth Rates and Birth Weight*

1R01ES019165-01 National Institute of Environmental Health Sciences (NIEHS)-NIH
 Role: Co-I Project period: 08/10-03/14 Grant amount: \$1,019,988
 Perfect effort: 12.5%

42. *Biological Response to Air Quality Change in Beijing Pre-, Mid- and Post-Olympics*

1R01ES018846-01A1 National Institute of Environmental Health Sciences (NIEHS)-NIH
 Role: Co-I Project period: 12/10-12/13 Grant amount: ~\$491,323
 Perfect effort: 10%

43. *Training Grant in Genomics Analysis and Interpretation*

2 T32 GM 67546-0 National Institute of Environmental Health Sciences (NIEHS)-NIH
 Role: Co-I Project period: 07/12-06/17 Grant amount: \$222,674
 Perfect effort: 5% (In-Kind)

44. *Environmental and Respiratory Health Across the Lifespan in Mongolia*

1D43TW 00988-01A1 National Institute of Environmental Health Sciences (NIEHS) and Fogarty
 International Center-NIH
 Role: Co-I Project period: 07/12- 06/17 Grant amount: ~1,250,000
 (Left project in 2013)
 Perfect effort: 5% (In-Kind)

45. *Ambient Exposures to Diesel Traffic Particles and Exacerbation of Cardiovascular and Chronic Pulmonary Obstructive Disease: Mechanistic Explanations for Epidemiological Observations*

British Heart Association
 Role: Co-I Project period: 05/12-4/14 Grant amount: ~1,200,000
 Perfect effort: 5% (in-kind)

IV. Invited Guest Lectures and Keynote Speeches

October 25, 2016, presented at Department of Epidemiology, Gillings School of Global Public Health, University of North Carolina- Chapel Hill. "Cardiovascular Effects of Ground-level Ozone: Linking Epidemiologic Findings and Biological Mechanisms".

September 14, 2016, presented at the Chinese Academy of Sciences Delegation (25 member) visit to Duke University, Durham, NS. "Environmental Health Sciences in the Post-genomic Era: Ready for Breakthrough?"

September 4, 2016, presented at the European Respiratory Society 2016 International Congress, London, UK. "Respiratory Effects of diesel Exhaust Particles: Real-life Exposure Studies and moderating Effects of Nanoceria Fuel Additives"

August 16, 2016, presented at the Ministry of Environmental Protection, Beijing, China. "Exposure science: Current State of Science and New Opportunities"

August 15, 2016, presented at Environmental Protection Bureau and Environmental Protection Research Institute of Rizhao City, Shandong Province, "What China can Learn from Air Pollution History?"

- May 17-18, 2016, presented and attended the Indo-US Workshop on Combating Air Pollution in North India, New Delhi, India. The program is sponsored by the US Department of State via US Embassy in India. Title of presentation: "Urban Air Pollution in China: What Can Be Done to Reduce the Health Impact?"
- March 1, 2016, presented at the Duke Pulmonary Research Conference, title of presentation: "Air Pollution, the Lung, and the Body: Finding Connections using Real-World Exposures".
- December 10, 2015, presented at Nanoscience Initiative final meeting in London on behalf of the RAMNUC Center, title of presentation: "A Nano-Ceria Fuel Additive: Impact on Emissions and Toxicity of Diesel Exhaust Particles".
- December 3, 2015, presented at University of Rochester Center for Energy & Environment, Jesse L. Rosenberger Seminar Series, title of presentation: "Air pollution in China: What can be done to reduce the health impacts?"
- November 12, 2015, presented a guest lecture at Dr. Paul Liroy Symposium, Rutgers University, title of Presentation: "The King and I: Exposure Science without Borders".
- November 6, 2015, presented at Asia Pacific Regional IMFAR: Shanghai 2015, title of presentation: "Air Pollution and Autism, is there a causal link?"
- July 7, 2015, Presented at the Quantifying Exposure to Engineered Nanomaterials (QEEN) from Manufactured Products workshop, title of presentation: "Health Risk Driven Exposure Assessment for Consumers During the Life Cycle of Nanomaterial-Containing Products".
- May 19, 2015, presented at Johns Hopkins University School of Public Health, Environmental Health Seminar Series title of presentation "Health Effects of Air Pollution: what Natural Experiments Can Tell Us"
- February 12, 2015, presented at University of Colorado School of Public Health, Denver, CO. Title of presentation: "Using natural Experiments to Study Health Effects of Air Pollution: from London to Beijing".
- February 5, 2015, presented at NIEHS Inflammation Faculty Webcast on Emerging Biomarkers of Inflammation, Durham, NC. Title of presentation: "The Utility of Inflammation Biomarkers in Studies of Air Pollution Health Effects".
- December 16, 2014, presented at Noncommunicable Diseases and Cookstoves Workshop, Washington DC. Title of presentation: "Indicators and Biomarkers of Cardiorespiratory Risk Factors in Relation to Air Quality Improvement During the Beijing Olympics".
- December 8-10, 2014, presented at the expert workshop on Health and Wellbeing in the Changing Urban Environment: A Systems Analysis Approach, Xiamen, China. Title of presentation: "Acute Health Effects of Urban Traffic: Observations from London and Beijing".
- November 20, 2014, presented at the panel discussion at the United Nations Cookstove Future Summit, New York City. Title of panel discussion: "Clean Cooking: The Burden, the Imperative, and the Progress".
- November 8, 2014, presented at Environment and Respiratory Disease Forum, Guangzhou, China. Title of presentation: "Biomarkers of Air Pollution Exposure and Health Effects".
- November 1-2, 2014, presented at the 4th International Autism Forum, Fudan University, Shanghai, China. Title of presentation: "Biomarkers of Air Pollution Exposure and Pathophysiological Pathways".
- October 11, 2014, presented at Dean's Seminars on Urbanization, Trinity College of Art and Sciences, Duke University, Durham, NC. Title of presentation: "Global Health Impact of Urban Air Pollution".
- July 14, 2014, presented at Qingpu District Environmental Protection Bureau, Shanghai, China. Title of presentation: "Air Pollution and Health: Historical and Current Perspectives".

- May 12, 2014, presented at College of Environmental Sciences and Engineering, Peking University, Beijing, China. Title of presentation: "Health Effects of Atmospheric Ultrafine Particles and Engineered Nanoparticles".
- April 1, 2014, presented at Workshop on Health Effects of Fine Particles from Vehicle Emissions, Washington DC. Title of presentation: "Ultrafine Particles and PM2.5 in Relation to Cardiorespiratory Effects and Pathophysiologic Pathways".
- January 7, 2014, presented at North Carolina State University, Raleigh, NC. Title of presentation: "Exploring How Respirable Particles Affect Health: From Real-World Observations to Laboratory Experiments".
- November 20, 2013, presented at Chinese Research Academy of Environmental Sciences, Beijing, China. Title of presentation: "Air Quality Improvements During the Beijing Olympics: What Can We Learn?".
- November 6, 2013, presented at Environmental Toxicology Program, University of California at Riverside. Title of presentation: "Analytical Chemistry Based Bio-Monitoring in Studies of Air Pollution Exposure and Health Effects".
- October 31, 2013, presented at the global health workshop of the Association of Pacific Rim Universities (APRU), Zhejiang University, Hongzhou, China. Title of presentation: "Air Quality Improvements during the Beijing Olympics: What Can We Learn?"
- September 16, 2013, presented at National Environmental Health Sciences Institute, Research Triangle Park, NC. Title of presentation: "Exploring Air Pollution Health Effects and Mechanisms Using Quasi-Experimental Approaches".
- April 15, 2013, presented at Health Effects Institute 2013 Annual Conference, San Francisco, CA. Title of presentation: "Improving Air Quality and Health: A Legacy of the Beijing Olympics?".
- March 19, 2013, presented at MRC-HPA Centre for Environment and Health, Imperial College London and King's College London, UK. Title of presentation: "How Does Air Pollution Affect Health? Finding Answers from London to Beijing and Beyond".

Professional Society Memberships

International Society for Environmental Epidemiology
 International Society of Exposure Science
 American Association for the Advancement of Science
 International Society of Indoor Air Quality and Climate
 American Chemical Society (past)
 Air and Waste Management Association (past)
 American Public Health Association (past)
 American Industrial Hygiene Association (past)

V. SERVICE

Duke University Committees (2013-)

Member of Faculty Search Committee, Department of Civil and Environmental Engineering, Duke University, 2013.

Member of the Search Committee for Faculty Hire in the area of environmental science and policy, Duke Kunshan University, 2013.

Chair of the Review Committee for William Pan's reappointment evaluation, Nicholas School of the Environment, Duke University, 2013.

Member of the Duke University Global Priorities Committee (GPC), the Committee is an advisory body to the Vice President and Vice Provost for Global Strategy and Programs and the Provost. It is charged with reviewing and refining Duke's global strategy and assessing university and academic programs and activities operating globally, both when they are being created and in monitoring ongoing performance, 2015-2018.

Member and Chair (2016-2017) of the China Faculty Council, appointed by Duke Provost. The Council is charged to advise the Provost and the Associate Vice Provost and Director of the Duke Kunshan University Program Office on program development opportunities in China, including for Duke Kunshan University (DKU), 2015-present.

Member of Duke Kunshan Hiring Central Committee, this committee vets for quality and /or any other issues arising from the main search committees in departments at Duke Kunshan University, 10/2015-present.

Chair of the Review Committee for William Pan's Tenure Promotion evaluation, Nicholas School of the Environment, Duke University, 2016.

Duke Kunshan University Leadership and Service

Chair of the Duke Kunshan Faculty Council, 2015-present.

Lead of Environmental Health Program of the Global Health Research Center, Duke Kunshan University.

Director of Regional Ozone Sino-US Collaborative Center (ROSUC), Duke Kunshan University.

Committee Member for faculty cluster hire for the Environment Program at Duke Kunshan University, 2016-2017.

Co-Chair for faculty cluster hire for the Global Health Program at DKU, 2016-2017.

Professional Organizations and Governmental Agencies

Member of Planning Committee and Workshop Coordinator for the Southeast Asian Environmental Health.

Research Workshop, sponsored by US National Institute of Environmental Health Sciences (NIEHS), University of Kebangsaan Malaysia, University of Putra Malaysia, Environmental & Occupational Health Science Institute, NJ, and University of Pittsburgh, PA, 01/01-05/01

Program Co-Chair, International Topical Meeting on Environmental Reliability and Risk Studies, Seoul National University, Seoul, South Korea, Sponsored by US National Science Foundation and co-sponsored by Rutgers University, Seoul National University, and UMDNJ , 02/05-02/05

Conference Chair, of the Annual Conference of International Society of Exposure Analysis (ISEA) held in October 17-21, 2004 in Philadelphia, USA. 2002-2004

Councilor (Academic), International Society of Exposure Analysis, 2004 -2007

Member of the International Advisory Committee (IAC) for the 10th International Healthy Building Conference in 2012 (HB2012), which is the official conference of the International Society of Indoor Air Quality and Climate (ISIAQ) and will take place in Brisbane, Australia, from 8-12 July 2012. 03/11-07/12

Member of the Review Panel (Search Committee) for Title-42, Director of Human Exposure and Atmospheric Sciences Division, National Exposure Research Laboratory, U.S. Environmental Protection Agency. 2011.

Member of the World Health Organization (WHO) Working Group charged to Develop Indoor Air Quality

Guidelines – Household Fuel Combustion. 2011-2012 (meeting held in New Delhi, India 04/24/12-04/26/12).

Member of 13th International Conference on Indoor Air Quality and Climate (Held in Hong Kong, July 7-12th, China)

Center for Environmental NanoScience Risk EPA Grantees Meeting (Held in Columbia, SC September 9-10th)
Member of Special Scientific Committee Meeting on Unconventional Oil and Gas Development (held in Pittsburgh, PA September 8-9th, 2014).

Member of the 4th International Autism Research Diagnosis & Development Shanghai (held in Fudan University October 1-2nd, 2014, China)

Member of Environment and Respiratory Diseases Forum (held in Guangzhou November 7-8th, 2014, China).

Rutgers and USC Committees

Member of the School-wide Curriculum Committee, UMDNJ-School of Public Health, 2009 – 2010.

Member of the Appointment and Promotions Committee, UMDNJ-School of Public Health, 2009 – 2010.

Chair, the Piscataway/New Brunswick Campus Executive Committee, UMDNJ-School of Public Health, 2008-2010.

Member of the Dean's Council, UMDNJ-School of Public Health, 2008- present.

Member of the Faculty Search Committee for Department of Environmental Sciences, School of Environmental and Biological Sciences, Rutgers University, 2008 – 2009.

Member of Dean's Council, UMDNJ-School of Public Health, 2008 – 2010.

Member of the Executive Council, UMDNJ-School of Public Health, 2008 – 2010.

Chair, Executive Committee for the Piscataway/New Brunswick Campus, UMDNJ-School of Public Health, 2008 – 2010.

Member of the ad hoc Search Committee for Dean, Robert Wood Johnson Medical School, University of Medicine and Dentistry of New Jersey, 2007- 2008.

Member and Discipline Coordinator, Doctoral Committee, School of Public Health, University of Medicine and Dentistry of New Jersey, 2001 – present.

Member, Graduate Admissions Committee, Department of Environmental Sciences, Rutgers University 1997 – 2005.

Member, Seminar Committee, Environmental and Occupational Health Sciences Institute (EOHSI) and National Institute of Environmental Health Sciences Center of Excellence at EOHSI, 1997 – 2004.

Member of the Executive Committee, Southern California Environmental Health Sciences Center, University of Southern California, 2011-2013.

Editorial Activities

Associate Editor (Editorial Board Member), Journal of Exposure Science and Environmental Epidemiology, 2007 – present.

Associate Editor, Air Quality, Atmosphere & Health, 2010 – present.

Associate Editor, Indoor Air, Journal of Indoor Environment and Health, 2012 – present.

Guest Editor, Journal of Thoracic Disease, 2014-2015.

Distinguished Editorial Board Member, Journal of Thoracic Diseases February 9, 2015-February 9, 2017

Journal Reviews

Analytical Chemistry

American Industrial Hygienist Association Journal American Journal of Respiratory and Critical Care Medicine

Atmospheric Environment Chemosphere Energy for Sustainable Development

Environmental Health Perspectives Environmental Science & Technology

Epidemiology Indoor Air (International Journal of Indoor Air Quality and Climate) International Journal of

Environmental Analytical Chemistry Journal of Air & Waste Management Association

Journal of Exposure Analysis and Environmental Epidemiology Journal of Hazardous Materials

Occupational and Environmental Medicine International Journal of COPD

The Science of Total Environment the Shell Foundation (reports)

The Health Effects Institute (reports) Thorax

Grant Reviews

Member of the Environmental Protection Agency Peer Review Committee for Air Pollution Monitoring for Communities –K1 (panel 2). Washington, DC January 8-9, 2015.

Member of the Environmental Health Sciences Review Committee and Special Reviewers. Research Triangle Park, August 14-15, 2014

Member of the National Institute of Environmental Health Science Review Committee for the Review of NIEHS P30 Center Grant Applications. Research Triangle Park, NC, 07/24-26, 2013.

Member of the National Institute of Environmental Health Science Review Committee for the Review of T32 Training Grants and R25 Grant Applications. Research Triangle Park, NC, 9/15, 2012.

Member of the National Institute of Environmental Health Sciences Review Committee for the Review of NIEHS P30 Center Grant Applications, EHS (P3). Research Triangle Park, NC, 08/22-23, 2012.

Member of the National Institute of Health Sciences Review Panel for Infectious Disease, Reproductive Health, and Asthma/Pulmonary Conditions (IRAP) study section. San Francisco, CA, 02/16-17, 2012.

Member of the AAAS Research Competitiveness Program in the review of proposals submitted for funding through the King Abdulaziz City for Science and Technology (KACST). 2012.

External Reviewer for the Natural Sciences and Engineering Research Council (NSERC) and the Canadian Institutes of Health Research (CIHR). 2011.

Member of the National Institute of Environmental Health Sciences Special Emphasis Panel (ZES1 LKB-D D). Development to Independence Review Meeting. Research Triangle Park, NC, 11/10, 2011.

Member of the National Institute of Environmental Health Sciences Special Emphasis Panel (RFA-ES-11-006). Deepwater Horizon Disaster Consortia: Health Impacts and Community Resiliency (U19). Research Triangle Park, NC, 4/6-8, 2011.

External Reviewer for Health Effects Institute, 2000-present.

External Reviewer for Thrasher Research Fund, 2007.

External Reviewer for the Research Council of Norway, 2007.

Member of the Environmental Exposures Working Group for the PhenX project – under the NIH Gene-Environment Interaction Initiative, 12/2008 – 5/2009.

Member of the US Environmental Protection Agency's Peer Review Panel for Graduate Fellowships: Public Health Sciences and Human Health Risk Assessment, Washington DC, 3/6-3/7, 2008.

Member of the US Environmental Protection Agency's Peer Review Panel for Fellowship: Environmental Decision Making Research, Washington DC, 1/29-2/1, 2008.

Member of the "CDC Grants for Public Health Research Dissertation" Special Emphasis Panel, Atlanta, Georgia, 7/25-26, 2007.

Member of Review Panel, Fellowship – Toxicology, STAR grants, US Environmental Protection Agency. Washington DC, 2/15-16, 2007.

Member of the Scientific Review Committee, P01 Application on Genetic Role in Health Effects of Air Pollution, National Institute of Environmental Health Sciences – NIH. Durham, North Carolina, 12/15, 2006.

Member of the expert panel drafting IARC Monographs on the Evaluation of Carcinogenic Risks to Humans Volume 95: Indoor air pollution from heating and cooking: coal, biomass, cooking oils and fumes. Lyon, France. (IARC: International Agency for Research on Cancer, World Health Organization), 10/10-17, 2006.

Member, National Institute of Environmental Health Sciences Special Emphasis Panel (ZES1 TN-E(FG)), Genetics, Air Pollution, and Respiratory Effects. Durham, North Carolina, 12/15, 2006.

Ad Hoc Member, the Center for Scientific Review Special Emphasis Panel, National Cancer Institute (NCI-NIH), Epidemiology of Cancer (EPIC) Study Section, Bethesda, Maryland, 03/02-03, 2006.

Ad Hoc Member, the Center for Scientific Review Special Emphasis Panel, National Cancer Institute (NCI-NIH), EPIC Study Section, Washington, DC, 06/23-24, 2005.

Ad Hoc Member, the NIEHS P30 Center Site Visit to the University of Southern California (NIEHS- National Institute of Environmental Health Sciences-NIH), 04/27-29, 2005.

Ad Hoc Member, the Center for Scientific Review Special Emphasis Panel, National Cancer Institute (NCI-NIH), EPIC Study Section, Washington, DC, 04/03/3-4, 2005.

Member, the Grant Review Panel for Particulate Matter Research Centers of US Environmental Protection Agency, Washington, DC, 01/25-27, 2005.

Peer reviewer of the STAR Research Grants for National Center for Environmental Research and Quality Assurance, US Environmental Protection Agency. EPA Category and Sorting Code: Airborne Particulate Matter Health Effects: Cardiovascular mechanisms 2002-STAR-G1, 06/02 – 07/02.

Reviewer of IPCC Draft Document “Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories”. (IPCC: Intergovernmental Panel on Climate Change), 12/99–2/00.

Peer reviewer of the STAR Research Grants for National Center for Environmental Research and Quality Assurance, US Environmental Protection Agency. EPA Category and Sorting Code: Airborne Particulate Matter Health Effects, 8/99-9/99.

Site-visit team member for Engineering Research Center (ERC), National Science Foundation (NSF), participated in the site review of a proposed ERC for *Atmospheric Monitoring and Sensor Engineering* at the University of Illinois at Urbana-Champaign, 2/26-27, 1998.

Community Service

Member of the Steering Committee of the New Jersey Comparative Risk Project, New Jersey Department of Environmental Protection, Trenton, New Jersey, 01/00-08/02.

Mentor of American Chemical Society’s Seed Program to sponsor summer research for high school students, 2002.

Guest speaker to the Science and Math Awareness Program, Piscataway High School, 1998-2003.

Mentor for Liberty Science Center Partnership Summer Research Program for high school students, 1997-2010.

Member of New Jersey Clean Air Council, appointed by the Governor of New Jersey, 2005-2010.

Sponsorship of Candidates for Postgraduate Degree at Duke University

Postdoctoral Fellow Mentor

Jicheng Gong: 2013 –present

Jake Chung: 2015-Present

Minquan Li: 2015-Present

Sponsorship of Candidates for Postgraduate Degree at Rutgers University and University of Southern California

Director of Dissertation/Thesis Committee

M.S. Degrees Awarded (as Academic Advisor)

Tara Proetta Rutgers University, MS in Environmental Sciences 1998-2000.

Chair of Doctoral Dissertation Committee for

Drew Day: PhD in Environmental Science, Integrated Toxicology and Environmental Health Program, 2013-present

Xiaoxing Cui: PhD in Environmental Science, Integrated Toxicology and Environmental Health Program, 2013-present

Member of Doctoral Dissertation Committee

Danielle Botelho, Rutgers University, 2009-

Thesis title: “Effects of nanoparticle functionalization, shape & size on lung function & inflammation”.

Master’s Thesis/Field Work Advisor

Chen Liu (MS in Global Health) 2013 – 2015

Shunyan Shen, PhD, visiting scholar from Nankai University, 2015-2016.

Mingquan Li, PhD, post-doc from Peking University, 2015-2017.

M.P.H. Degrees Awarded at UMDNJ-School of Public Health (as Academic Advisor)

Glenn Pulliam 2008

Mary Pauline De La Cruz 2009

Michael Carr 2010

Ian Pracher 2010

Jessica Small 2010

Adviser/supervisor of M.P.H. Student practicum or M.S. student thesis at University of Southern California

Lily Fu 2010 - 2011

Athena Foong 2011 – 2013

Ph.D. or DrPH Degrees Awarded (as Chair or co-Chair of dissertation research committee)

Thomas Wainman, 1999 Rutgers University, Ph.D. in Environmental Sciences 1995-1999. (Co-Chair with Paul Lioy, Ph.D.)

Dissertation title: “Use of a two tiered dynamic chamber to investigate indoor air chemistry.”

Zhengmin Qian, 2002 Rutgers University and UMDNJ-Robert Wood Johnson Medical School, Joint Ph.D. Program in Exposure Assessment 1997-2002.

Dissertation title: “Assessing air pollution exposure and health effects on children’s respiratory health in four Chinese cities.”

Daniel Reyner, 2004 UMDNJ- School of Public Health, DrPH in Public Health, 1999–2004.

Dissertation title: “Effects of exposure to paternal environmental tobacco smoke, respiratory disease requiring hospitalization, and breast feeding during infancy on lung functioning”.

Wei Hu, 2005, University of Science and Technology of Beijing, Beijing, China, Ph.D. in Environmental Sciences and Engineering, 2001 – 2005 (Co-chair with Professor Fusheng Wei)

Xiaoli Duan, 2005, University of Science and Technology of Beijing, Beijing, China, Ph.D. in Environmental Sciences and Engineering, 2001 – 2005 (Co-chair with Professor Fusheng Wei)

Weili Liu, 2006, Rutgers University and UMDNJ-Robert Wood Johnson Medical School, Joint Ph.D. Program in Exposure Assessment, 2000 –2006.

Dissertation title: “Characteristics of indoor, outdoor, and personal exposure to carbonyl compounds”.

Kunning Zhu, 2006, Rutgers University and UMDNJ-Robert Wood Johnson Medical School, Joint Ph.D. in Program in Exposure Assessment (Co-chair of thesis committee with Paul J. Liroy).

Dissertation title: “Evaluation and comparison of continuous PM2.5 monitors in measurements of ambient aerosol, fresh diesel exhaust aerosol, and fresh secondary organic aerosol”.

Stella Tsai, 2007, UMDNJ- School of Public Health, Ph.D. in Public Health. Dissertation title: “Outdoor aeroallergens, air pollutants, and daily asthma hospitalization in two urban areas of New Jersey”.

Jason Harrington, 2007, Rutgers University and UMDNJ-Robert Wood Johnson Medical School, Joint PhD in Program in Exposure Assessment.

Dissertation title: “Development and evaluation of airborne carbonyl measurement methods”.

In-Kyu (Paul) Han, 2008, UMDNJ-School of Public Health, Ph.D. in Public Health. Dissertation Title: “Urinary 1-Hydroxypyrene in Nonsmokers: A Biomarker for Coke Smoke Exposure and General Urban PAH Exposure”

Tenya Steele, UMDNJ-School of Public Health, Ph.D. in Public Health, 2005-2008 (dropped out).

Alyaa Farouk Abdel Fattah Ibrahim, 2010, Faculty of Nursing, Alexandria University, Egypt, degree of Doctor of Community health Nursing.

Dissertation title: “the relation between indoor air pollution and child health in Abis rural area in Alexandria”. (Served as co-Advisor and hosted Alyaa as visiting student scholar at UMDNJ from 2008 to 2010)

Chizoba Nwankwo, 2010, UMDNJ-School of Public Health, Ph.D. in Public Health. Dissertation title: “Sex differences in response to acute diesel exhaust exposure.”

Jicheng Gong, 2011, UMDNJ-Robert Wood Johnson Medical School and Rutgers University, Joint Ph.D. in Program in Exposure Assessment,

Dissertation title: “Development and application of exhaled breath biomarkers for studying health effects of air pollution.”

Brent Altemos, 2014, Rutgers University School of Public Health, PhD in Public Health,

Dissertation title: “Air Pollution Source Apportionment Before, During, and After the 2008 Beijing Olympics and Association of Sources to Aldehydes and Biomarkers of Blood Coagulation, Pulmonary and Systemic Inflammation, and Oxidative Stress in Healthy Young Adults”.

Victor DeCandia UMDNJ-School of Public Health, PhD in Public Health, 2007 – 2010 (In 2010 assigned to a different advisor, no follow up).

Nancy Lashway UMDNJ-School of Public Health, PhD in Public Health, 2007 – 2010 (In 2010 assigned a different advisor, no follow up).

Member of Dissertation Research Committee

Linda Bonanno, Rutgers University and UMDNJ-Robert Wood Johnson Medical School, Joint Ph.D. Program in Exposure Assessment, 1996-2000.

Sheng-Wei Wang, Rutgers University, Ph.D. in Environmental Sciences, 1997-1998.

Pei-Yu Tsai, Rutgers University and UMDNJ-Robert Wood Johnson Medical School, Joint Ph.D. Program in Exposure Assessment, 1998-2000.

Nares Chuersuwan, Rutgers University, Ph.D. in Environmental Sciences, 1998-2001.

Ho-Jin Lim, Rutgers University, Ph.D. in Environmental Sciences, 1999-2001.

Qingyu Meng, Rutgers University, Ph.D. in Environmental Sciences, 2002-2004.

Paromita Hore, UMDNJ-School of Public Health, Ph.D. in Public Health, 2000-2004.

Served as external thesis evaluator for) Jouni Jurvelin, MSc, University of Kuopio and KTL-National Public Health Institute, Kuopio, Finland, 2003-2003.

Jaymin Kawn, Rutgers University and UMDNJ-Robert Wood Johnson Medical School, Joint Ph.D. Program in Exposure Assessment, 2002-2005.

Gary Garetano, UMDNJ-School of Public Health, Ph.D. in Public Health, 2003-2005.

Chang Ho Yu, Rutgers University and UMDNJ-Robert Wood Johnson Medical School, Joint Ph.D. Program in Exposure Assessment, 2003-2005.

Diann Blanset, UMDNJ-School of Public Health, Ph.D. in Public Health, 2004-2006.
Steven Spayd, Ph.D. Program at UMDNJ- School of Public Health, 2004- 2009.

Margaret Lumia, Ph.D. Program at UMDNJ- School of Public Health, 2005- 2007.

Maria Trabaris, PhD, Rutgers University and UMDNJ-Robert Wood Johnson Medical School, Joint Ph.D. Program in Exposure Science, 2004-2008.

Marija Borjan, PhD Program at UMDNJ-School of Public Health, 2006-2009.

Susan Huyck, DrPH Program at UMDNJ-School of Public Health, 2007-2010.

Sponsorship/Mentor of Post-Doctoral Fellows

Zhipeng Bai, Ph.D., 1997-2000. Rutgers University and UMDNJ
Lin Zhang, Ph.D., 1998-2001. Rutgers University and UMDNJ
In-Kyu Han, Ph.D., 2008-2008. Rutgers University and UMDNJ
Ananya Roy, Sc.D., 2009-2011. Rutgers University and UMDNJ
Jicheng Gong, Ph.D., 2012-2013. University of Southern California

VI. STAFF SUPERVISION

Tseng-Heng Li, Research Assistant, Ph.D. student at Rutgers University, 1995-1996.

Cheng-Wei Fan, Research Assistant, Ph.D. student at Rutgers University, 1996-1998.

Vito Ilaqua, Ph.D. student at Rutgers University, 1998-1999.

Yuching Yang, Ph.D. student at Rutgers University, UMDNJ, 1999-2000.

Zhi-hua (Tina) Fan, Ph.D., Research Associate, UMDNJ, 1998-2000.

Chen Zhang, B.S., Senior Lab Technician, UMDNJ, 1997-2006.

Robert Harrington, B.S., Senior Lab Technician, UMDNJ, 1999-2005.

Lin Zhang, Ph.D. Research Teaching Specialist III/II, UMDNJ, 2001-2013.

Jean Tong, M.S. Research Teaching Specialist V, UMDNJ, 2005-2011.

Henock Solomon, M.P.H, Project Specialist, USC Department of Preventive Medicine, 2011- 2014.

Yan Chang, PhD, Senior Research Associate, USC department of Preventive Medicine, 2011- 2014.

Vikram Paranjpe, Undergraduate Research - Global Health, USC, Fall 2011-2013.

Sanika Gadkari, Undergraduate Research - Health Promotion and Disease Prevention, USC, spring 2012-2013.

Charlene Nguyen, Research Assistant, USC Department of Preventive Medicine 2012-2013.

Marlyn Duarte, MS, Data Analyst II, Duke Global Health Institute, 2014-present.

Hailong Hang, BS, Laboratory Technician, Duke Global Health Institute, 2015-

Linchen He, MEM, Laboratory Technician, Duke Global Health Institute, 2015-

Rui Wang, BS, Laboratory Technician, Duke Global Health Institute, 2015-2015.

Laboratory Volunteers

Jerry Liu MD, PhD, 06/2014-03/2015

Hailong Han, BS, 03/2015-06/2015

Rui Wei, BS, 03/2015-07/2015
 Linchen He, MEM, 04/2015-07/2015

VII. INTERNATIONAL SCHOLARS SPONSORSHIP

Chunyan Shan, Ph.D., visiting scholar from Nankai University Department of Environmental Science and Engineering, 2015-2016

Yongjie Wei, Ph.D., visiting scholar from Chinese Research Academy of Environmental Sciences, 2015-2015.

Cong Cong, B.S., visiting scholar from Peking University, 2015-2015.

Nan Zhang, Ph.D., student from Tsinghua University, Beijing China, 2014-2015.

Xiaoli Duan, Ph.D., visting scholar from Chinese Research Academy of Environmental Sciences, 2015-2015.

Huijuan Li, Ph.D., visiting scholar from Xuzhou Institute of Technology, 2015-2016.

Yalin Chen, Ph.D., Director of Rizhao City Environmental Protection Research Institute, Shangdong province, China, 2013-2014.

Huixin Wu (Yunnan Medical University, Kunming, China), 2012-2013 at University of Southern California.

VIII. BIBLIOGRAPHY

H-index =49, as of 6/22/16, based on Google Scholar

Peer Reviewed Original Research Articles

1. **Zhang J**, He QC and Liyo PJ.
 Characteristics of Aldehydes - Concentrations, Sources, and Exposures for Indoor and Outdoor Residential Microenvironments.
Environmental Science & Technology 28(1):146-152, 1994.
 (Cited 216 times as of 6/22/16)
2. **Zhang J** and Liyo PJ.
 Ozone in Residential Air - Concentrations, I/O Ratios, Indoor Chemistry, and Exposures.
Indoor Air-International Journal of Indoor Air Quality and Climate 4(2):95-105, 1994.
 (Cited 66 times as of 6/22/16).
3. **Zhang J**, Wilson WE and Liyo PJ.
 Sources of Organic-Acids in Indoor Air - a Field-Study.
Journal of Exposure Analysis and Environmental Epidemiology 4(1):25-47, 1994.
 (Cited 30 times as of 6/22/16)
4. **Zhang J**, Wilson WE and Liyo PJ.
 Indoor Air Chemistry - Formation of Organic-Acids and Aldehydes. *Environmental Science & Technology* 28(11):1975-1982, 1994.
 (Cited 66 times as of 6/22/16)
5. **Zhang J** and Smith KR.

- Hydrocarbon emissions and health risks from cookstoves in developing countries. *Journal of Exposure Analysis and Environmental Epidemiology* 6(2):147-161, 1996.
(Cited 93 times as of 6/22/16)
6. Hibbert R, Bai Z, Navia J, Kammen DM and **Zhang J**.
High lead exposures resulting from pottery production in a village in Michoacan State, Mexico.
J Expo Anal Environ Epidemiol 9(4):343-51, 1999.
(Cited 23 times as of 6/22/16)
 7. Liou PJ, Wainman T, **Zhang J** and Goldsmith S.
Typical household vacuum cleaners: The collection efficiency and emissions characteristics for fine particles.
Journal of the Air & Waste Management Association 49(2):200-206, 1999.
(Cited 56 times as of 6/22/16)
 8. Wei F, Teng E, Wu G, Hu W, Wilson WE, Chapman RS, Pau JC and **Zhang J**.
Ambient concentrations and elemental compositions of PM10 and PM2.5 in four Chinese cities.
Environmental Science & Technology 33(23):4188-4193, 1999.
(Cited 176 times as of 6/22/16)
 9. **Zhang J**, Qian Z, Kong L, Zhou L, Yan L, and Chapman RS.
Effects of Air Pollution on Respiratory Health of Adults in Three Chinese Cities.
Journal of Environmental Health, 55(6): 373-381, 1999.
(Cited 50 times as of 6/22/16)
 10. **Zhang J**, Smith KR, Uma R, Ma Y, Kishore VVN, Lata K, Khalil MAK, Rasmussen RA and Thorneloe ST.
Carbon monoxide from cookstoves in developing countries: 1. Emission factors. *Chemosphere - Global Change Science* 1(1-3):353-366, 1999.
(Cited 74 times as of 6/22/16)
 11. **Zhang J**, Smith KR, Uma R, Ma Y, Kishore VVN, Lata K, Khalil MAK, Rasmussen RA and Thorneloe ST.
Carbon monoxide from cookstoves in developing countries: 2. Exposure potentials.
Chemosphere - Global Change Science 1(1-3):367-375, 1999.
(Cited 41 times as of 6/22/16)
 12. **Zhang J** and Smith KR.
Emissions of carbonyl compounds from various cookstoves in China.
Environmental Science & Technology 33(14):2311-2320, 1999.
(Cited 162 times as of 6/22/16)
 13. Qian Z, Chapman RS, Tian Q, Chen Y, Liou PJ and **Zhang J**.
Effects of air pollution on children's respiratory health in three Chinese cities.
Arch Environ Health. 55(2):126-133, 2000.
(Cited 57 times as of 6/22/16)
 14. Smith KR, Uma R, Kishore VVN, **Zhang J**, Joshi V and Khalil MAK.
Greenhouse Implications of Household Stoves: An Analysis for India.
Annual Review of Energy and the Environment. 25(1):741-763, 2000.
(Cited 240 times as of 6/22/16)
 15. **Zhang J**, Smith KR, Ma Y, Ye S, Jiang F, Qi W, Liu P, Khalil MAK, Rasmussen RA and Thorneloe SA.

Greenhouse gases and other airborne pollutants from household stoves in China: a database for emission factors.

Atmospheric Environment 34(26):4537-4549, 2000.

(Cited 321 times as of 6/22/16)

16. **Zhang J**, Zhang L, Fan Z and Ilacqua V.

Development of the Personal Aldehydes and Ketones Sampler Based upon DNSH Derivatization on Solid Sorbent.

Environmental Science & Technology. 34(12):2601-2607, 2000.

(Cited 59 times as of 6/22/16)

17. Wainman T, **Zhang J**, Weschler C, and Liroy PJ.

Ozone and limonene in indoor air: a source of submicron particle exposure. *Environmental Health Perspectives*. 108 (12): 1139-1145, 2000.

(Cited 211 times 6/22/16)

18. Wei F, Hu W, Teng E, Wu G, **Zhang J**, and Chapman RS.

Relation analysis of the air pollution and children's respiratory prevalence rates.

China Environmental Science. 20(3): 220-224, 2000.

(Cited 0 times 6/19/15)

19. Hu W, Wei F, Teng E, Wu G, **Zhang J**, and Chapman RS.

The impact of air pollution on respiratory health of children and their parents.

China Environmental Science. 20(5): 425-428, 2000.

(Cited 3 time 6/22/16)

20. Hu W, Wei F, **Zhang J**, Wu G, Teng E, Chapman RS.

Study on relation between air pollution and children's respiratory illness prevalence using a two-step regression method.

China Environmental Science. 21(6): 485-489, 2001.

(Cited 4 times 6/22/16)

21. Wei F, Hu W, Wu G, Teng E, Zhang J, Chapman RS.

Analysis of relation between air pollution and children's lung function indices.

China Environmental Science, 21(5): 385-389, 2001.

(Cited 4 times 6/22/16)

22. Fan ZH, **Zhang J**, Fan CW, and Pennise DM.

The MMT bag for emission source sampling: Design and evaluation.

Journal of the Air & Waste Management Association. 51(1):60-68, 2001.

(Cited 7 times as of 6/22/16)

23. Ge S, Bai ZP, Liu WL, Zhu T, Wang TJ, Qing S, and **Zhang J**.

Boiler briquette coal versus raw coal: Part I - Stack gas emissions.

Journal of the Air & Waste Management Association. 51(4):524-533, 2001.

(Cited 40 times as of 6/22/16)

24. **Zhang J**, Ge S, and Bai Z.

Boiler briquette coal versus raw coal: Part II--Energy, greenhouse gas, and air quality implications.

J Air Waste Manag Assoc. 51(4):534-41, 2001.

(Cited 13 times as of 6/22/16)

25. Fan CW, and **Zhang J**.

- Characterization of emissions from portable household combustion devices: particle size distributions, emission rates and factors, and potential exposures.
Atmospheric Environment. 35(7):1281-1290, 2001.
(Cited 101 times as of 6/22/16)
26. Pennis DM, Smith KR, Kithinji JP, Rezende ME, Raad TJ, **Zhang J**, and Fan CW.
Emissions of greenhouse gases and other airborne pollutants from charcoal making in Kenya and Brazil.
Journal of Geophysical Research-Atmospheres. 106(D20):24143-24155, 2001.
(Cited 100 times as of 6/22/16)
27. Purvis KL, Jumba IO, Wandiga S, **Zhang J**, and Kammen DM.
Worker exposure and health risks from volatile organic compounds utilized in the paint manufacturing industry of Kenya.
Appl Occup Environ Hyg. 16(11):1035-42, 2001.
(Cited 8 times as of 6/22/16)
28. Qian Z, **Zhang J**, Wei F, Wilson WE, and Chapman RS.
Long-term ambient air pollution levels in four Chinese cities: inter-city and intra-city concentration gradients for epidemiological studies.
J Expo Anal Environ Epidemiol. 11(5):341-351, 2001.
(Cited 59 times as of 6/22/16)
29. Wainman T, Weschler CJ, Liyo PJ, and **Zhang J**.
Effects of surface type and relative humidity on the production and concentration of nitrous acid in a model indoor environment.
Environmental Science & Technology. 35(11):2200-2206, 2001.
(Cited 49 times as of 6/22/16)
30. Mitra AP, Morawska L, Sharma C, and **Zhang J**.
Chapter two: methodologies for characterisation of combustion sources and for quantification of their emissions.
Chemosphere. 49(9):903-922, 2002.
(Cited 38 times as of 6/22/16)
31. Morawska L, and **Zhang J**.
Combustion sources of particles. 1. Health relevance and source signatures.
Chemosphere. 49(9):1045-58, 2002.
(Cited 235 times as of 6/22/16)
32. Rich DQ, Rhoads GG, Yiin LM, **Zhang J**, Bai ZP, Adgate JL, Ashley PJ and Liyo PJ.
Comparison of home lead dust reduction techniques on hard surfaces: The New Jersey Assessment of Cleaning Techniques Trial.
Environmental Health Perspectives. 110(9):889-893, 2002.
(Cited 8 times as of 6/22/16)
33. Yiin LM, Rhoads GG, Rich DQ, **Zhang J**, Bai Z, Adgate JL, Ashley PJ and Liyo PJ.
Comparison of techniques to reduce residential lead dust on carpet and upholstery: the new jersey assessment of cleaning techniques trial.
Environ Health Perspect. 110(12):1233-7, 2002.
(Cited 18 times as of 6/22/16)
34. **Zhang J**, Hu W, Wei F, Wu G, Korn LR and Chapman RS.

- Children's respiratory morbidity prevalence in relation to air pollution in four Chinese cities.
Environ Health Perspect. 110(9):961-7, 2002.
(Cited 152 times as of 6/22/16)
35. **Zhang J** and Liou PJ.
Human exposure assessment in air pollution systems.
ScientificWorldJournal 2(497-513, 2002.
(Cited 7 times as of 6/22/16)
36. **Zhang J** and Morawska L.
Combustion sources of particles: 2. Emission factors and measurement methods.
Chemosphere. 49(9):1059-74, 2002.
(Cited 64 times as of 6/22/16)
37. Bai Z, Wang Z, Zhu T and **Zhang J**.
Developing Indoor Air Quality Related Standards in China.
Journal of Asian Architecture and Building Engineering. 2(1):55-60, 2003.
(Cited 12 times as of 6/22/16)
38. Bai ZP, Yiin LM, Rich DQ, Adgate JL, Ashley PJ, Liou PJ, Rhoads GG and **Zhang J**.
Field evaluation and comparison of five methods of sampling lead dust on carpets.
Aiha Journal. 64(4):528-532, 2003.
(Cited 16 times as of 6/22/16)
39. Fan Z, Liou P, Weschler C, Fiedler N, Kipen H, and **Zhang, J**.
Ozone-initiated reactions with volatile organic compounds under a simulated indoor environment.
Environmental Science & Technology, 37: 1811-1821, 2003.
(Cited 160 times as of 6/22/16)
40. Edwards RD, Smith KR, **Zhang J** and Ma YQ.
Models to predict emissions of health-damaging pollutants and global warming contributions of residential fuel/stove combinations in China.
Chemosphere. 50(2):201-215, 2003.
(Cited 43 times as of 6/22/16)
41. Liu WL, **Zhang J**, Hashim JH, Jalaludin J, Hashim Z and Goldstein BD.
Mosquito coil emissions and health implications.
Environmental Health Perspectives. 111(12):1454-1460, 2003.
(Cited 109 times as of 6/22/16)
42. Tsai SM, **Zhang J**, Smith KR, Ma YQ, Rasmussen RA and Khalil MAK.
Characterization of non-methane hydrocarbons emitted from various cookstoves used in China.
Environmental Science & Technology. 37(13):2869-2877, 2003.
(Cited 45 times as of 6/22/16)
43. **Zhang J** and Smith KR.
Indoor air pollution: a global health concern.
Br Med Bull. 68(1):209-225, 2003.
(Cited 184 times as of 6/22/16)
44. Zhang L, Chung FL, Boccia L, Colosimo S, Liu WL and **Zhang J**.

Effects of garage employment and tobacco smoking on breathing-zone concentrations of carbonyl compounds.

American Industrial Hygiene Association Journal. 64(3):388-393, 2003.

(Cited 5 times as of 6/22/16)

45. Edwards RD, Smith KR, **Zhang J** and Ma YQ.
Implications of changes in household stoves and fuel use in China.
Energy Policy 32(3):395-411, 2004.
(Cited 135 times as of 6/22/16)
46. Ge S, Xu X, Chow JC, Watson J, Sheng Q, Liu WL, Bai ZP, Zhu T and **Zhang J**.
Emissions of air pollutants from household stoves: Honeycomb coal versus coal cake.
Environmental Science & Technology. 38(17):4612-4618, 2004.
(Cited 44 times as of 6/22/16)
47. Offenberg JH, Naumova YY, Turpin BJ, Eisenreich SJ, Morandi MT, Stock T, Colome SD, Winer AM, Spektor DM, **Zhang J** and Weisel CP.
Chlordanes in the indoor and outdoor air of three U.S. cities.
Environ Sci Technol. 38(10):2760-8, 2004.
(Cited 40 times as of 6/22/16)
48. Qian ZM, Chapman RS, Hu W, Wei FS, Korn LR and **Zhang J**.
Using air pollution based community clusters to explore air pollution health effects in children.
Environment International. 30(5):611-620, 2004.
(Cited 68 times as of 6/22/16)
49. Qian ZM, **Zhang J**, Korn LR, Wei FS and Chapman RS.
Factor analysis of household factors: are they associated with respiratory conditions in Chinese children?
International Journal of Epidemiology. 33(3):582-588, 2004.
(Cited 49 times as of 6/22/16)
50. Qian ZM, **Zhang J**, Korn LR, Wei FS and Chapman RS.
Exposure-response relationships between lifetime exposure to residential coal smoke and respiratory symptoms and illnesses in Chinese children.
Journal of Exposure Analysis and Environmental Epidemiology. 14(S78-S84), 2004.
(Cited 22 times as of 6/22/16)
51. Shendell DG, Winer AM, Stock TH, Zhang L, **Zhang J**, Maberti S and Colome SD.
Air concentrations of VOCs in portable and traditional classrooms: Results of a pilot study in Los Angeles County.
Journal of Exposure Analysis and Environmental Epidemiology. 14(1):44-59, 2004.
(Cited 43 times as of 6/22/16)
52. Wang Z, Bai Z, Yu H, **Zhang J** and Zhu T.
Regulatory standards related to building energy conservation and indoor-air-quality during rapid urbanization in China.
Energy and Buildings. 36(12):1299-1308, 2004.
(Cited 64 times as of 6/22/16)
53. Weisel CP, **Zhang J**, Turpin BJ, Morandi MT, Colome S, Stock TH, Spektor DM, Korn L, Winer A, Alimokhtari S, Kwon J, Mohan K, Harrington R, Giovanetti R, Cui W, Afshar M, Maberti S and Shendell D.

Relationship of Indoor, Outdoor and Personal Air (RIOPA) study: study design, methods and quality assurance//control results.

J Expo Anal Environ Epidemiol. 15(2):123-137, 2004.

(Cited 97 times as of 6/22/16)

54. Xu X, **Zhang J**, Zhang L, Liu WL and Weisel CP.

Selective detection of monohydroxy metabolites of polycyclic aromatic hydrocarbons in urine using liquid chromatography/triple quadrupole tandem mass spectrometry.

Rapid Communications in Mass Spectrometry. 18(19):2299-2308, 2004.

(Cited 87 times as of 6/22/16)

55. Duan X, Wei F, **Zhang J**, Yang H, Zhang L, Wu G.

Lung cancer risk assessment of human exposure to PAHs using urinary 1-hydroxypyrene.

China Environmental Science (in Chinese). 25(3): 275-278, 2005.

(Cited 5 times as of 6/22/16)

56. Duan X, Wei F, Yang H, **Zhang J**, Zhang L, Xu J, and Wu G.

Total daily exposure to polycyclic aromatic hydrocarbons in human subjects with different working environments.

China Environmental Sciences (in Chinese), 24: 515-518, 2005.

(Cited 0 times as of 1/5/16)

57. Fan ZH, Weschler CJ, Han IK and **Zhang J**.

Co-formation of hydroperoxides and ultra-fine particles during the reactions of ozone with a complex VOC mixture under simulated indoor conditions.

Atmospheric Environment. 39(28):5171-5182, 2005.

(Cited 52 times as of 6/22/16)

58. Fiedler N, Laumbach R, Kelly-McNeil K, Lioy P, Fan ZH, **Zhang J**, Ottenweller J, Ohman-Strickland P and Kipen H.

Health effects of a mixture of indoor air volatile organics, their ozone oxidation products, and stress.

Environmental Health Perspectives. 113(11):1542-1548, 2005.

(Cited 91 times as of 6/22/16)

59. Herrington J, Zhang L, Whitaker D, Sheldon L and **Zhang J**.

Optimizing a dansylhydrazine (DNSH) based method for measuring airborne acrolein and other unsaturated carbonyls.

Journal of Environmental Monitoring. 7(10):969-976, 2005.

(Cited 14 times as of 6/22/16)

60. Hore P, Robson M, Freeman N, **Zhang J**, Wartenberg D, Ozkaynak H, Tolve N, Sheldon L, Needham L, Barr D and Lioy PJ.

Chlorpyrifos Accumulation Patterns for Child-Accessible Surfaces and Objects and Urinary Metabolite Excretion by Children for 2 Weeks after Crack-and-Crevise Application.

Environmental Health Perspectives. 113(2):211-219, 2005.

(Cited 33 times as of 6/22/16)

61. Laumbach RJ, Fiedler N, Gardner CR, Laskin DL, Fan ZH, **Zhang J**, Weschler CJ, Lioy PJ, Devlin RB, Ohman-Strickland P, Kelly-McNeil K and Kipen HM.

Nasal effects of a mixture of volatile organic compounds and their ozone oxidation products.

- Journal of Occupational and Environmental Medicine*. 47(11):1182-1189, 2005.
(Cited 33 times as of 6/22/16)
62. Meng QY, Turpin BJ, Korn L, Weisel CP, Morandi M, Colome S, **Zhang J**, Stock T, Spektor D, Winer A, Zhang L, Lee JH, Giovanetti R, Cui W, Kwon J, Alimokhtari S, Shendell D, Jones J, Farrar C and Maberti S. Influence of ambient (outdoor) sources on residential indoor and personal PM_{2.5} concentrations: Analyses of RIOPA data.
Journal of Exposure Analysis and Environmental Epidemiology. 15(1):17-28, 2005.
(Cited 151 times as of 6/22/16)
63. Meng QY, Turpin BJ, Polidori A, Lee JH, Weisel C, Morandi M, Colome S, Stock T, Winer A and **Zhang J**. PM_{2.5} of ambient origin: Estimates and exposure errors relevant to PM epidemiology.
Environmental Science & Technology. 39(14):5105-5112, 2005.
(Cited 51 times as of 6/22/16)
64. Reff A, Turpin BJ, Porcja RJ, Giovenetti R, Cui W, Weisel CP, **Zhang J**, Kwon J, Alimokhtari S, Morandi M, Stock T, Maberti S, Colome S, Winer A, Shendell D, Jones J and Farrar C. Functional group characterization of indoor, outdoor, and personal PM_{2.5}: results from RIOPA.
Indoor Air. 15(1):53-61, 2005.
(Cited 37 times as of 6/22/16)
65. **Zhang J**, Hu W, Wei F, Wu G, Cheng W-L and Chapman RS. Long-term changes in air pollution and health implications in four Chinese cities.
Energy for Sustainable Development. 9(3):67-76, 2005.
(Cited 5 times as of 6/22/16)
66. Kwon J, Weisel CP, Turpin BJ, **Zhang J**, Korn LR, Morandi MT, Stock TH and Colome S. Source Proximity and Outdoor-Residential VOC Concentrations: Results from the RIOPA Study.
Environmental Science & Technology. 40(13):4074-4082, 2006.
(Cited 47 times as of 6/22/16)
67. Liu W, **Zhang J**, Kwon J, Weisel C, Turpin B, Zhang L, Korn L, Morandi M, Stock T and Colome S. Concentrations and source characteristics of airborne carbonyl compounds measured outside urban residences.
J Air Waste Manag Assoc. 56(8):1196-204, 2006.
(Cited 12 times as of 6/22/16)
68. Liu W, **Zhang J**, Zhang L, Turpin BJ, Weisel CP, Morandi MT, Stock TH, Colome S and Korn LR. Estimating contributions of indoor and outdoor sources to indoor carbonyl concentrations in three urban areas of the United States.
Atmospheric Environment. 40(12):2202-2214, 2006.
(Cited 120 times as of 6/22/16)
69. Polidori A, Turpin B, Meng QY, Lee JH, Weisel C, Morandi M, Colome S, Stock T, Winer A, **Zhang J**, Kwon J, Alimokhtari S, Shendell D, Jones J, Farrar C and Maberti S. Fine organic particulate matter dominates indoor-generated PM_{2.5} in RIOPA homes.
Journal of Exposure Science and Environmental Epidemiology. 16(4):321-331, 2006.
(Cited 47 times as of 6/22/16)
70. Adgate JL, Mongin SJ, Pratt GC, **Zhang J**, Field MP, Ramachandran G and Sexton K. Relationships between personal, indoor, and outdoor exposures to trace elements in PM_{2.5}.

Science of The Total Environment. 386(1-3):21-32, 2007.

(Cited 38 times as of 6/22/16)

71. Blanset DL, **Zhang J** and Robson MG.

Probabilistic estimates of lifetime daily doses from consumption of drinking water containing trace levels of N,N-diethyl-meta-toluamide (DEET), triclosan, or acetaminophen and the associated risk to human health.

Human and Ecological Risk Assessment. 13(3):615-631, 2007.

(Cited 18 times as of 6/22/16)

72. Cheng WL, Chen YS, **Zhang J**, Lyons TJ, Pai JL and Chang SH.

Comparison of the Revised Air Quality Index with the PSI and AQI indices.

Science of the Total Environment. 382(2-3):191-198, 2007.

(Cited 43 times as of 6/22/16)

73. Herrington JS, Fan ZH, Liou PJ and **Zhang J**.

Low acetaldehyde collection efficiencies for 24-hour sampling with 2,4-dinitrophenylhydrazine (DNPH)-coated solid sorbents.

Environmental Science & Technology. 41(2):580-585, 2007.

(Cited 27 times as of 6/22/16)

74. Liu W, **Zhang J**, Korn LR, Zhang L, Weisel CP, Turpin B, Morandi M, Stock T and Colome S.

Predicting personal exposure to airborne carbonyls using residential measurements and time/activity data.

Atmospheric Environment. 41(25):5280-5288, 2007.

(Cited 31 times as of 6/22/16)

75. McCreanor J, Cullinan P, Nieuwenhuijsen MJ, Stewart-Evans J, Malliarou E, Jarup L, Harrington R, Svartengren M, Han I, Ohman-Strickland P, Chung KF and **Zhang J**.

Respiratory effects of exposure to diesel traffic in persons with asthma.

New England Journal of Medicine. 357(23):2348-2358, 2007.

(Cited 570 times as of 6/22/16)

76. Meng QY, Turpin BJ, Lee JH, Polidori A, Weisel CP, Morandi M, Colome S, **Zhang J**, Stock T and Winer A. How Does Infiltration Behavior Modify the Composition of Ambient PM_{2.5} in Indoor Spaces? An Analysis of RIOPA Data.

Environ Sci & Technol. 41(21):7315-7321, 2007.

(Cited 36 times as of 6/22/16)

77. Mitchell CS, **Zhang J**, Sigsgaard T, Jantunen M, Liou PJ, Samson R and Karol MH.

Current state of the science: Health effects and indoor environmental quality. *Environmental Health Perspectives*. 115(6):958-964, 2007.

(Cited 131 times as of 6/22/16)

78. Reff A, Turpin BJ, Offenbergh JH, Weisel CP, **Zhang J**, Morandi M, Stock T, Colome S and Winer A.

A functional group characterization of organic PM_{2.5} exposure: Results from the RIOPA study.

Atmospheric Environment. 41(22):4585-4598, 2007.

(Cited 24 times as of 6/22/16)

79. Weschler CJ, Wisthaler A, Cowlin S, Tamas G, Strom-Tejsten P, Hodgson AT, Destailats H, Herrington J, **Zhang J** and Nazaroff WW.

Ozone-initiated chemistry in an occupied simulated aircraft cabin.

Environmental Science & Technology. 41(17):6177-6184, 2007.

(Cited 93 times as of 6/22/16)

80. **Zhang J** and Smith KR.

Household air pollution from coal and biomass fuels in China: Measurements, health impacts, and interventions.

Environ Health Perspect. 115(6):848-55, 2007.

(Cited 349 times as of 6/22/16)

81. Zhu K, **Zhang J** and Lioy PJ.

Evaluation and comparison of continuous fine particulate matter monitors for measurement of ambient aerosols.

J Air Waste Manag Assoc. 57(12):1499-506, 2007.

(Cited 27 times as of 6/22/16)

82. Han I-K, Duan X, Zhang L, Yang H, Rhoads GG, Wei F and **Zhang J**.

1-Hydroxypyrene concentrations in first morning voids and 24-h composite urine: intra- and inter-individual comparisons.

J Expos Sci Environ Epidemiol. 18(5):477-485, 2008.

(Cited 13 times as of 6/22/16)

83. Fiedler N, Kelly-Mcneil K, Ohman-Strickland P, **Zhang J**, Ottenweller J and Kipen HM.

Negative affect and chemical intolerance as risk factors for building-related symptoms: A controlled exposure study.

Psychosomatic Medicine. 70(2):254-262, 2008.

(Cited 11 times as of 6/22/16)

84. Fiedler N, Kipen H, Ohman-Strickland P, **Zhang J**, Weisel C, Laumbach R, Kelly-McNeil K, Olejeme K and Lioy P.

Sensory and cognitive effects of acute exposure to hydrogen sulfide.

Environmental Health Perspectives. 116(1):78-85, 2008.

(Cited 19 times as of 6/22/16)

85. Han J-F, He X-Y, Herrington JS, White LA, **Zhang J** and Hong J-Y.

Metabolism of 2-Amino-1-methyl-6-phenylimidazo[4,5-b]pyridine (PhIP) by Human CYP1B1 Genetic Variants.

Drug Metab Dispos dmd.107.016824, 2008.

(Cited 5 times as of 6/22/16)

86. Herrington JS and **Zhang J**.

Development of a method for time-resolved measurement of airborne acrolein. *Atmospheric Environment*. 42(10):2429-2436, 2008.

(Cited 7 times as of 6/22/16)

87. **Zhang J**, Han I-K, Zhang L and Crain W.

Hazardous chemicals in synthetic turf materials and their bioaccessibility in digestive fluids.

J Expos Sci Environ Epidemiol. 18(6):600-607, 2008.

(Cited 29 times as of 6/22/16)

88. Zhu X, Fan Z, Wu X, Meng Q, Wang S-w, Tang X, Ohman-Strickland P, Georgopoulos P, **Zhang J**, Bonanno L, Held J and Lioy P.

Spatial variation of volatile organic compounds in a "Hot Spot" for air pollution. *Atmospheric Environment*. 42(32):7329-7338, 2008.

(Cited 23 times as of 6/22/16)

89. Gandhi S, Pettit AP, Ohman-Strickland P, Gow A, **Zhang J**, Lauer E, Kipen HM.

Two Methods for Measurement of Acute Changes in Endothelial Function Following Diesel Exhaust Inhalation.

American Journal of Respiratory and Critical Care Medicine. 179:A3164, 2009.

(Cited 2 times as of 6/22/16)

90. Laumbach R, Tong J, Zhang L, Ohman-Strickland P, Stern A, Fiedler N, Kipen H, Kelly-McNeil K, Liou P and **Zhang J**.

Quantification of 1-aminopyrene in human urine after a controlled exposure to diesel exhaust.

Journal of Environmental Monitoring. 11(1):153-159, 2009.

(Cited 23 times as of 6/22/16)

91. Wei Y, Han IK, Shao M, Hu M, **Zhang J** and Tang X.

PM2.5 constituents and oxidative DNA damage in humans.

Environ Sci Technol. 43(13):4757-62, 2009.

(Cited 65 times as of 6/22/16)

92. Blando JD, Schill DP, De La Cruz MP, Zhang L, **Zhang J**.

Preliminary study of propyl bromide exposure among New Jersey dry cleaners as a result of a pending ban on perchloroethylene.

Journal of Air & Waste Management Association. 60:1049–1056, 2010.

(Cited 7 times as of 6/22/16)

93. Kipen H, Rich DQ, Huang W, Zhu T, Wang G, Hu M, Lu SE, Ohman-Strickland P, Zhu P, Wang Y, **Zhang J**.

Measurement of inflammation and oxidative stress following drastic changes in air pollution during the Beijing Olympics: a panel study approach.

Annals of the New York Academy of Sciences. 1203:160–167, 2010.

(Cited 31 times as of 6/22/16)

94. Laumbach RJ, Rich DQ, Gandhi S, Amorosa L, Schneider S, **Zhang J**, Ohman-Strickland P, Gong J, Lelyanov O, Kipen HM.

Acute Changes in Heart Rate Variability in Type 2 Diabetes Following a Highway Traffic Exposure.

Journal of Occupational and Environmental Medicine. 52:324-31, 2010.

(Cited 22 times as of 6/22/16)

95. Rich DQ, Kipen HM, **Zhang J**., Kamat L., Wilson AC.

Triggering of transmural infarctions, but not non-transmural infarctions, by ambient fine particles.

Environmental Health Perspectives. 118:1229–1234, 2010.

(Cited 29 times as of 6/22/16)

96. Yamamoto N, Shendell DG, Winer AM, **Zhang J**.

Residential air exchange rates in three major U.S. metropolitan areas: Results from the RIOPA Study 1999-2001.

Indoor Air. 20:85-90, 2010.

(Cited 63 times as of 6/22/16)

97. Zhang L, Jiang Z, Tong J, Wang Z, Han Z, **Zhang J**.

- Using charcoal as base materials reduces mosquito coil emissions of toxins.
Indoor Air. 20:176-184, 2010.
(Cited 19 times as of 6/22/16)
98. Wei Y, Han IK, Hu M, Shao M, **Zhang J**, Tang, X.
Personal exposure to particulate PAHs and anthraquinone and oxidative DNA damages in humans.
Chemosphere. 81:1280-1285, 2010.
(Cited 55 times as of 6/22/16)
99. Huyck S, Ohman-Strickland P, Zhang L, Tong J, Xu X, **Zhang J**.
Determining times to maximum urine excretion of 1-aminopyrene following Diesel exhaust exposure.
J. of Exposure Science and Environmental Epidemiology. 20: 650-655, 2010.
(Cited 12 times as of 6/22/16)
100. Borjan M, Marcella S, Blount B, Greenberg M, **Zhang J**, Murphy E, Valentin Blasini L, Robson M.
Perchlorate exposure in lactating women in an urban community in New Jersey
Science of the Total Environment, 409(3): 460-464, 2011.
(Cited 17 times as of 6/22/16)
101. Kipen H, Gandhi S, Rich DQ, Ohman-Strickland P, Laumbach R, Fan ZH, Chen L, Laskin D, **Zhang J**, Madura K.
Acute decreases in proteasome pathway activity following inhalation of fresh diesel exhaust or secondary organic aerosol.
Environmental Health Perspectives. 119: 658-663, 2011.
(Cited 23 times as of 6/22/16)
102. Laumbach RJ, Kipen HM, Kelly-McNeil K, **Zhang J**, Zhang L, Lioy PJ, Ohman-Strickland P, Gong J, Kusnecov A, Fiedler N.
Sickness Response Symptoms among Healthy Volunteers after Controlled Exposures to Diesel Exhaust and Psychological Stress.
Environ Health Perspectives. 119: 945-950, 2011.
(Cited 9 times as of 6/22/16)
103. Remais JV, **Zhang J**.
Environmental Lessons from China: Finding Promising Policies in Unlikely Places.
Environ Health Perspectives. 119: 893-895, 2011.
(Cited 8 times as of 6/22/16)
104. Chung KF, **Zhang J**, Zhong N.
Outdoor air pollution and respiratory health in Asia.
Respirology. 16(7):1023-1026, 2011.
(Cited 35 times as of 6/22/16)
105. Roy A, Chapman R, Hu W, Wei F, Liu X, **Zhang J**.
Indoor air pollution and lung function growth among children in four Chinese Cities.
Indoor Air. 22(1):3-11, 2012.
(Cited 18 times as of 6/22/16)

106. Pettit AP, Brooks A, Laumbach R, Fiedler N, Wang Q, Ohman-Strickland P, Madura K, **Zhang J**, Kipen H.
Alteration of peripheral blood monocyte gene expression in humans following diesel exhaust inhalation.
Inhalation Toxicology, 24(3): 172-181, 2012.
(Cited 18 times as of 6/22/16)
107. Sarkar S, Song Y, Sarkar S, Kipen HM, Laumbach RJ, **Zhang J**, Ohman-Strickland P, Gardner CR, Schwander S.
Suppression of the NF- κ B Pathway by Diesel Exhaust Particles Impairs Human Antimicrobial Immunity.
Immunology. 188(6): 2778-93, 2012.
(Cited 31 times as of 6/22/16)
108. Roy A, Hu W, Korn L, Chapman R, **Zhang J**.
Ambient particulate matter and lung function growth in Chinese children.
Epidemiology. 23: 464-472, 2012.
(Cited 19 times as of 6/22/16)
109. Rich DQ, Kipen HM, Huang W, Wang G, Wang Y, Zhu P, Ohman-Strickland P, Hu M, Philipp C, Diehl SR, Lu SE, Tong J, Gong J, Thomas D, Zhu T, **Zhang J**.
Association between Changes in Air Pollution Levels during the Beijing Olympics and Biomarkers of Inflammation and Thrombosis in Healthy Young Adults.
JAMA (Journal of American Medical Association). 307: 2068-2078, 2012.
(Cited 120 times as of 6/22/16)
This paper was recognized as one of the 30 Papers of the Year, from nearly 2500 NIEHS-funded studies published in 2012. PMID: PMC4049319.
110. Hussain S, Laumbach RJ, Coleman J, Youseff H, **Zhang J**.
Controlled Exposure to Diesel Exhaust Causes Increased Nitrite in Exhaled Breath Condensate Among Subjects with Asthma.
Journal of Occupational and Environmental Medicine, 54(10):1186-1191, 2012.
(Cited 16 times as of 6/22/16)
111. Huang W, Wang G, Lu SE, Kipen HM, Wang Y, Hu M, Lin W, Rich DQ, Ohman-Strickland P, Diehl SR, Zhu P, Tong J, Gong J, Zhu T, **Zhang J**.
Inflammatory and Oxidative Stress Responses of Healthy Young Adults to Changes in Air Quality during the Beijing Olympics.
American J of Respiratory and Critical Care Medicine. 186(11):1150-9, 2012.
(Cited 57 times as of 6/22/16)
112. Gong J, Zhu T, Kipen HM, Wang G, Hu M, Ohman-Strickland P, Lu SE, Zhang L, Wang Y, Zhu P, Rich DQ, Diehl SR, Huang W, Tong J, **Zhang J**.
Malondialdehyde in Exhaled Breath Condensate and Urine as a Biomarker of Air Pollution Induced Oxidative Stress.
Journal Of Exposure Science And Environmental Epidemiology. 23(3):322-7, 2013.
(Cited 15 times as of 6/22/16)
113. Mapou AEM, Shendell DG, Therkorn JH, Xiong Y, Meng Q, **Zhang J**.
Aldehydes in Passenger Vehicles: An analysis of data from the RIOPA Study 1999-2001.
Atmospheric Environment. 79:751-759, 2013.

- (Cited 2 times as of 6/22/16)
114. Rich DQ, Ozkaynak H, Crooks J, Baxter L, Burke J, Ohman-Strickland P, Thevenet Morrison K, Kipen HM, **Zhang J**, Kostis J, Lunden M, Hodas N, Turpin B.
The triggering of myocardial infarction by fine particles is enhanced when particles are enriched secondary species.
Environmental Science and Technology. 47(16):9414-23, 2013.
(Cited 15 times as of 6/22/16)
 115. Adetona O, **Zhang J**, Hall DB, Wang J-S, Vena JE, Naeher LP.
Occupational Exposure to Woodsmoke and Oxidative Stress in Wildland Firefighters.
Science of the Total Environment. 449:269-275, 2013.
(Cited 9 times as of 6/22/16)
 116. Commodore AA, **Zhang J**, Chang Y, Hartinger SM, Lanata CF, Mäusezahl D, Gil AI, Hall DB, Aguilar-Villalobos M, Vena JE, Wang JS, Naeher LP.
Concentrations of Urinary 8-Hydroxy-2'-deoxyguanosine and 8-isoprostane in Women Exposed to Woodsmoke in a Cookstove Intervention Study in San Marcos, Peru.
Environment International. 60:112-122, 2013.
(Cited 11 times as of 6/22/16)
 117. Leo BF, Chen S, Kyo Y, Herpoldt KL, Terrill NJ, Dunlop IE, McPhail DS, Shaffer MS, Schwander S, Gow A, Zhang J, Chung KF, Tetley TD, Porter AE, Ryan MP.
The Stability of Silver Nanoparticles in a Model of Pulmonary Surfactant.
Environmental Science and Technology. 47(19): 11232–11240, 2013.
(Cited 38 times as of 6/22/16)
 118. Chen S, Goode AE, Sweeney S, Theodorou IG, Thorley AJ, Ruenraroengsak P, Chang Y, Gow A, Schwander S, Skepper J, **Zhang J**, Shaffer MS, Chung KF, Tetley TD, Ryan MP, Porter AE.
Sulfidation of silver nanowires inside human alveolar epithelial cells: a potential detoxification mechanism.
Nanoscale. 5(20):9839-47, 2013.
(Cited 18 times as of 6/22/16)
 119. Li F, Wiegman C, Seiffert JM, Zhu J, Clarke C, Chang Y, Bhavsar P, Adcock I, **Zhang J**, Zhou X, Chung KF.
Effects of N-acetylcysteine in ozone-induced chronic obstructive pulmonary disease model.
PLOS ONE, 8 (11): e80782, 2013.
(Cited 9 times as of 6/22/16)
 120. **Zhang J**, Nazarenko Y, Zhang L, Calderon L, Lee KB, Garfunkel E, Schwander S, Tetley TD, Chung KF, Porter AE, Ryan M, Kipen H, Lioy PJ, Mainelis G.
Impacts of a Nanosized Ceria Additive on Diesel Engine Emissions of Particulate and Gaseous Pollutants.
Environmental Science and Technology, 47 (22),13077–13085, 2013.
(Cited 8 times as of 6/22/16)
 121. Chen S, Theodorou IG, Goode AE, Gow A, Schwander S, **Zhang J**, Chung KF, Tetley TD, Shaffer MS, Ryan MP, Porter AE.
High resolution analytical electron microscopy reveals cell culture media induced changes to the chemistry of silver nanowires.
Environmental Science and Technology, 47(23), 13813-13821, 2013.
(Cited 16 times as of 6/22/16)
 122. Yuan Z, Chen Y, Zhang Y, Liu H, Liu Q, Zhao J, Hu M, Huang W, Wang G, Zhu T, **Zhang J**, Zhu P.

- Changes of plasma vWF level in response to the improvement of air quality: an observation of 114 healthy young adults.
92(4):543-8. 2013;
(Cited 5 times as of 6/22/16)
123. Mukherjee D, Botelho D, Gow AJ, **Zhang J**, Georgopoulos PG.
Computational Multiscale Toxycodynamic Modeling of Silver and Carbon Nanoparticle Effects on Mouse Lung Function.
PLoS One. 2013 Dec 3;8(12):e80917.
(Cited 8 times as of 6/22/16)
124. Sarkar S, Zhang L, Subramaniam P, Lee KB, Garfunkel E, Strickland PA, Mainelis G, Liroy PJ, Tetley TD, Chung KF, **Zhang J**, Ryan M, Porter A, Schwander S.
Variability in Bioreactivity Linked to Changes in Size and Zeta Potential of Diesel Exhaust Particles in Human Immune Cells.
PLOS ONE. 9 (5): e97304, 2014.
(Cited 5 times as of 6/22/16)
125. Chang Y, Nguyen C, Paranjpe VR, Gilliland F, **Zhang J**.
Analysis of Bisphenol, a Diglycidyl Ether (BADGE) and its Hydrolytic Metabolites in Biological Specimens by High-Performance Liquid Chromatography Tandem Mass Spectrometry.
Journal of Chromatography B Analyt Technol Biomed Life Sci. 15;965:33-8.
(Cited 2 time as of 6/22/16)
126. Neophytou AM, Hart JE, Chang Y, **Zhang J**, Smith TJ, Garshick E, Laden F.
Short-Term Traffic-Related Exposures and Biomarkers of Nitro-PAH Exposure and Oxidative DNA Damage.
Toxics. 2(3):377-390. 2014
(Cited 4 times as of 6/22/16)
127. Mu L, Deng F, Tian L, Li Y, Swanson M, Ying J, Browne RW, Rittenhouse-Olson K, **Zhang J**, Zhang ZF, Bonner MR.
Peak expiratory flow, breath rate and blood pressure in adults with changes in particulate matter air pollution during the Beijing Olympics: a panel study.
Environ Res. 2014 Aug;133:4-11.
(Cited 9 times as of 6/22/16)
128. Mukherjee D, Leo BF, Royce SF, Porter AE, Ryan MP, Schwander S, Chung KF, Tetley TD, **Zhang J**, Georgopoulos PG.
Modeling physiochemical interactions affecting in vitro cellular dosimetry of engineered nanomaterials: application to nanosilver.
J Nanopart Res. 2014 Oct 1;16(10):2616.
(Cited 5 times as of 6/22/16)
129. Royce S, Mukherjee D, Cai T, Xu S, Alexander JA, Mi Z, Calderon L, Mainelis G, Lee K, Liroy P, Tetley T, Chung KF, **Zhang J**, Georgopoulos P.
Modeling Population Exposures to Silver Nanoparticles Present in Consumer Products.
J. Nano Res. 16(11). pii: 2724, 2014.
(Cited 5 times as of 6/22/16)
130. Mukherjee D, Royce SG, Sarkar S, Thorley A, Schwander S, Ryan MP, Porter AE, Chung KF, Tetley TD, **Zhang J**, Georgopoulos PG.
Modeling in vitro cellular responses to silver nanoparticles.
J Toxicology. 2014; 2014:852-890.
(Cited 2 times as of 6/22/16)

131. Roy A, Gong J, Thomas DC, **Zhang J**, Kipen HM, Rich DQ, Zhu T, Huang W, Hu M, Wang G, Wang Y, Zhu P, Lu SE, Ohman-Strickland P, Diehl SR, Eckel SP.
The Cardiopulmonary Effects of Ambient Air Pollution and Mechanistic Pathways: A Comparative Hierarchical Pathway Analysis.
PLoS One. 2014 Dec 12;9(12):e114913.
(Cited 4 times as of 6/22/16)
132. Laumbach RJ, Kipen HM, Ko S, Kelly-McNeil K, Cepeda C, Pettit A, Ohman-Strickland P, Zhang L, **Zhang J**, Gong J, Veleeparambil M, Gow AJ.
A controlled trial of acute effects of human exposure to traffic particles on pulmonary oxidative stress and heart rate variability.
Particle and Fibre Toxicology. 11:45. doi:10.1186/s12989-014-0045-5, 2014.
(Cited 14 times as of 6/22/16)
133. Gong J, Zhu T, Kipen H, Wang G, Hu M, Guo Q, Ohman-Strickland P, Lu SE, Wang Y, Zhu P, Rich DQ, Huang W, **Zhang J**.
Comparisons of ultrafine and fine particles in their associations with biomarkers reflecting physiological pathways.
Environ Sci Technol. 6;48(9):5264-73, 2014.
(Cited 16 times as of 6/22/16)
134. **Zhang J**, Samet JM.
Chinese haze versus Western smog: lessons learned.
J Thorac Dis. 2015 Jan;7(1):3-13.
(Cited 5 times as of 6/22/16)
135. Chung KF, **Zhang JJ**, Zhong N.
Haze, health and disease.
J Thorac Dis. 2015 Jan; 7(1): 1-2. PMC4311078.
(cited 2 times 6/22/16)
136. Sweeney S, Theodorou IG, Zambianchi M, Chen S, Gow A, Schwander S, **Zhang JJ**, Chung KF, Shaffer MS, Ryan MP, Porter AE, Tetley TD.
Silver nanowire interactions with primary human alveolar type-II epithelial cell secretions: contrasting bioreactivity with human alveolar type-I and type-II epithelial cells.
Nanoscale. 2015 Jun 21;7(23):10398-409. doi: 10.1039/c5nr01496d.
(Cited 1 times as of 6/22/16)
137. Marchetti M, Shaffer MS, Zambianchi M, Chen S, Superti F, Schwander S, Gow A, **Zhang JJ**, Chung KF, Ryan MP, Porter AE, Tetley TD.
Adsorption of surfactant protein D from human respiratory secretions by carbon nanotubes and polystyrene nanoparticles depends on nanomaterial surface modification and size.
Philos Trans R Soc Lond B Biol Sci. 5;370(1661). pii: 20140038, 2015.
(Cited 8 times as of 6/22/16)
138. Seiffert J, Hussain F, Wiegman C, Li F, Bey L, Baker W, Porter A, Ryan MP, Chang Y, Gow A, **Zhang J**, Zhu J, Tetley T, Chung KF.
Pulmonary Toxicity of Instilled Silver Nanoparticles: Influence of Size, Coating and Rat Strain.
PLoS ONE. 10(3): e0119726. doi: 10.1371/journal.pone.0119726, 2015.
(Cited 9 times as of 6/22/16)
139. Altomose B, Gong J, Zhu T, Hu M, Zhang L, Cheng H, Zhang L, Tong J, Kipen HM, Ohman-Strickland P, Meng Q, Robson MG, **Zhang J**.
Aldehydes in Relation to Air Pollution Sources: A Case Study around the Beijing Olympics Atmospheric Environment.
Atmospheric Environment. 109: 61-69, 2015.

- (Cited 3 times as of 6/22/16)
140. Botelho D, Leo B, Massa C, Sarkar S, Tetley T, Chung KF, Chen S, Ryan M, Porter A, **Zhang J**, Schwander S, Gow A.
Low dose AgNPs reduce lung mechanical function and innate immune defense in the absence of cellular toxicity.
Nanotoxicology. 2016 Feb;10(1):118-27. PMID: 26152688. PMC5033060.
(Cited 2 times as of 6/22/16)
141. Rich DQ, Liu K, Thurston SW, Stevens TP, Pan Y, Kane C, Weinberger B, Ohman-Strickland P, Woodruff TJ, Duan X, Assibey-Mensah V, **Zhang J**.
Differences in Birth Weight Associated with the 2008 Beijing Olympic Air Pollution Reduction: Results from a Natural Experiment.
Environ Health Perspect. 123: 880-887. 2015. PMCID: PMC4559955.
(Cited 16 times as of 6/22/16)
142. Theodorou I, Botelho D, Schwander S, **Zhang J**, Chung KF, Tetley T, Shaffer M, Gow A, Ryan M, Porter AE.
Static and dynamic microscopy of the chemical stability and aggregation state of silver nanowires in components of murine pulmonary surfactant provides insights into bio-nano interactions.
Environ Sci Tech. 2015 Jul 7;49(13):8048-56.
(Cited 3 times as of 6/22/16)
143. Sweeney S, Theodorou IG, Zambianchi M, Chen S, Gow A, Schwander S, **Zhang J**, Chung KF, Shaffer MS, Ryan MP, Porter AE, Tetley TD,
Silver nanowire interactions with primary human alveolar type-II epithelial cell secretions: contrasting bioreactivity with human alveolar type-I and type-II epithelial cells.
Nanoscale. 2015 Jun 4;7(23):10398-409.
(Cited 1 times as of 6/22/16)
144. Mukherjee D, Porter, A, Ryan M, Schwander S, Chung KF, Tetley T, **Zhang J**, Georgopoulos P.
Modeling In Vivo Interactions of Engineered Nanoparticles in the Pulmonary Alveolar Lining Fluid.
Nanomaterials (Basel). 2015 Sep;5(3):1223-1249.
(Cited 0 times as of 6/22/16)
145. Gong J, Zhu T, Kipen H, Rich DQ, Huang W, Lin W-T, **Zhang J**.
Urinary Polycyclic Aromatic Hydrocarbon Metabolites as Biomarkers of Exposure to Traffic-Emitted Pollutants.
Environ Int. 2015 Dec;85:104-10.2015.
(Cited 1 times as of 6/22/16)
146. Duan X, Shen G, Yang H, Lambert G, Wei F, **Zhang J**.
Measurement of Human CYP1A2 Induction by inhalation exposure to Benzo(a)pyrene based on in vivo isotope breath method.
Environ Pollut. 2016, 208: 506-511. doi: 10.1016/j.envpol.2015.10.023. Epub 2015 Nov 6.
(Cited 0 times as of 6/22/16)
147. Duan X, Shen G, Yang H, Tian J, Wei F, Gong J, **Zhang J**.
Dietary Intake Polycyclic Aromatic Hydrocarbons (PAHs) and Associated Cancer Risk in a Cohort of Chinese Urban Adults: Inter- and Intra-Individual Variability.
Chemosphere. 2015 Nov 24;144:2469-2475. doi: 10.1016/j.chemosphere.2015.11.019.
(Cited 1 times as of 6/22/16)
148. Srijata S, Leo BF, Carranza C, Chen S, Santiago-Rivas C, Porter AE, Ryan MP, Gow A, Chung KF, Tetley TD, **Zhang J**, Georgopoulos PG, Ohman-Strickland P, Schwander S.
Modulation of Human Macrophage Responses to Mycobacterium tuberculosis by Silver Nanoparticles of Different Size and Surface Modification.

- PLoS One*. 2015 Nov 18;10(11):e0143077. doi: 10.1371/journal.pone.0143077.
(Cited 1 times as of 6/22/16)
149. Zhang N, Ni XY, Huang H, Zhao JL, Duarte M, **Zhang J**.
The impact of interpersonal pre-warning information dissemination on regional emergency evacuation.
Arch Environ Occup Health. 2015 Jun 11:0. [Epub ahead of print]
(Cited 1 times as of 6/22/16)
150. Assibey-Mensah V, Liu K, Thurston SW, Stevens TP, **Zhang JJ**, Zhang J, Kane C, Pan Y, Weinberger B, Ohman-Strickland P, Woodruff T, Rich D.
Impact of the 2008 Beijing Olympics on the Risk of Pregnancy Complications.
Arch Environ Occup Health. 2015 Jun 11:0. PMC4676735.
(Cited 0 times as of 6/22/16)
151. Li F, Zhang P, Zhang M, Liang L, Sun X, Li M, Tang Y, Bao A, Gong J, **Zhang J**, Adcock I, Chung KF, Zhou X.
Hydrogen Sulfide Prevents and Partially Reverses Ozone-Induced Feature of Lung Inflammation and Emphysema in Mice.
Am J Respir Cell Mol Biol. 2016 Jan. DOI: 10.1165/rcmb.2015-0014OC.
(Cited 0 times as of 6/22/2016)
152. Zhang N, Huang H, Duarte M, **Zhang J**.
Risk analysis for rumor propagation in metropolises based on improved 8-state ICSAR model and dynamic personal activity trajectories.
Physica A: Statistical Mechanics and its Applications. doi:10.1016/j.physa.2015.12.131
(Cited 0 times as of 6/22/16)
153. Wei Y, **Zhang J**, Li Z, Gow A, Chung KF, Hu M, Sun Z, Zeng L, Zhu T, Jia G, Li X, Duarte M, Tang, X.
Chronic Exposure to Air Pollution Particles Increases the Risk of Obesity and Metabolic Syndrome: Findings from a Natural Experiment in Beijing.
FASEB. Feb 2016. doi:10.1096/fj.201500142fj.201500142.
(Cited 0 times as of 6/22/16)
154. Sweeney S, Leo BF, Chen S, Abraham-Thomas N, Thorley A, Gow A, Schwander S, **Zhang J**, Shaffer M, Chung KF, Ryan MP, Porter AE, Tetley TD.
Pulmonary surfactant mitigates silver nanoparticle toxicity in human alveolar type-I-like epithelial cells.
Colloids and Surfaces B: Biointerfaces (accepted)
(Cited 0 times as of 6/22/16)
155. Altemose B, Robson MG, Kipen HM, Ohman-Strickland P, Meng Q, Gong J, Huang W, Wang G, Rich DQ, Zhu T, **Zhang J**.
Association of Air Pollution Sources and Aldehydes with Biomarkers of Blood Coagulation, Pulmonary Inflammation, and Systemic Oxidative Stress.
Journal of Exposure Science and Environmental Epidemiology (accepted)
(Cited 0 times as of 6/22/16)
156. Bhatt P, Mirick DK, Randolph TW, Gong J, Buchanan DM, **Zhang J**, Davis S.
Oxidative DNA Damage During Sleep Periods Among Nightshift Workers.
Occupational and Environmental Medicine (OEM Online First, published on June 15, 2016 as 10.1136/oemed-2016-103629)
(Cited 0 times as of 6/22/16)
157. **Zhang J**, Lee KB, He L, Seiffert J, Subramaniam P, Yang L, Chen S, Maguire P, Mainelis G, Schwander S, Tetley T, Porter, A, Ryan M, Shaffer M, Hu S, Gong J, Chung KF.
Effects of a nano-ceria fuel additive on physicochemical properties of diesel exhaust particles.
Environmental Science: Processes and Impacts 2016: DOI: 10.1039/C6EM00337K
(Cited 0 times as of)

158. Theodorou IG, Ruenraroengsak P, Gow A, Schwander S, **Zhang JJ**, Chung KF, Tetley TD, Ryan MP, Porter AE.
Effect of pulmonary surfactant on the dissolution, stability and uptake of zinc oxide nanowires by human respiratory epithelial cells.
Nanotoxicology. 2016 Jul 21:1-37. [Epub ahead of print]
159. Seiffert J, Buckley A, Leo B, Martin NG, Zhu J, Dai R, Hussain F, Guo C, Warren J, Hodgson A, Gong J, Ryan MP, **Zhang JJ**, Porter A, Tetley TD, Gow A, Smith R, Chung KF.
Pulmonary effects of inhalation of spark-generated silver nanoparticles in Brown-Norway and Sprague-Dawley rats.
Respir Res. 2016 Jul 19;17(1):85.
160. Feng L, Ouyang F, Liu L, Wang X, Li Y, Murtha A, Shen H, **Zhang J**, Zhang JJ.
Levels of urinary metabolites of organophosphate flame retardants, TDCIPP and TPHP, in pregnant women in Shanghai.
Journal of Environmental and Public Health. 2016, doi: 10.1155/2016/9416054.

Invited Peer-Reviewed Journal Articles

* indicating principal author

1. Mitra A.P., Morawska L., Sharma C., and **Zhang J**.
Methodologies for characterization of combustion sources and for quantification of their emissions.
Chemosphere 2002, 49: 903-922.
(Cited 38 times as of 6/22/16)
2. **Zhang J**.* and Smith K.R.
Indoor air pollution: A global health concern. In *Impact of Environmental Pollution on Health: Balancing Risk*, Ed: Briggs DJ, Joffe M, Elliot P.
British Medical Bulletin, 2003, 68: 209-225.
(Cited 184 times as of 6/22/16)
3. **Zhang J**.* and Smith K.R.
Indoor air pollution from household fuel combustion in China: A review.
(Invited plenary paper) *The Proceedings of Indoor Air 2005, the 10th International Conference on Indoor Air Quality and Climate*, Sept 4-9, 2005. Beijing China. pp 65-83.
(Cited 28 times as of 6/22/16)
4. Straif K., Baan R., Grosse Y., Secretan B., Ghissassi F.E., Coglianò V., on behalf of the WHO International Agency for Research on Cancer Monograph Working Group (**Zhang, J.**, member).
Carcinogenicity of household solid fuel combustion and high-temperature frying,
Lancet-Oncology 2006, 7:977-978.
(Cited 133 times as of 6/22/16)
5. **Zhang J**, * Mauzerall DL, Zhu T, Liang S, Ezatti M, Remais, JV.
Environmental health in China: challenges to achieving clean air and safe water.
The Lancet 2010; 375: 1110–19.
(Cited 175 times as of 6/22/16)

Peer-reviewed Research Reports

1. Smith K.R., Pennise D.M., Khummongkol P., Chaiwong V., Ritgeen K., **Zhang J**., Panyathanya W., Rasmussen R.A., Khalil M.A.K., and Thorneloe S.A. *Greenhouse Gases from Small-scale Combustion Devices in Developing Countries. Phase III: Charcoal-Making Kilns in Thailand*. EPA-600/R-99-109.

December, 1999. U.S. Environmental Protection Agency, Office of Research and Development, Washington, D.C.

(Cited 41 times as of 1/5/16)

2. Smith K.R., Uma R., Kishore V.V.N., Lata K., Madne S., Rao G., **Zhang J.**, Rasmussen R.A., Khalil M.A.K., and Thorneloe S.A. *Greenhouse Gases from Small-scale Combustion Devices in Developing Countries, Phase IIa: Household Stoves in India*. EPA-600/R-00-052 June, 2000. U.S. Environmental Protection Agency, Office of Research and Development, Washington, D.C.
(Cited 127 times as of 6/22/16)
3. Weisel C.P., **Zhang J.***, Turpin B.J., Morandi M.T., Colome S., Stock T.H., Spektor D.M. *Investigators' Report: Relationships of Indoor, Outdoor, and Personal Air (RIOPA). Part I. Collection Methods and Descriptive Analyses*. Research Report 130. Health Effects Institute (HEI) and the Mickey Leland National Urban Air Toxics Center. Boston, MA. 2005.
(Cited 144 times as of 6/22/16)
4. **Zhang J.**, McCreanor J.E., Cullinan P., Chung K.F., Ohman-Strickland P., Han I., Jarup L., Nieuwenhuijsen M.J. *Investigators' Report: Health Effects of Real-world Exposure to Diesel Exhaust in Asthmatics*. Research Report 136. Health Effects Institute (HEI), Boston, MA, 2009. available at <http://pubs.healtheffects.org/view.php?id=297>
(Cited 51 times as of 6/22/16)
5. **Zhang J.** as Contributing Author. Volume 95 of the IARC Monographs on "Household Use of Solid Fuels and High-temperature Frying", International Agency for Research on Cancer, Lyon, France. 2010.
(Cited 16 times as of 6/22/16)
6. **Zhang J.** as Contributing Author, Special Report 18 of Health Effects Institute "Outdoor Air Pollution and Health in the Developing Countries of Asia: A Comprehensive Review". Health Effects Institute (HEI), Boston, MA. November 2010.
(Cited 20 times as of 6/22/16)
7. Lioy P.J., Zhihua T.F., **Zhang J.**, Georgopoulos P., Sheng-Wei W., Ohman-Strickland P, Wu X., Zhu X., Harrington J., Tang X., Meng Q., Jung K.H., Kwon J., Hernandez M., et al. "Personal and Ambient Exposures to Air Toxics in Camden, New Jersey". Health Effects Institute (HEI), Boston, MA. 2011.
(Cited 14 times as of 6/22/16)
10. **Zhang J.**, Zhu T., Kipen H., Wang G., Huang W., Rich D., Zhu P., Wang Y., Lu S.E., Ohman-Strickland P., Diehl S., Hu M., Tong J., Gong J., Thomas D. Special Investigator's Report Number 174: "Cardio-respiratory Biomarker Responses of Healthy Young Adults to Drastic Air Quality Changes Surrounding the Beijing Olympics". Health Effects Institute (HEI), Boston, MA. February 2013.
(Cited 34 times as of 6/22/16)

Books/Book Chapters

1. **Zhang J.**, et al. *A Treasure Box of Environmental Knowledge*, Beijing: Chinese Environmental Science Press. 1988.
2. **Zhang J.**, et al. *A Treasure Box of Environmental Knowledge*, 2nd ed., Beijing: Chinese Environmental Science Press. 1993.
3. **Zhang J.**, et al. *A Treasure Box of Environmental Knowledge*, 3rd ed., Beijing: Chinese Environmental Science Press. 1993.

4. **Zhang J.**, et al. *A Treasure Box of Environmental Knowledge*, 4th ed., Beijing: Chinese Youth Press. 1995.
5. Liou P.J. and **Zhang J.** "Chapter 1: Air pollution". In *Air Pollutants and The Respiratory Tract*. Edited by Swift, D.L., Series of Lung Biology in Health and Disease. Marcel Dekker. pp 1-38. 1999.
6. **Zhang J.** " Hazardous Air Pollutants" . In: *Encyclopedia of Public Health*. Edited by L. Breslow, B. Goldstein, L.W. Green, W. Keck, J. Last, M. McGinnis. Macmillan Reference, New York, NY. 2001.
7. Samet, J.M., **Zhang J.** "Climate Change and Health". In: *Routledge Handbook on Public Health in Asia: Global Perspectives*. Edited by S. Griffith, J.L.Tang , and E.K. Yeoh. Routledge, Taylor and Francis Group, Oxon, UK. 2013.

Selected Conference Proceeding Papers

1. **Zhang J.**, Li J., Tang X., Wilson W. E. (1988) Production of organic hydroperoxides and hydrogen peroxide in HC-NOx-Dry air system. *Journal of the Environmental Chemistry Division, ACS*, Vol. 28, No. 2, pp. 96-98.
2. **Zhang J.**, He Q., Liou P. J. (1993) Concentrations of aldehydes in residential indoor and outdoor air. *Proceedings of Indoor Air '93, the 6th International Conference on Indoor Air Quality and Climate*, Vol. 2: pp. 165-169, Helsinki, Finland. (Peer reviewed)
3. Smith K.R., **Zhang J.**, Thorneloe S.A. (1995) Greenhouse gases from widely used small-scale combustion devices in developing countries: Phase I-II: stoves in India and China and Phase III: charcoal kilns in Thailand. *Proceedings of the EPA's Symposium on Greenhouse Gas Emissions and Mitigation Research*, June 27-29, 1995, Washington, D.C.
4. **Zhang J.** and Smith K.R. (1996) Indoor air pollution: Formaldehyde and other carbonyls emitted from various cookstoves. *Proceedings of Indoor Air '96, the 7th International Conference on Indoor Air Quality and Climate*, Vol. 2, pp. 85-90, Nagoya, Japan. (Peer reviewed)
5. Fan C., **Zhang J.** and Cheung J. P. (1997) Air pollutants emitted from household combustion sources. *Proceedings of Measurement of Toxic and Related Air Pollutants Symposium*, Air & Waste Management Association, April 29 - May 1, 1997, Research Triangle Park, North Carolina.
6. **Zhang J.**, Smith K.R., Kishore V.V.N., Ma Y., Rasmussen R., Uma R., Khalil M.A.K., Kusam J. and Thorneloe S.A. (1997) Greenhouse Gases from Cookstoves in Developing Countries: Preliminary Emission Factors. *In Emission Inventory: Planning for the Future, Proceedings of the 1997 AWMA/EPA Emission Inventory Conference*, October 28-30, 1997, Research Triangle Park, North Carolina, Vol 1, pp. 368-378.
7. Fan C. and **Zhang J.** (1998) Particulate matter and other air pollutants from several portable household combustion devices: particle size distributions, emission rates, emission factors, and potential exposures. In *Proceedings of AWMA's Conference of PM2.5, A Fine Particle Standard*, January 27-30, 1998, Long Beach, California, Pp 876-888.
8. Qian Z., **Zhang J.**, Wei F., Chapman R.S. Impacts of cooking coal smoke and heating coal smoke on respiratory health of children in four Chinese cities. *Proceedings of Indoor Air 2002*. Vol IV, pp. 1030-1035. (Peer reviewed)
9. Fiedler N., **Zhang J.**, Fan Z., Kelly-McNeil K., Liou P.J., Gardner C., Ohman-Strickland P., Kipen H. Health effects of a volatile organic mixture with and without ozone. *Proceedings of Indoor Air 2002*. Vol II, pp 596-601. (Peer reviewed)
10. Bai Z., Jia C., Zhu T., **Zhang J.** Indoor air quality related standards in China. *Proceedings of Indoor Air 2002*. Vol IV, pp 1012-1017. (Peer reviewed)
11. Liu W., **Zhang J.**, Zhang L., Weisel C.P., Turpin B.J., Morandi M.T., Colome S., Stock T.H., Korn L. Can personal exposure to carbonyls be predicted using residential indoor and outdoor concentrations? *The*

Proceedings of Indoor Air 2005, the 10th International Conference on Indoor Air Quality and Climate, Sept 4-9, 2005. Beijing China. pp 1759-1762. (Peer reviewed).