

# Barbara J. Turpin

Professor

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Environmental Sciences and Engineering  
Gillings School of Global Environmental Health  
University of North Carolina at Chapel Hill  
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## Education

- B.S. California Institute of Technology, 1984  
Major: Engineering and Applied Science  
Academic Focus: Mechanical/Environmental Engineering  
Research Focus: Air Pollution
- Ph.D. Oregon Health and Science University, 1990  
OGI School of Science and Engineering  
Environmental Science and Engineering

## Employment and Academic Rank

- Professor with tenure, UNC at Chapel Hill, 2015 - present  
Department Chair, UNC at Chapel Hill, August 2016 – July 2023  
Distinguished Professor with tenure at Rutgers, 2013 – 2015  
Campus Dean for Undergraduate Education, Rutgers, 2012 - 2015  
Full Professor with tenure at Rutgers, 2005 - 2013  
Associate Professor with tenure at Rutgers, 2000 - 2005  
Assistant Professor and Air Quality Specialist at Rutgers, 1994 - 2000  
Postdoctoral Research Associate, 1990 – 1994  
University of Minnesota Particle Technology Laboratory, Dr. Peter McMurry, Advisor  
Doctoral Student and Postdoctoral Associate, 1984 – 1990  
Oregon Health Sciences University (Formerly Oregon Graduate Center), Environmental Science and Engineering, Dr. James Huntzicker, Advisor  
Summer undergraduate research, 1984  
California Institute of Technology, Environmental Engineering Science, Dr. Glen Cass, Advisor  
Summer Undergraduate Research Fellow, 1983  
Dr. Ned Munger, Advisor, “Public Attitudes toward Water Reuse in Namibia, Southwest Africa,”  
California Institute of Technology

## **Honors and Awards**

Creative Advances in Environmental Sciences and Technology Award, American Chemical Society, 2018  
Fellow, American Association for Aerosol Research, 2014  
Fellow, American Geophysical Union, 2013  
Fellow, American Association for the Advancement of Science, 2011  
David Sinclair Award for “sustained excellence in aerosol research and technology by an established scientist still active in his/her career,” American Association for Aerosol Research (AAAR), 2010  
Haagen Smit Prize, 2009  
Cook College/NJAES Research Excellence Award, Rutgers University, 2004  
Merle Adams, Rutgers Cooperative Extension Research Award, 1999  
United States Fencing Team, 1989, 1992, National Champion 1992

## **Advisory and Oversight Committees**

National Academies Committee on the Chemistry of Urban Wildfires, 2021-2022  
EPA Clean Air Scientific Advisory Committee (CASAC) Particulate Matter Review Panel, Aug 30, 2021 – March 30, 2022  
Independent Particulate Matter Review Panel, submitted public comments on PM<sub>2.5</sub> standard, 2018-2020  
EPA Clean Air Scientific Advisory Committee (CASAC) Particulate Matter Review Panel, Oct 21, 2015- Oct 11, 2018  
Scientific Advisory Committee, U. Washington’s EPA Air Pollution and Health Center, 2011-2016  
Chair, External Review Team, U. North Carolina, Environ. Sciences and Engineering, 2010  
Haagen Smit Prize Committee, 2010  
Advisory Group, IARC Monographs on Air Pollution, WHO, 2004  
External Advisory Board, AIRES PM Epidemiology Study, 2000-2008  
Advisory Board Member, Eastern Regional Radon Training Center, Rutgers, 1996-2000

## **Professional Society Positions**

American Geophysical Union Atmospheric Science Fellows Committee, 2017-2020  
International Global Atmospheric Chemistry (IGAC) – International Commission for Atmospheric Chemistry and Global Pollution (iCACGP) Conference Organizing Committee, Natal Brazil 2014  
President, American Association for Aerosol Research (AAAR), 2012-2013  
Vice-President, AAAR, 2011-2012  
Chair, Development Committee, AAAR, 2011-2012  
Chair, Long Range Planning Committee, AAAR, 2011-2012  
Member, International Commission for Atmospheric Chemistry and Global Pollution, 2010-2014 (iCACGP is a Commission of the International Association of Meteorology and Atmospheric Sciences under the International Council for Science)  
Board of Directors Executive Committee, AAAR, 2010-2012  
Development Committee Member, AAAR, 2009-2012  
Conference Chair, American Association for Aerosol Science Annual Conference, 2003  
Electorate Nominating Committee Member, American Association for the Advancement of Science (AAAS), 2001-2004  
Board of Directors, American Association for Aerosol Research (AAAR), 1997-2000

## **Editor and Editorial Boards**

Associate Editor, *Environmental Science and Technology*, 2013 - 2020  
Editorial Board, *Atmospheric Environment*, 2015 - pres.  
Editorial Advisory Board, *Aerosol Science and Technology*, 2010 – 2005  
Editorial Board, *Environmental Health Perspectives*, 2009 – 2014  
Editorial Advisory Board, *Environmental Science and Technology*, 2008 - 2013  
Editorial Advisory Board, *Aerosol Science and Technology*, 1997 - 2003

## **Chair, Department of Environmental Sciences and Engineering, UNC (2016-2023)**

I served as Chair of the Department of Environmental Sciences and Engineering (ESE), located in the Gillings School of Global Public Health at University of North Carolina – Chapel Hill. ESE was the first environmental engineering department located in a school of public health. We harness environmental solutions to enhance public health and well-being, and foster resilience in the face of climate and environmental change - leveraging solution-oriented research, education, and practice. Students and faculty work collaboratively to: 1) understand the environmental transport and transformation of chemicals and infectious agents, 2) protect vulnerable populations from toxic exposures, 3) mitigate the impacts of climate change on air, water and health, and 4) create a healthy, sustainable and equitable future.

While Chair, ESE developed or participated in the development of three new MPH Concentrations (Environment, Climate and Health, Health Equity, and Global Health). We joined the Assured Enrollment program which enables us to pre-admit undergraduate students to our major at the time of UNC admission, started an undergraduate minor called Engineering for Environment, Climate and Health, and we started a discovery-based undergraduate learning community called the Environmental ECUIPP Lab (Engaging Communities and Undergraduates Inquiring for Public health Protection). These efforts have seen a doubling of our BSPH enrollment with a concurrent increase in student excellence and diversity. Together, the three new MPH concentrations have yielded enrollments in excess of 100 students.

## **Rutgers Campus Dean for Undergraduate Education (2012-2015)**

I was one of 5 distinguished faculty members who together served Rutgers' 60,000 students as Campus Deans. In this capacity, I participated in the crafting of University-wide initiatives to enhance undergraduate education at Rutgers (through the Office of Undergraduate Education) and developed initiatives to strengthen the campus community. I was part of the Rutgers University Administrative Council and the Dean's Council for the School of Environmental and Biological Sciences. I was involved in: development of an honors college to attract top undergraduate scholars, university strategic planning, and integration of the University of Medicine and Dentistry into Rutgers University. I led an effort to develop strategic goals for the Campus Deans (see below) and co-chaired the writing of a white paper on Campus Deans and co-curricular undergraduate education for the central administration. On my campus, I developed collaborations and programming with faculty and student leaders. I strive to inspire students to be more active learners and to contribute more broadly to society. Here are the goals that guided my work as Campus Dean and my allocation of University resources:

### ***Campus Dean Objectives:***

- Foster a multidisciplinary, multigenerational community of scholars
- Promote a campus culture that embraces a diversity of experiences and perspectives

- Engage students in the process of discovery, so they benefit from and contribute to research mission of the University
- Develop leadership capacity and civic responsibility, producing graduates who make positive societal change
- Graduate scholars who continue to learn and teach, sharing research-based information, spreading literacy, honoring Rutgers' historic legacy, and contributing to its Land Grant mission

## **Major University and School Committees**

### ***UNC:***

SPH Dean's Council, 2016-2023  
 Search committee, Gillings Associate Dean for Inclusive Excellence, 2022  
 Search committee chair, Gillings Vice Chair, 2020  
 SPH MPH Steering Committee, 2018-2019  
 Co-lead of "Environmental Health Solutions" MPH Concentration, 2018-present  
 SPH Organizational Development Plan Steering Committee, 2016-2017  
 SPH Core Curriculum Implementation Committee, 2016-2017  
 Vice-Chancellor's Implementation Committee for The Environment at Carolina, 2016

### ***Rutgers:***

Chair, Search for Henry Rutgers Professor of Earth, Ocean and Atmospheric Sciences, 2015  
 New Brunswick Campus Strategic Planning Coordinating Committee, 2014  
 Rutgers' Honors College Planning Committee, 2014  
 Vice Chancellor of Student Affairs Search Committee, 2013  
 Rutgers University Administrative Council, 2011-2014  
 Cabinet, School of Environmental and Biological Sciences (SEBS), 2011-2014  
 Faculty Advisor, SEBS Governing Council, 2011-2014  
 Board of Directors, Cook Community Alumni Association, 2011-2014  
 Curriculum and Education Committee, SEBS, 2011-2014  
 Appointments and Promotions Committee, SEBS, 2009-2012  
 Executive Council of the Graduate School of New Brunswick, 2007-2008  
 New Brunswick Faculty Council, 2007-2008  
 Cook College Planning Committee, 2004-2007  
 University Senate, 2003-2006  
 Judicial Board, Graduate School-New Brunswick, 2000-2001  
 Faculty Representative, Cook College Council, 1999-2000  
 Chair, Affirmative Action Committee, Cook College, 1997-1998  
 Affirmative Action Committee Member, Cook College, 1996-1998

## **Academic Appointments**

### ***UNC:***

Chair, Department of Environmental Science and Engineering, 2016 - 2023  
 Member, Department of Environmental Science and Engineering, 2015 – present  
 Co-Lead, Environmental Health Solutions MPH Concentration, 2018 - present

### ***Rutgers:***

Cook Campus Dean for Undergraduate Education, 2011-2017

Director, Environmental Sciences Graduate Program, MS & PhD, ~100 students, 2002-2005  
Director, Bioresource Engineering Graduate Program, MS, 2000-2003  
Member, Environmental and Occupational Health Sciences Institute, Rutgers and UMDNJ  
Adjunct member, NIEHS Center of Excellence, Rutgers and UMDNJ  
Member, Environmental Sciences Graduate Faculty  
Member, Atmospheric Sciences Graduate Faculty  
Member, Graduate Program in Exposure Science, Rutgers  
Member, NIEHS Exposure Science Training Grant, 2010 – 2015, Rutgers

### **Plenary and Keynote Talks (invited)**

National Academies *Keynote Speaker*, “Emerging and Insightful Research Needs: Impacts Regarding Sources,” National Academies, Washington, DC., at Why Indoor Chemistry Matters Workshop 2: Prioritizing Indoor Chemistry Research, National Academies, Washington, DC., February 2024.  
Chemistry of Indoor Environments Conference *Keynote Speaker*, “If These Walls Could Talk: The Dynamic Behavior of Indoor Water-Soluble Organic Gases,” National Academies, Washington, DC October 2023.  
CMAS Conference *Plenary*, “Critical public health challenges that call for our engagement: How atmospheric chemists and engineers can help address our most pressing problems,” Chapel Hill, NC, October 2020.  
Chemistry of Indoor Environments, Keynote, “Opportunities and Challenges in the Study of Indoor Residential Chemistry,” Boulder, CO, October 2018.  
Healthy Buildings Conference, *Keynote Speaker*, “Invited Advancing the Understanding of Air Exposures at Home: Gleaning Insights from Decades of Air Chemistry Research,” Lublin, Poland, July 2017.  
European Aerosol Conference, *Plenary Lecturer*, “Secondary Organic Aerosol Formation through Atmospheric Chemistry: Atmospheric Evidence, Chemistry, Partitioning and Prediction,” Granada, Spain, September 2012.  
Association of Environmental Engineering and Science Professors (AEESP) (Invited) *Plenary Lecturer*, “Secondary Organic Aerosol Formation Through Reactions in Atmospheric Waters,” American Association for Aerosol Research Annual Conference, Portland, OR, October, 2010.  
International Global Atmospheric Chemistry (IGAC) *keynote lecture*, “Enhancing the Prognostic Capability of Global Aerosol Models: Atmospheric Aqueous Chemistry and Its Role in Secondary Organic Aerosol (SOA) Formation,” Halifax, Nova Scotia, 11-16 July, 2010.  
Berkeley Atmospheric Sciences Symposium *keynote lecture*, “Secondary Organic Aerosol Formation through Reactions in Atmospheric Waters,” University of California, Berkeley, CA, February 2010.  
Gordon Research Conference on Atmospheric Chemistry *plenary lecture*, “In-Cloud Formation of Secondary Organic Aerosol”, Big Sky, MT, Sept 2005.  
Health Effects Institute Annual Conference *plenary lecture*, “Linking Sources to Indoor and Personal Exposures (RIOPA Study),” Seattle, WA, April 2002.

### **Invited Panelist/Workshop Participant**

Surface Chemistry of the Indoor Environment Workshop, “Laboratory and field measurements to further predictive capabilities for surface chemistry: Water soluble organics,” University of California, San Diego, CA, January 2020.  
Triangle Environmental Health Collaborative 2019 Summit: PFAS: Integrating Science and Solutions in North Carolina, “Air Emissions and Atmospheric Deposition,” October 2019, RTP, NC.

Chemistry of Indoor Environments Symposium, American Association for the Advancement of Science (AAAS), AAAS Headquarters, Washington, DC, September 2019.

PFAS Network Science Meeting, “Atmospheric Concentrations and Deposition of PFAS,” Chapel Hill, NC, August 2019.

EPA-STAR Progress Review Meeting, “Anthropogenic Influences on Organic Aerosol Formation and Regional Climate Implications,” Environmental Protection Agency, Research Triangle Park, NC March 2016.

National Academy of Medicine Workshop, “Workshop on the Health Risks of Indoor Exposure to Particulate Matter,” Washington, DC, February, 2016.

Sloan Foundation Workshop “The Chemistry of the Indoor Environment Strategy Review,” New York, NY, September 2015.

A&WMA-Environmental Sciences Graduate Student Association Mini-Conference on “Pursuing a Successful Career in Science” *From Student to Professor Panelist*, Rutgers University, New Brunswick, NJ, February 2013

EPRI-A&WMA Workshop on Future Air Quality Model Development Needs, Washington, DC, September 2011

Atmospheric Sciences Collaborations and Enriching Networks (ASCENT) Workshop, for emerging senior atmospheric scientists, *Panelist*, Steamboat Springs, CO, July 2011

Higher Education Resource Service academic leadership retreat, Bryn Mawr College, June 2011

Southern Oxidant and Aerosol Study (SOAS) Workshop, New Brunswick, NJ, May 2011

Particulate Matter Peer Review/Authors Workshop, US Environmental Protection Agency (EPA), Research Triangle Park, NC, June 2008

Model Development Workshop, Electric Power Research Institute, Palo Alto, CA, May 2008

Session Co-Chair, Ambient Air Quality Monitoring and Health Research: Workshop to Discuss Key Issues, EPA, Research Triangle Park, NC, April 2008

Workshop to Discuss Policy-Relevant Science to Inform EPA’s Integrated Plan for the Review of the Primary PM NAAQS, EPA, Research Triangle Park, NC, July 2007

Health Effects of Organic Aerosols Workshop, Palo Alto, CA, October 2006

Particulate Matter: Atmospheric Sciences, Exposure and the Fourth Colloquium on PM and Human Health, *Plenary Panelist*, Pittsburgh, PA, 2003

Semi-continuous Measurement Technologies in the Context of Health Studies Workshop, at Particulate Matter: Atmospheric Sciences, Exposure and the Fourth Colloquium on PM and Human Health, invited participant, Pittsburgh, PA, 2003

Health Effects Institute Workshop on Air Toxics, Baltimore, MD, 2002

DOE Tropospheric Aerosols Program Workshop, Brookhaven National Laboratory, 1999

EPA Particulate Matter Research Needs Workshop, Research Triangle Park, NC, 1999

Health Effects Institute Workshop on PM Exposure Assessment, National Academy of Sciences, Washington, DC, 1997

EPA Particulate Matter Research Needs Workshop, Research Triangle Park, NC, 1996

NJ DEP National Environmental Performance Partnership Workshop, New Brunswick, NJ, 1996

DOE Research Needs Workshop, Boulder, CO, 1993

## **Peer Review Responsibilities**

### ***Integrated Science Assessment Reviews:***

*Integrated Science Assessment for Particulate Matter*, US Environmental Protection Agency (EPA), Clean Air Scientific Advisory Committee, PM Panel, 2016.

*Integrated Science Assessment for NO<sub>x</sub> and SO<sub>x</sub>*, US Environmental Protection Agency (EPA), Expert Peer Reviewer; 2015 Webinar.

*Integrated Science Assessment for Particulate Matter*, US Environmental Protection Agency (EPA), EPA/600/R-08/139F, 2009.

“Assessing Human Exposures of High Risk Sub-Populations to Particulate Matter,” National Exposure Research Laboratory (NERL) Report, US Environmental Protection Agency, July 2001.

“Evaluation of Proposed Methodology to Address Interferences Related to the Current OC/EC Analytical Method for the NERL PM Panel Studies,” National Exposure Research Laboratory (NERL) Report, US Environmental Protection Agency, May 2001.

“Visibility Assessment for the Southeastern US,” Report of the Southern Appalachian Mountains Initiative, October 1998.

"Chapter 3: Physics and Chemistry of Particulate Matter" in *EPA Criteria Document for Particulate Matter*, EPA/600/P-95/001aF, 1996, pg 3:1 – 3:240.

"Chapter 4: Sampling and Analysis Methods for Particulate Matter and Acid Deposition" in *EPA Criteria Document for Particulate Matter*, EPA/600/P-95/001aF, 1996, pg 4-1 – 4:146.

"Chapter 5: Sources and Emissions of Atmospheric Particles" in *EPA Criteria Document for Particulate Matter*, EPA/600/P-95/001aF, 1996, pg 5:1 – 5:81.

**Proposal and other reviews:** National Academies of Sciences, Engineering, and Medicine (NAS), US National Science Foundation (NSF), National Oceanic and Atmospheric Association (NOAA), Department of Energy (DOE), Environmental Protection Agency (EPA), Health Effects Institute (HEI), National Institute of Health (NIH), Swiss National Science Foundation (SNF), French National Research Agency (ANR)

**Journal reviews:** Science, Nature, Environmental Science and Technology, Atmospheric Chemistry and Physics, Environmental Health Perspectives, Journal of Geophysical Research – Atmospheres, Aerosol Science and Technology, Journal of Aerosol Science, Atmospheric Environment, Journal of Exposure Science and Environmental Epidemiology

## **Other Professional Service**

Expert Witness for NJ Attorney General, United States et al v. Ohio Edison, US District Court, Southern District of Ohio, Eastern Division, 2003-2005.

## **Professional Society Memberships**

American Association for the Advancement of Science (AAAS)  
American Association for Aerosol Research (AAAR)  
American Association of University Women (AAUW)  
American Chemical Society (ACS)  
American Geophysical Union (AGU)  
International Society of Indoor Air Quality and Climate (ISIAQ)

## **Departmental Search Committees**

### ***UNC:***

Gillings Vice Dean, Search Chair

Environmental Science and Engineering Business Manager Search Committee, 2015

### ***RUTGERS:***

Dept. of Environmental Health, School of Public Health, UMDNJ Faculty Search Committee, 2009-2010

Chair, Environmental Sciences Cluster Hire Faculty Search Committee, 2008-2009

SEBS – Graduate School of Education Faculty Search Committee, 2007-2008

Chair, Environmental Sciences Search Committee, 2000-2001

Rutgers Cooperative Extension Faculty Search Committee, 1999

Environmental Sciences Faculty Search Committees, 7 faculty lines, 1995-2004

## **Graduate Program Committees, Rutgers**

Coordinator, Air Pollution Science and Technology Option, Environmental Sciences Graduate Program, 2010-2015.

Curriculum Committee, Atmospheric Sciences Graduate Program, 2009-2012

Admissions Committee, Environmental Sciences Graduate Program, 2008-2011

Admissions Committee, Atmospheric Sciences Graduate Program, 2007-2010

Graduate Program Director, Environmental Sciences, 2002-2005

Graduate Program Director, Bioresource Engineering, 2000-2003

## **Departmental Committees, Rutgers**

Curriculum and Education Committee, Dept. of Environmental Sciences, 2007-2016

Chair, Curriculum and Education Committee, Dept. of Environmental Sciences, 2007-2010

Chair, Reading Committee for 1 Tenure Candidate, RCE, 2001

Leadership Input Committee (Dept Chair search), Dept. of Environmental Sciences, 1998

External Review Committee, Dept. of Environmental Sciences, 1997-1998

Undergraduate Curriculum Committee (major curricular revisions) Dept. of Environmental Sciences, 1996-2000

## **Extension Programming, Rutgers**

Presentation of air pollution measurement and enforcement short courses for federal, state and local air pollution practitioners. Presentation of NJ state certification and recertification courses for Visual Emissions, Odor Control and Community Noise Enforcement. Approximately 350 professionals are trained each year.

Operation of the Rutgers Noise Technical Assistance Center, which conducts training, lends noise monitoring equipment and provides technical support to communities, County Environmental Health Agents, other enforcement personnel and the Department of Environmental Protection. Approximately 400 enforcement officers are trained each year.



## Classroom Teaching

### *UNC:*

ENVR:205	Engineering Tools for Environmental Problem Solving, Instructor	2017-current
ENVR:704	Critical Analysis of Environmental Research	2020-current

### *RUTGERS:*

375:203	Physical Princ. of Environ. Science	Co-developed; taught even yrs	1999-2015
375:542	Aerosol Science	Developed, taught odd yrs	2011, 2013
107:501	Fundamentals of Atmospheric Sciences; 3 wk Atm Chem Module		2007-2009
117:474	Air Pollution Engineering	Developed; taught in Fall	1995-2011
375:524	Source Control of Air Pollution	Taught with 127:474	1995-2011
375:422	Air Sampling and Analysis	Lecture/lab, taught in Spring	1995-1999
117:488	Bioenv. Engineering Senior Design	Advised 1 team/yr	1994-1997

## Advising

### *Postdoctoral Research Advisor*

Haley Royer	2023-	Co-advisor, Advised by Jason Surratt
Alex McCumber	2022-2023	Advisor, Co-advised by Joe Brown
Jiaqi Zhou	2019-2022	Advisor
Sarah Petters	2017-2020	Advisor, Co-advised by Jason Surratt
Sophie Tomaz	2016-2018	Advisor, Co-advised by Jason Surratt Dr. Tomaz is a Research Assoc. at CNRS, Lyon, France
Neha Sareen	2012-2015	Co-advisor with Ann Marie Carlton Dr. Sareen is a Scientist at US EPA Region II
Yong Bin Lim	2008-2012	Dr Lim is now working at the Korean Institute of Science and Technology. He is the recipient of a Brainpool Fellowship by Ministry of Science, ICT and Planning in South Korea
Mark Perri	2007-2009	Co-advised with Sybil Seitzinger Dr Perri is an Assoc. Professor, Sonoma State Univ.
Qing Yu Meng	2004-2005	Dr. Meng is a Scientist in California Air Resource Board
Ho-Jin Lim	2001-2005	Dr Lim is Assoc. Prof, Kyungpook National University, Daegu, Korea
John Offenber	2001-2003	Dreyfus Postdoc with Dr. Steven Eisenreich Dr. Offenber is an EPA Scientist, RTP, NC
Jong Hoon Lee	1999-2003	Dr. Lee is a Scientist at the Southern California Air Quality Management District
Wenxuan (William) Cui	1998-1999	Dr. Cui works in the pharmaceutical industry

## ***PhD Advisor***

### ***UNC:***

Clara Eichler      PhD student 2020-2024    Advisor, ORISE Fellowship awardee (EPA)  
Naomi Chang      PhD student 2019-2024    Advisor, with Co-advisor Glenn Morrison

Marc Webb      “Water-soluble species in residential air, air-surface dynamics and the influence of surface films and water,” PhD Dissertation, Environmental Sciences and Engineering, University of North Carolina, 2017-2023, co-advised by Glenn Morrison and Jason Surratt. Dr. Webb is a Senior Staff Professional in the Raleigh office of Geosyntec Consultants.

### ***Rutgers:***

Sara Duncan      “Water-Soluble Organic Gases in Residential Indoor Air and the Potential for Aqueous Chemistry Indoors to Alter Exposures,” PhD Dissertation, Environmental Sciences, Rutgers University, 2012-2018. NIEHS Exposure Trainee. Dr. Duncan is an Assistant Professor at Western Carolina University.

Jeffrey Kirkland      “Aqueous OH Photooxidation of Atmospherically-Relevant Precursor Systems Through Laboratory Experiments,” PhD Dissertation, Environmental Sciences, Rutgers University, 2008-2014.

Natasha Hodas      “Variability in the Fraction of Ambient Fine Particulate Matter in Indoor Air and Implications for Air Pollution Epidemiology,” PhD Dissertation, Atmospheric Sciences, Rutgers University, 2008-2014. Recipient of EPA Graduate Fellowship, Air and Waste Management Association APERG Fellowship, Graduate Assistantship in Areas of National Need (GAANN) Fellowship. Now employed at Intel, Oregon.

Diana Ortiz-Montalvo      “Quantifying Secondary Organic Aerosol (SOA) Formed Through Cloud Chemistry and Cloud Droplet Evaporation,” PhD Dissertation, Environmental Sciences, Rutgers University, 2007-2013. Recipient of Ford Foundation, Air and Waste Management Association APERG Fellowship, Graduate Assistantship in Areas of National Need (GAANN). Dr. Ortiz-Montalvo is a Research Scientist at the National Institute of Standards and Technology.

Yi Tan      “Secondary Organic Aerosol (SOA) Formation from Aqueous OH Radical Oxidation of Dicarbonyl Compounds in the Atmosphere,” PhD Dissertation, Environmental Sciences, Rutgers University, 2005-2010.

Katy Altieri      “Insights into the Molecular Level Composition, Sources and Formation Mechanisms of Dissolved Organic Matter in Aerosols and Precipitation,” PhD Dissertation, Marine Sciences, Rutgers University, 2004-2009. Seitzinger Advisor; Turpin Co-Advisor. Wagner Award Winner; Global Change Postdoctoral Fellow at

Princeton University. Senior Research Officer at University of Cape Town, South Africa.

- Ann Marie Carlton “Secondary Organic Aerosol (SOA) Formation through Cloud Processing: Aqueous Photooxidation of Glyoxal and Methylglyoxal,” PhD Dissertation, Environmental Sciences, Rutgers University, 2003- 2006. NSF Graduate Fellowship, APERG Graduate Fellowship. Dr. Carlton is a Professor in the Department of Chemistry at University of California – Irvine. Winner of AAAR’s Susanne V. Hering Aerosol Science Impact Award.
- Andrea Polidori “Characterizing the Origin and Polarity of Organic Aerosol,” PhD Dissertation, Environmental Sciences, Rutgers University, 2001-2005. Now at the Southern California Air Quality Management District.
- Adam Reff “PM<sub>2.5</sub> Exposure Assessment Using FTIR Spectroscopy” PhD Dissertation, Environmental Sciences, Rutgers University, 2000-2005. Now at the US Environmental Protection Agency.
- Qing Yu Meng “Mechanistic Investigation of the Relationship of Indoor, Outdoor and Personal PM<sub>2.5</sub>,” PhD Dissertation, Environmental Sciences, Rutgers University, 2000-2004. (also awarded MS in Statistics). Now employed at the California Air Resources Board.
- Ho-Jin Lim “Semi-Continuous Aerosol Carbon Measurements: Addressing Atmospheric Processes of Local and Global Concern,” PhD Dissertation, Environmental Sciences, Rutgers University, 1996-2001. Now an Associate Professor at Kyungpook National University, Daegu, Korea.
- Nares Chuersuwan “New Jersey PM<sub>2.5</sub>: Issues Pertaining to the Development of Effective Control Strategies,” PhD Dissertation, Environmental Sciences, Rutgers University, 1996-2000. Now an Assistant Professor at the School of Environmental Health, Suranaree University of Technology, Thailand.
- Tsung Hung Li “Generation, Characterization, Aerosol Partitioning, and Indoor Measurements of Hydrogen Peroxide for Exposure and Toxicological Assessment,” PhD Dissertation, Environmental Sciences, Rutgers University, 1995-2000. Now works in aerosolized drug delivery.
- James Blando “Secondary Formation of Organic Particulate Matter in the Smoky Mountains,” PhD Dissertation, Environmental Sciences, Rutgers University, 1995- 1999. Now an Associate Professor at Old Dominion after a long tenure at the NJ Department of Health.
- Lisa Zussman “Development of Methods to Examine the Effects of Atmospheric Particulate Matter (PM) on Human Peripheral Blood Leukocytes,” PhD Dissertation, Environmental Sciences, Rutgers University, 1994-1999. Works at the interface between autism research and parents of autistic children.

***MS Advisor (thesis)***

***UNC:***

- Daniel Amparo Per- and Polyfluoroalkyl Substances (PFAS) in Residential Air Conditioner Condensate, co-adviser with Glenn Morrison, 2020-2022. Mr. Amparo is an Environmental Scientist at the Raleigh office of Arcadis International.
- Ashley Harrill Aqueous-Phase Processing of 2-Methyltetrol Sulfates by Hydroxyl Radical Oxidation in Fog and Cloud Water Mimics: Implications for Isoprene-Derived Secondary Organic Aerosol, co-adviser with Jason Surratt, 2019-2020
- Liyong Cui Design of a system to study reactive uptake of polar organic gases to realistic indoor surfaces, 2016 - 2018

***Rutgers:***

- Anjuli Ramos "Formation of Organic Aerosol through Cloud Chemistry: Insights from the OH Radical Oxidation of Filtered Rainwater," MS Thesis, Environmental Sciences, Rutgers University, 2009-2011.
- Craig Anderson "Assesment of Railway Activity and Train Noise Exposure: A Teaneck, New Jersey Case Study," MS Thesis, Atmospheric Sciences, Rutgers University, 2006-2009.
- Yasuko Yoshida "Advanced Trajectory Analysis to Examine the Influence of Sources and Source Regions on the Regional Mid-Atlantic States Aerosol," MS Thesis, Environmental Sciences, Rutgers University, 1999-2001.
- Ann Marie Carlton "Design and Method Development for Size-Segregation and Chemical Analysis of Personal Aerosol Exposures," MS Thesis, Bioresource Engineering, Rutgers University, 1994-1999. Dr. Carlton is a Professor in the Department of Chemistry at University of California – Irvine.
- Nares Chuerswan "Aerosol Carbon in New Jersey," MS Thesis, Environmental Sciences, Rutgers University, 1994-1996.

***MS Advisor (Rutgers; coursework)***

Francesco Maimone	graduated	2004-2008	Environmental Sciences
Stan Mak (returning student)	graduated	2007-2008	Environmental Sciences
Dawn Mason	graduated	2001-2003	Bioresource Engineering
Ritu Mody	graduated	1998-2000	Environmental Sciences
Michael Klien	graduated	1996-1999	Environmental Sciences
James DeNoble	graduated	1996-1999	Environmental Sciences
William Bull	graduated	1994-1997	Environmental Sciences
Keith Glynn	graduated	1993-1995	Environmental Sciences

***MS, PhD Committee Member***

***UNC:***

Jin Yan, Environmental Sciences and Engineering, PhD Student  
Sun Joo Huang, Environmental Sciences and Engineering, PhD Student  
Cade Christensen, Chemistry, PhD student  
Michael Davern, Chemistry, PhD student  
Gabiella West, Chemistry, PhD student  
Yuzhi Chen, Environmental Sciences and Engineering, PhD Student, graduated 2020.  
Chitsan Wang, Environmental Sciences and Engineering, PhD Student, 2015-2020.  
Ciao-kai Liang, Environmental Sciences and Engineering, PhD Student, 2015-2020.  
Michael Williams, Environmental Sciences and Engineering, MS Student, 2015-2017.  
Rachel Long, Environmental Sciences and Engineering, MSPH Student, 2015-2017.  
Caitlin Rose, Environmental Sciences and Engineering, MS Student, 2018-2019.  
Zhexi Zeng, Environmental Sciences and Engineering, MS Student, 2017-2018.

***Rutgers:***

numerous students in Rutgers Environmental Science Program.

***Other universities (outside member):***

Khoi Nguyen	“Aerosol Liquid Water: Measurement, Trends, and Implications for Atmosphere-Biosphere Interactions,” PhD Dissertation, Rutgers University, to defend March 2016.
Caroline Farkas	“Impact and Sensitivity Analyses of Energy Sector Emissions: Air Quality Modeling of the PJM Region,” PhD Dissertation, Rutgers University, December 2015.
Nasrin Aghamohammadi	“An Investigation of the Carbon-Sulphur-Nitrogen Fluxes During Experimental Burning of Selected Tropical Biomass Species,” PhD Dissertation, University of Malaya, Kuala Lumpur, April 2011.
Mohammed Tawfiq	“Development of Laboratory-Scale Burning Facility to Simulate Real-Time Burning of Tropical Biomass Species,” PhD Dissertation, Nik Mariam Nik Sulaiman advisor, University of Malaya, Kuala Lumpur, October 2009.
Elizabeth Galarneau	“Semivolatile Polycyclic Aromatic Hydrocarbons: Particle/Gas Partitioning Measurements and Models,” PhD Dissertation, Miriam Diamond advisor, University of Toronto, Canada, January 2007.
Raphael Tremblay	“Organic Speciation of Size-Segregated Atmospheric Particulate Matter,” PhD Dissertation, Rod Zika advisor, University of Miami, Coral Gables, Florida, USA, August 2006.

Elizabeth Cunningham “A Study of Nanoparticles: Silica Fume and Woodsmoke,” PhD Dissertation, John Todd advisor, University of Tasmania, Hobart, Australia, 2002.

Po-Fu Huang "Single Particle Analysis by Electron Microscopy: Insights Into Atmospheric Transformations," PhD Dissertation, Peter McMurry advisor, Department of Mechanical Engineering, University of Minnesota, Minneapolis, MN, USA 1997.

### ***Undergraduate Research***

Margot Francini, Sampling strategies for PFAS in air, BSPH Honors Research, Jan 2024 – present, Turpin advisor.

Isabella Siesel (BSPH Honors Thesis, UNC ESE), Indoor exposure to PFAS, Honors Research, Jan 2022 – May 2024. Turpin advisor.

Shalini Sharma (BSPH, Honors Thesis, UNC ESE), Environmental transmission of COVID-19, May 2021. Turpin committee member.

Ashley Harrill, “Aqueous OH oxidation of organosulfates under cloud-relevant conditions,” January 2019. Surratt advisor; Turpin co-advisor

Grace Nipp (B.S.P.H., Honors Thesis, UNC ESE), “Developing a Versatile Exposure System for the Analysis of the Effects of Electronic Cigarettes,” April 2019. Surratt advisor; Turpin committee member

Caitlin Rose, “The Effect of Isomeric Isoprene Epoxydiol Structure on the Sulfur Mass Balance of Fine Particulate Matter,” January 2019. Surratt advisor; Turpin committee member

Zhexi Zeng, “Development of a Hydrophilic Interaction Liquid Chromatography (HILIC) Method for the Chemical Characterization of Water-Soluble Isoprene Epoxydiol (IEPOX)-Derived Secondary Organic Aerosol,” May 2018. Surratt advisor; Turpin committee member

### **- Rutgers University**

Cynthia Naveendra	Experienced based education	Soluble biomass burning emissions	2013
Nancy Sazo	Public Health internship	Indoor organic pollutants	2013
Justin Corbo*	Aresty, Sr Chemistry Thesis	Aqueous atmospheric chemistry	2012-2013
*Justin received the Henry Rutgers Scholars Award for his research			
Anjuli Ramos	RISE program	Cloud processing SOA yields	2008
Antonio Riggi	UG research	Operation of upper-air met site	2008-2010
Mary Moore	UG research	In-cloud SOA modeling	2007-2008
Taylor Hayes	UG research	Modeling train noise exposure	2007-2008
Sumantha Prasad	UG research	Meadowlands OC/EC	2007-2008
Craig Matis	UG research	Noise exposure assessment	2006-2007
Mary Moore	UG research	Operation of upper-air met site	2005-2008
Mark Papier	UG research	Operation of upper-air met site	2002-2004
Francesco Maimone	UG research	Organic PM analysis methods	2001-2003
Tracy Shrestha	Project SUPER	ICP/MS analysis of PM	summer 2001
Sandra Lake	Sr. Thesis, Physics	Measurement of organic PM <sub>2.5</sub>	2000-2001
Marta Chicano	Int. Exchange, Spain	RIOPA field work	summer 2000

Andrea Polidori	Sr. Thesis, Int. Exch., Italy	Organic PM fractionation	2000
Adam Reff	Sr. Thesis, Chemistry	FTIR Spectroscopy of PM <sub>2.5</sub>	1999-2000
Zareen Dadwad	Project SUPER	Solubility of PM in lung fluid	1999
Robert Styles	Sr. Thesis, Chemistry	ICP/MS optimization for PM	1998-1999
Steve Locilento	UG research	PM <sub>2.5</sub> sampling issues	1996-97
Luke Oman	UG research	Operation of upper-air met site	1999-2001
David Bowman	UG research	Sampling and FTIR analysis	summer 1996
Luz Bigay	ACS SEED (HS Jr.)	Impactor performance	summer 1995
Amy Roos*	UG Research Oppor.	Sliver film TEM substrate	summer 1992
Kathy Podolske*	Sr. Thesis, ChemEng	Diffusion Separator	1991

\*Mentored as a postdoc under advisor Peter McMurry

### ***Undergraduate Co-op Advisor – Rutgers University***

Nancy Hanna	Johnson and Johnson	1998-1999
Keith Glenn	Roy Weston, Inc	1998
Bharvi Patel	Ingersoll Rand	1998
Tom Battagliese	Testo Inc.	1996-1997
Gretchen Zeigler	Merck	1996
Martin Eide	Ethicon	1996
Jennifer Trepkau	Rutgers Environ. Sci.	1995-1996
Max Achtau	Testo Inc.	1995-1996

### **Research Interests**

**Vision:** To improve the scientific understanding needed to predict the concentrations, properties, and effects of atmospheric aerosol, for the development of effective climate change mitigation strategies, air pollution control strategies, and public health protection

**Approach:** Secondary formation of organic aerosols; chemistry of indoor air, organic aerosol measurement and characterization; partitioning of organic compounds between gas and particulate phases; exposure assessment; collaborative aerosol health studies.

### **Research Grants and Contracts**

Pending NSF, “Generation of Atmospheric Reactive Oxygen Species from the Built Environment,” Morrison PI, Turpin Co-PI; 5/1/2024 - 4/30/2027, \$599,949.

Pending NSF, “Collaborative Research: Chemical Composition, Optical Properties and Photosensitized Reaction Potential of Biomass Burning Aerosols from East African Fuels - Laboratory and Ambient Measurements,” Bililign PI, Surratt and Turpin Co-PI; 9/1/2024 – 8/31/2027, \$449,956.

Pending NSF, “MRI Track 1: Acquisition of a High-Resolution Ion Mobility Time-of-Flight Mass Spectrometer to Advance Understanding of Atmospheric Multiphase Chemistry,” Zhang PI; 8/1/2024 – 7/31/2027.

PI, NC Collaboratory, “Toward an Improved Understanding of Airborne Per and Polyfluoroalkyl Substances (PFAS): Advancing Measurements of Air Concentrations and Emissions and Application to a North Carolina Occupational Setting,” 6/1/2024 – 5/31/2026, \$300,000.

Co-I, NSF, “NSF Engineering Research Center for Precision Microbiome Engineering (PreMiEr),” Gunsch (Duke) Lead PI, Stewart PI of UNC subcontract; 9/1/2022 – 8/31/2027, \$26M total (\$4,662,825 to UNC).

Co-I, EPA, “Development of High-Resolution Chemical Ionization Mass Spectrometry Methods for Real-Time Measurement of Emerging Airborne Per- and Polyfluoroalkyl Substances (PFASs),” Surratt (Lead PI), 5/1/2022-4/30/2025, \$799,833 total (\$400,028 to UNC).

PI, NC Collaboratory, “Chemical Characterization and Variability of Per- and Polyfluoroalkyl Substances (PFAS) in Indoor and Outdoor Air Environments in North Carolina,” with Surratt (Co-PI), 5/1/2022-4/30/2025, \$750,000 (total and to UNC).

Co-I, NSF, “Excellence in Research: Biomass Burning Aerosol - Molecular-Level Characterization of Aging Conditions on Optical and Chemical Properties,” with co-PIs Solomon Bililign (NCA&T) and Jason Surratt (UNC-CH), 9/1/2021 – 8/31/2025, \$258,328.

Co-I, NSF, “Collaborative Research: Organosulfate Multiphase Chemistry and Physicochemical Properties: Oxidation and Sulfate Recycling in Aerosols and Cloud Droplets,” with PI Jason Surratt, and Co-Is Andy Ault, Zhenfa Zhang, Avram Gold, 2/1/2021 – 1/31/2024, \$899,401 total (\$474,387 to UNC).

Principal Investigator, NSF, “RAPID: Airborne CoV-2 viability and oxidation,” with Co-Investigators Jason Surratt, Glenn Morrison, Karsten Baumann, Joe Brown, Jill Stewart, Mike Fisher, Ralph Baric, 8/1/2020-7/31/2022, \$199,939.

Principal Investigator, Alfred P. Sloan Foundation, “Probing the Behavior of Emerging Water-Soluble Organic Compounds in Indoor Air,” with Co-Investigators Glenn Morrison, Jason Surratt, and Joanna Atkin, 7/1/2020 – 12/31/2023, \$500,000.

Co-Principal Investigator, UNC Collaboratory, “Measurement of PFAS in Air and Atmospheric Deposition,” with Co-PI Ralph Mead, and Brooks, Kieber, Skrabel, and Bauman, 7/1/2018 – 6/30/2021, \$541,188.

Principal Investigator, Alfred P. Sloan Foundation, “Investigating the Impacts of Water-Soluble Organic Gases and Surface Chemistry on Air Composition in Damp Homes,” with Co-Investigators Glenn Morrison, Jason Surratt, and Joanna Atkin, 7/1/2017 – 6/30/2022, \$750,000.

Principal Investigator, National Oceanic and Atmospheric Association, “Characterizing Oxidized North American Fire Emissions and Their Aqueous/Multiphase Atmospheric Transformations through the FIREX Campaign,” with Co-PI Jason Surratt, 7/1/2016-6/30/2020, \$597,723.

Principal Investigator, Alfred P. Sloan Foundation, “Investigating the Impact of Aqueous Chemistry on Indoor Air,” 6/1/2015-5/30/2017, \$200,000.



Principal Investigator, EPA-STAR grant, "Organic Aerosol Formation in the Humid, Photochemically-Active Southeastern US: SOAS Experiments and Simulations," with Ann Marie Carlton, 4/1/2013 – 3/31/2016, \$399,928.

Principal Investigator, NSF grant, "Collaborative Research: Secondary Organic Aerosol Production in Real Atmospheric Waters," with Jeffrey Collett and Frank Keutsch, 4/1/2011-3/31/2015, \$1,264,000 total, \$574,966 Turpin portion.

Principal Investigator, EPA Cooperative Agreement, "Refined Exposure Surrogates for Ambient PM in Epidemiology Studies," 9/1/08 – 8/31/11, with Melissa Lunden, David Rich and Pamela Ohman-Strickland, \$199,999.

Principal Investigator, EPA-STAR, "Improved Prediction of In-Cloud Biogenic SOA: Experiments and CMAQ Model Revisions," 11/01/07-10/31/11, with Sybil Seitzinger, \$598,543.

Principal Investigator, NOAA, "Investigating the In-Cloud Formation of Secondary Organic Aerosol," 07/01/07-06/30/11, with Sybil Seitzinger, \$458,328.

Principal Investigator, NSF, "Investigating the Aqueous-phase Chemistry of In-Cloud Secondary Organic Aerosol Formation," 10/1/06-9/31/10, with Sybil Seitzinger, \$432,117.

Principal Investigator, US Environmental Protection Agency, "Study of Train Noise in Teaneck, NJ" with Eric Zwerling, 9/1/05-8/31/09, \$299,907.

Principal Investigator, WRRI, "A Study of Nitrogen Fluxes in an Urban Wetland to Determine Potential Enhancement of Denitrification after Wetland Restoration and Enhancement," with Sybil Seitzinger and Beth Ravit, 3/1/05-2/28/06, \$30,000.

Co-Project Director, Rutgers University Academic Excellence Fund Project, "Triple Quadrupole GC/MS For Analysis of Trace Organics in Environmental Matrixes," 2005, Project PI: Lisa Totten, \$175,000.

UMDNJ Subcontract PI (Meadowlands Commission) "Baseline Assessment of Meadowlands Air Quality: Particulate Matter Measurements," 2004-2007, Project PI: Clifford Weisel, Turpin portion \$22,500.

UMDNJ Subcontract PI (US EPA) "Assessment of the contribution to personal exposures of air toxics from mobile sources: Particulate Matter." 11/1/03-6/30/04, Project PI: Weisel, Turpin portion \$15,550.

UMDNJ Subcontract PI (American Lung Association) "Capsaicin and citric acid cough sensitivity: Generation and characterization of exposures," 7/1/03-6/31/05, Project PI: R. Laumbach, Turpin portion \$19,120.

Principal Investigator, US Environmental Protection Agency, "Secondary and Regional Contributions to Organic PM: A Mechanistic Investigation of Organic PM in the Eastern and Southern United States," 10/1/03-9/30/07, with Co-I Sybil Seitzinger and Ho-Jin Lim \$446,061.

Principal Investigator, Center for Environmental Indicators, Exposure to Organic and Elemental Carbon, 7/03-6/05, \$7,000.

Co-Investigator, Health Effects Institute, "Role of Irritant Receptors in Cardiovascular Effects of Fine Airborne Particulate Matter," 11/02-10/04, \$50,000, Project PI: Dr. Christine Nadziejko, NYU.

Principal Investigator, Center for Environmental Indicators, Measurement of Diesel Indicators: Pilot Study, 6/02-5/03, with Co-I John Offenber, \$5,400.

Principal Investigator, Electric Power Research Institute, "Characterizing Organic Fine Particulate Matter (PM<sub>2.5</sub>) for the Pittsburgh Supersite," 2/02-6/04, \$50,000.

Principal Investigator, DEP/EPA, "Sources of Air Toxics to the Hudson River Harbor Estuary: Analysis of New Jersey's Atmospheric Deposition Network," 3/1/01-2/28/03, with Steven Eisenreich, \$133,384.

Carnegie Mellon University Subcontract PI (DOE), The Pittsburgh PM Supersite Program: A Multidisciplinary Consortium for Atmospheric Aerosol Research, "Size and Time-Resolved Measurements of the Organic Fraction of PM<sub>2.5</sub>: Toward a Better Understanding of Exposures and Effective Control Strategies," 2/01-1/05, Turpin portion \$322,000.

Co-PI, NSF, "Collaborative Research: Submicron Organic Aerosol Measurements during ACE-Asia," 9/00-8/02, with project PI Lynn Russell, \$71,687 Turpin portion.

Principal Investigator, NJ Department of Environmental Protection, "Fine Particle Source Apportionment and Data Analysis," 8/99-7/00, with Paul Lioy, \$83,071.

Principal Investigator, Electric Power Research Institute Grant, "Time-Resolved Organic and Elemental Carbon Measurements for the Atlanta Supersite Experiment," 6/99-5/00, \$15,000.

Harvard University Subcontract PI (EPA), "Pollutant Exposure of COPD-Diagnosed Individuals in Los Angeles," 10/98-9/02, with Helen Suh project PI, Turpin portion \$250,000.

Principal Investigator, Health Effects Institute Grant, "Contributions of Outdoor PM Sources to Indoor Concentrations and Personal Exposures: A Three City Study," 7/98-12/02, \$1,132,206.

Principal Investigator, Electric Power Research Institute Grant, "Organic PM: Insights Gained from SEAVS and Considerations for Future Studies," 1/98-6/99, \$29,977.

Co Investigator, Health Effects Institute Grant, "Role of Peroxides and Macrophages in Fine Particulate Matter Toxicity," 1/98-12/00, with PI Debbie Laskin, \$440,701.

Co-Investigator, Mickey Leland Urban Air Toxics Center Grant, "Contributions of Outdoor Sources to Indoor Concentrations and Personal Exposures to Air Toxics," 1/98-12/01, with PI Cliff Weisel, \$1,499,034.

Co-Investigator, NIEHS Center of Excellence Exploratory Research Grant, EOHSI, "Development of an Online Flow Cell Fluorescent Spectrometer for the Measurement of Gas and Particle-Phase Peroxides to Examine their Role in Particle-Induced Injury," 1997-1998, with PI Brian Buckley and Debbie Laskin, \$14,950.

Co-Investigator, NIEHS Center of Excellence Exploratory Research Grant, EOHSI, "Separation of Aerosol Organics by Functional Group Composition Using Thin Layer Chromatography," 1996-1997, with PI Monica Mazurek, \$12,500.

Principal Investigator, Electric Power Research Institute Grant, "FTIR Microscopy in the SE Aerosol and Visibility Study," 1995-1998, with co-investigator Paul Lioy, \$182,100.

Principal Investigator, NIEHS Center of Excellence Exploratory Research Grant, EOHSI, "Development of Personal Exposure Monitoring Methods for Organic Aerosols," 1995-96, with co-investigator Paul Lioy, \$12,272.

Principal Investigator, Rutgers Research Council Grant, "Secondary Formation of Organic Aerosol in New Jersey," 1995-96, \$4,000.

Principal Investigator, NSF Exploratory Research Grant, "The Development of Scanning Electron Microscope Techniques to Ascertain the Microscopic Mixing Characteristics of Atmospheric Aerosols," 1992-95, \$18,000.

### **Training/Public Service Grants and Contracts**

Principal Investigator, NJ Department of Environmental Protection Training Grant, "Visible Emission Evaluation and Odor Enforcement Training to NJDEP and CEHA Agency Personnel," Annual Contracts July 1998 – July 2015, totaling \$462,945.

Principal Investigator, NJ Department of Environmental Protection Training Grant, "NJ Noise Enforcement Training and Technical Assistance," with co-investigator Eric Zwerling, Annual Contracts July 1994 – June 2015, totaling \$506,866.

Principal Investigator, NJ Department of Environmental Protection, "Operation of Rutgers University Photochemical Assessment Monitoring Site," 5/1/05-4/30/11. \$244,448.

Principal Investigator, City of Vancouver, "Community Noise Measurement and Enforcement for Vancouver, Canada," 4/08 – 6/08, with Co-PI Eric Zwerling, \$22,133.

Principal Investigator, US Environmental Protection Agency Air Pollution Training Institute, "Air Pollution Training Grant," 10/02-9/07, \$232,500.

Principal Investigator, US Environmental Protection Agency Air Pollution Training Institute, "Air Pollution Training Grant," 9/01-8/02, \$31,500.

Principal Investigator, Dreyfus Foundation Postdoctoral Fellowship, with Dr. Eisenreich, 7/01-6/03, \$48,000.

Principal Investigator, US Environmental Protection Agency Air Pollution Training Institute, "Air Pollution Training Grant," 9/98-8/01, \$210,481.

Principal Investigator, City of Anchorage, "Noise Code Enforcement Training," with co-Investigator Eric Zwerling, 1998, \$5999.

Principal Investigator, NJ Department of Environmental Protection, "Rutgers University Photochemical Assessment Monitoring Site," 1997-2005, Annual contracts totaling \$200,000.

Principal Investigator, City of Seattle, "Noise Enforcement Training Course," with co-investigator Eric Zwerling, 1997-1998, \$5,100.

Principal Investigator, US Environmental Protection Agency Air Pollution Training Institute, "Air Pollution Training Grant," 9/95-8/98, \$192,406.

Principal Investigator, US Environmental Protection Agency Air Pollution Training Institute, "Air Pollution Training Grant," 1994-95, \$48,000.

## Peer Reviewed Journal Publications

(\*indicates corresponding author; \*\* indicates member of Dr. Turpin's research group)

152. Eichler, C.M.A., Chang, N.Y., Amparo, D.E., Cohen Hubal, E.A., Surratt, J.D., Morrison, G.C., **Turpin, B.J.**\* (2024) Partitioning of neutral PFAS in homes and release to the outdoor environment: Results from the IPA Campaign, in preparation.
151. Chang, \*\* N.Y., Eichler, \*\* C.M.A., Amparo, \*\* D.E., Zhou, \*\* J., Baumann, K., Cohen Hubal, E.A., Surratt, J.D., Morrison, G.C., **Turpin, B.J.**\* (2024) Indoor Air Concentrations of Quartz Fiber Filter-Collected Ionic PFAS and Emissions to Outdoor Air: Findings from the IPA Campaign, in preparation.
150. Webb, \*\* M., Morrison, G., Baumann, K., Li, J., Ditto, J., Huynh, H., Yu, J., Mayer, K., Mael, L., Kim, D., Link, M., Vance, M., Farmer, D., Abbatt, J., Grassian, V., Poppendieck, D., **Turpin, B.J.**\* (2024) Dynamics of Residential Indoor Gas- and Particle-Phase Water-Soluble Organic Carbon: Measurements during the CASA Experiment, in preparation.
149. Ditto, J., Webb, \*\* M., Huynh, H., Yu, J., Morrison, G., **Turpin, B.J.**, Alves, M., Mayer, K., Link, M., Goldstein, A., Poppendieck, D., Vance, M., Farmer, D., Chan, A.W.H., Abbatt, J.P.D. (2024) The role of indoor surface pH in controlling the fate of acids and bases in an unoccupied residence. *ES&T Air*, submitted.
148. Farmer \*, D.K., Vance \*, M.E., Poppendieck, D., Abbatt, J., Alves, M.R., Dannemiller, K., Deeleepejananan, C., Ditto, J., Dougherty, B., Farinas, O., Goldstein, A., Grassian, V.H., Kim, D., King, J., Kroll, J., Li, J., Link, M., Mael, L., Mayer, K., Martin, A.B., Morrison, G., O'Brien, R., **Turpin, B.J.**, Webb, \*\* M., Zimmerman, S.M. (2024) The Chemical Assessment of Surfaces and Air (CASA) Study: Using chemical perturbations in a test house to investigate indoor processes, *ESPI*, submitted.
147. Cui, T., Tomaz, \*\* S., Tarun-Chenna, S., Tian, Z., Li, H., Selimovic, V., Chen, Y., Sexton, K.G., May, A.A., Cappa, C.D., Kroll, J.H., Roberts, J.M., Warneke, C., de Gouw, J., Yokelson, R.J., Jathar, S., **Turpin, B.J.**,\* Surratt, J.D.\* (2024) Chemical Composition of Brown Carbon Aerosol

from Primary and Photochemically-Aged Laboratory-Simulated Western US Wildfire Emissions, *ACS Earth and Space Chemistry*, in preparation.

146. Tomaz,\*\* S., Petters,\*\* S.S., Surratt, J.D.,\* **Turpin, B.J.**\* (2024) Furan-like Molecules Emitted by Biomass Burns: A Potential Source of Aqueous Secondary Organic Aerosol, *Environ. Sci. Technol.*, in preparation.
145. Kirkland,\*\* J.R., Lim,\*\* Y.B., Sullivan, A.P., Collett Jr., J.L., Skog, K., Keutsch, F.N., Decesari, S., Facchini, C.M., **Turpin, B.J.**\* (2024) Amines, organic acids, and aqueous photooxidation of water-soluble gasses from the Po Valley, Italy, *Atmos. Environ.*, in preparation.
144. Davern, M.J., West, G.V., Eichler,\*\* C.M.A., **Turpin, B.J.**, Zhang,\* Y., Surratt,\* J.D. (2024) External Liquid Calibration Method for Iodide Chemical Ionization Mass Spectrometry Enables Quantification of Gas-Phase Per- and Polyfluoroalkyl Substances (PFAS) Dynamics in Indoor Air, *Analyst*, submitted.
143. Cooke, M.E., Armstrong, N.C., Frankhauser, A.M., Chen, Y., Lei, Z., Zhang, Y., Ledsky, I.R., **Turpin, B.**, Zhang, Z., Gold, A., McNeill, V.F., Surratt, J.D., Ault,\* A.P. (2024) Decreases in Epoxide-Driven Secondary Organic Aerosol Production Under Highly Acidic Conditions: The Importance of Acid-Base Equilibria, *ES&T*, submitted.
142. Moschos, V., Christensen, C., Mouton, M., Fiddler, M., Isolabella, T., Mazzei, F., Massabò, D., **Turpin, B.**, Bililign, S., Surratt, J. (2024) Quantifying the Light-Absorption Properties and Molecular Composition of Brown Carbon Aerosol from Sub-Saharan African Biomass Combustion, *Environ. Sci. Technol.* 58, 4268–4280.
141. Chen, Y., Ng, A., Green, J., Zhang, Y., Riva, Matthieu, Riedel, T., Pye, H., Lei, Z., Olson, N., Cooke, M., Zhang, Z., Vizuete, W., Gold, A., **Turpin, B.J.**, Ault, A., Surratt,\* J. (2024) Applying a Phase-Separation Parameterization in Modeling Secondary Organic Aerosol Formation from Acid-Driven Reactive Uptake of Isoprene Epoxydiols under Humid Conditions, *ACS ES&T Air*, in press.
140. Nassikas, N.J., McCormack, M.C., Ewart, G., Balmes, J.R., Bond, T., Brigham, E., Cromar, K., Goldstein, A.H., Hicks, A., Hopke, P.K., Meyer, B., Nazaroff, W.W., Paulin, L.M., Rice, M.B., Thurston, G.D., **Turpin, B.J.**, Vance, M., Weschler, C.J., Zhang, J., Kipen, H. (2024) Indoor air sources of outdoor air pollution: Health consequences, policy, and recommendations, *Annals ATS*, Vol 21, No 3, pp 365–376. DOI: 10.1513/AnnalsATS.202312-1067ST
139. Khan, F., Chen, Y., Hartwell, H.J., Yan, J., Lin, Y.-H., Freedman, A., Zhang, Z., Zhang, Y., Lambe, A.T., **Turpin, B.J.**, Gold, A., Ault, A.P., Szmigielski,\* R., Fry,\* R.C., Surratt,\* J.D. (2023) Heterogeneous Oxidation Products of Fine Particulate Isoprene Epoxydiol-Derived Methyltetrol Sulfates Increase Oxidative Stress and Inflammatory Gene Responses in Human Lung Cells, *Chemical Research in Toxicology*, 36(11), 1814-1825.
138. Eichler,\*\* C.M.A., Chang,\*\* N.Y., Cohen Hubal, E.A., Amparo, D.E., Zhou, J., Surratt., J.D., Morrison, G.C., **Turpin,\* B.J.** Cloth-Air Partitioning of Neutral Per- and Polyfluoroalkyl Substances (PFAS) in North Carolina Homes during the Indoor PFAS Assessment (IPA) Campaign (2023) *Environ. Sci. Technol.*, 57 (40), 15173-15183, 10.1021/acs.est.3c04770.
137. Plaas, H.E., Yan, J., Christensen, C., Chang, S., Cortez, C., Fern, S., Nelson, L., Sabo, A., Armstrong, N.C., **Turpin, B.J.**, Paerl,\* H.W., Surratt,\* J.D. (2023) Secondary Organic Aerosol

Formation from Cyanobacterial-Derived Volatile Organic Compounds, *ACS Earth and Space*, 7, 1798-1813.


136. Yan, J., Zhang, Y., Chen, Y., Armstrong, N.C., Buchenau, N.A., Lei, Z., Xiao, Y., Zhang, Z., Lambe, A.T., Chan, M.N., **Turpin, B.J.**, Gold, A., Ault, A.P., Surratt,\* J.D. (2023) Kinetics and Products of Heterogeneous Hydroxyl Radical Oxidation of Isoprene Epoxydiol-Derived Secondary Organic Aerosol, *Earth Space Chem.* 7, 1916–1928.
135. Li, J., Link, M., Pandit, S., Webb,\*\* M., Deelepojananan, C., Mayer, K., Garofalo, L., Rediger, K., Poppendieck, D., Zimmerman, S., Karion, A., Vance, M., Grassian, V., Morrison, G., **Turpin, B.**, Farmer,\* D. (2023) The persistence of smoke VOCs indoors: Partitioning, surface cleaning, and air cleaning in a smoke-contaminated house. *Science Advances*, 9(41), p.eadh8263.
134. Webb,\*\* M., Cui,\*\* L., Morrison, G., Baumann, K., Surratt, J.D., Zhang, Z., Atkin, J., **Turpin, B.J.** (2023) The Fate of Organic Peroxides Indoors: Quantifying Humidity-Dependent Uptake on Naturally Soiled Indoor Window Glass, *Environ. Sci. Processes Impacts*, 25, 1031-1048, <https://doi.org/10.1039/D3EM00041A>
133. Zhou,\*\* J., Baumann, K., Surratt, J.D., **Turpin,\* B.J.** (2022) Legacy and Emerging Per- and Polyfluoroalkyl Substances (PFAS) Collected on PM<sub>2.5</sub> Filters in Close Proximity to a Fluoropolymer Manufacturing Facility, *Environ. Sci. Processes Impacts*, 24, 2272-2283.
132. Armstrong, N.C., Chen, Y., Cui, T., Zhang, Y., Christensen, C., Zhang, Z., **Turpin, B.J.**, Chan, M.N., Gold, A., Ault, A.P., Surratt,\* J.D. (2022) Isoprene Epoxydiol-Derived Sulfated and Non-Sulfated Oligomers Suppress Particulate Mass Loss During Oxidative Aging of Secondary Organic Aerosol, *Environ. Sci. Technol.*, 56, 16611-16620.
131. Bangma, J., McCord, J., Giffard, N., Buckman, K., Petali, J., Chen, C., Amparo,\*\* D., **Turpin, B.**, Morrison, G., Strynar,\* M. (2022) Analytical Method Interferences for Perfluoropentanoic Acid (PFPeA) and Perfluorobutanoic Acid (PFBA) in Biological and Environmental Samples, *Chemosphere*, 13772.
130. Coffaro, B., Kipen, H., Duncan,\*\* S.M., **Turpin, B.J.** Weisel,\* C.P. (2022) Condensed-Phase Identification and Quantification from Squalene-Ozone Reactions, *Indoor Air*, submitted.
129. Zhou,\*\* J., Baumann, K., Chang,\*\* N., Morrison, G., Bodnar, W., Zhang, Z., Atkin, J.M., Surratt,\* J.D., **Turpin,\* B.J.** (2022) Per- and Polyfluoroalkyl Substances (PFASs) in Airborne Particulate Matter (PM<sub>2.0</sub>) Emitted During Floor Waxing, *Atmospheric Environment*, 268, 118845 <https://doi.org/10.1016/j.atmosenv.2021.118845>
128. Wolf,\* M.J., Zhang, Y., Zhou,\*\* J., Surratt, J.D., **Turpin, B. J.**, Cziczo, J.D. (2021) Enhanced ice nucleation of sea salt particles with the addition of fluorinated marine pollutants, *ACS Earth Space Chem.* 5, 2074-2085.
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## Book Chapters

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1. Altshuller, P., Ewald, W., Gillani, N., Gillette, D., Hering, S., Lioy, P.J., Noll, K., Pandis, S., Pankow, J., Schwartz, S., Wilson, W. E., Contributors: Barnes, M., Cahill, T., Tilton, B., Friedlander, S., McMurry, P., Soderholm, S., **Turpin, B. J.** "Chapter 3: Physics and Chemistry of Particulate Matter" in *EPA Criteria Document for Particulate Matter*, EPA/600/P-95/001aF, 1996.

## Invited Lectures and Seminars

- American Chemical Society Symposium on Women in Science and Engineering, "Critical Public Health Challenges Call for our Engagement. How Can We Help?" Atlanta, GA (virtual), August 2021
- Surface Chemistry of the Indoor Environment Seminar Series, "Sources and Partitioning of Forever Chemicals: Insights from PFAS Measurements," University of San Diego, San Diego, CA (virtual), March 2021.
- Rice University Seminar, "Water-Soluble Gases, Chemistry and Exposure: Insights from Diverse Environments," Houston, TX (virtual), March 2021.

Sorority and Fraternity Leadership and UNC Office of Fraternity and Sorority Life Annual Conference, "Understanding environmental exposures to COVID-19: aerosols and droplets," Chapel Hill, NC (virtual), January 2021.

Gillings' Building COVID-19 Research Collaborations Webinar Series fall 2020, "Where is SARS-CoV-2 and how does it get there?" Chapel Hill, NC, August 2020.

Chemistry of Indoor Environments Symposium, American Association for the Advancement of Science (AAAS), AAAS Headquarters, Washington, DC, September 2019.

American Chemical Society Creative Advances in Environmental Sciences and Technology Award Presentation, "Liquid Water, Water-Soluble Organic Gases, and Chemistry in Diverse Atmospheres," Presented at the American Chemical Society Conference, New Orleans, LA, March 2018.

Gordon Research Conference Invited Presentation, "Progress and Prospects: The Quest to Understand the Impacts of Multiphase Chemistry on a Wet Planet," Gordon Research Conference on Atmospheric Chemistry, Sunday River, Maine, August 2017.

Environmental Protection Agency STAR Progress Review Talk, "Organic Aerosol Formation in the Humid, Photochemically-Active Southeastern US: SOAS Experiments and Simulations," EPA, Raleigh, NC, March 2016.

Massachusetts Institute of Technology Seminar, "Controlling Exposure to Fine Atmospheric Particles: The Role of Liquid Water," MIT Department of Civil and Environmental Engineering, Cambridge, MA, March 2016.

National Academy of Medicine Health Risks of Indoor Particulate Matter Exposure Workshop Talk, "Indoor Air Characterization Provides Insights into PM Sources and Transformations," Washington, DC, February, 2016.

North Carolina State University Seminar, "Controlling Exposures to Fine Atmospheric Particles: The Role of Liquid Water," NC State Department of Civil and Environmental Engineering, Raleigh, NC, January 2016.

Sloan Foundation Workshop Presentation "Does Aqueous Chemistry Alter Exposures in Damp Buildings?" Sloan Foundation, New York, NY, September 2015.

University of North Carolina Seminar "Anthropogenic Waters Alter Atmospheric Chemistry. What Are The Implications to Air Quality and Exposure in a Changing World," University of North Carolina, Department of Environmental Science and Engineering, Chapel Hill, NC, August 2015.

Rutgers University – Newark Seminar, "Atmospheric Water: A Medium for Organic Transformations," Rutgers University – Newark, Department of Earth and Environmental Sciences, Newark, NJ, October 2014.

University of North Carolina Seminar "Controlling Exposure to Fine Particles: In and Out of the Clouds," University of North Carolina, Department of Environmental Science and Engineering, Chapel Hill, NC, June 2014.

New Jersey Institute of Technology Seminar, "Exploring Atmospheric Aqueous Chemistry and Secondary Organic Aerosol Formation," New Jersey Institute of Technology, Department of Chemistry, Newark, NJ, February 2014.

Mid-Atlantic Regional Air Management Association (MARAMA) 2012 Monitoring Committee Meeting, "Secondary organic aerosol formation in the eastern U.S.," Philadelphia, PA, September 2012.

EPRI-A&WMA Workshop, "State of the Science and Research Needs: Heterogeneous Chemistry and Prediction of Organic Aerosol," EPRI-A&WMA Workshop on Future Air Quality Model Development Needs, Washington, DC, September 2011.

Princeton University Seminar, "Atmospheric Aqueous Photochemistry Forms Complex Organic Matter," Princeton University, Dept of Geosciences, May 2011.

Firmenich Inc. Seminar, "Atmospheric Chemical Processes from Regional to Personal Scale Dictate Exposure to Particulate Air Pollution," Firmenich Inc., Plainsboro, NJ, March 2011.

University of Wisconsin - Madison Seminar, "Secondary Organic Aerosol Formation Through Aqueous Photochemistry in Clouds, Fogs and Aerosols," Department of Chemistry, University of Wisconsin, Madison, Wisconsin, May 2009.

Arizona State University Seminar, "Secondary Organic Aerosol Formation Through Aqueous Photochemistry," Department of Chemistry, Arizona State University, Tempe, AZ, February 2009.

University of Minnesota Seminar, "Secondary Organic Aerosol Formation Through Cloud Processing," Department of Mechanical Engineering, University of Minnesota, Minneapolis, MN, October 2008.

Model Development Workshop, "Prediction of In-Cloud SOA Production: Problems and Prospects," Model Development Workshop, Electric Power Research Institute, Palo Alto, CA, May 2008.

Columbia University Seminar, "Secondary Organic Aerosol Formation Through Cloud Processing of Isoprene Oxidation Products," Dept. of Chemical Engineering, Columbia University, NY, Jan 2008.

Gordon Research Conference Featured Presentation, "In-cloud SOA formation from water-soluble products of biogenic emissions" Presented at the Gordon Research Conference on Biogenic Hydrocarbons and the Atmosphere, Ventura, CA, Feb 2007.

Environment Canada Seminar, "Atmospheric processes from regional to personal scales dictate exposure to particulate air pollution," Environment Canada, Toronto, Canada, January 2007.

Health Effects of Organic Aerosols Workshop, "Health effects of organic aerosols: Exposure issues and measurement approaches," Health Effects of Organic Aerosols Workshop, Palo Alto, CA, Oct 2006.

NJ Clean Air Council Annual Public Hearing Testimony, "Contributions of Atmospheric Pollutants to Indoor Air Quality," NJ Clean Air Council Annual Public Hearing: Indoor Air Quality, Setting an Agenda for a Cleaner Future, Trenton, NJ, April 2006.

International Agency for Research on Cancer (IARC) Monograph Planning Meeting, "Characterizing exposures to atmospheric pollutants," IARC, Lyon, France, December 2004.

NJ Clean Air Council Annual Public Hearing Testimony, *Presented at:* NJ Clean Air Council Annual Public Hearing: Fine Particulate Matter in the Atmosphere: Health Impacts in New Jersey and Need for Control Measures, Trenton, NJ, April 2004.

Mid-Atlantic Regional Air Management Association (MARAMA) Workshop, "Organic aerosol measurement: Problems and prospects," MARAMA Meeting, Cape May, NJ, October, 2003.

Specialty Conference Workshop Panel Speaker, "Semi-continuous methods for measuring PM," Presented at Particulate Matter: Atmospheric Sciences, Exposure, and the Fourth Colloquium on PM and Human Health, Pittsburgh, PA, April 2003.

Specialty Conference Plenary Panel Speaker, "When and where are people exposed to PM?" Presented at Particulate Matter: Atmospheric Sciences, Exposure, and the Fourth Colloquium on PM and Human Health, Pittsburgh, PA, April 2003.

NJ Department of Environmental Protection (NJ DEP) Seminar, "Sources of Air Toxics to the Hudson River Harbor Estuary: Analyses of the New Jersey Atmospheric Deposition Network," NJ DEP, Trenton, NJ, January 2003.

New York University Seminar, "Fine particle processes: Regional and personal effects," Department of Environmental Medicine, New York University, Tuxedo, NY, September 2000.

Northeast States for Coordinated Air Use Management (NESCAUM) meeting, "Organic speciation for source apportionment and SIP development," NESCAUM Monitoring and Assessment Committee Meeting, Glens Falls, NY, June 2000.

DEP Commissioner Briefing, "Application of new source apportionment tools to NJ Atmospheric Deposition Network data," DEP Commissioner Shinn, Trenton, NJ, June 2000.

EOHSI Public Forum Panel Speaker, "Air Pollution Exposure and Effects: Global Implications," *Panelist*, Presented at the Public Forum: Environmental Health in the Twenty-first Century: Opportunities and Challenges, EOHSI, Piscataway, NJ, January 2000.

University of Delaware Seminar, "Measurement of organic aerosol," University of Delaware Department of Mechanical Engineering, Newark, DE, November 1997.

Specialty Conference Featured Lecture, "Measuring and simulating particulate organics in the atmosphere: problems and prospects," Air and Waste Management Association International Specialty Conference on Visual Air Quality, Aerosols and Global Radiation Balance, Bartlet, NH, September 1997.

Featured Conference Lecture, "Characterizing personal exposures to fine particulate matter and their relationships to indoor and outdoor concentrations," Presented at the American Society of Heating, Refrigeration and Air Conditioning Engineers Annual Meeting, Boston, MA, June 1997.

NJ Clean Air Council Annual Public Hearing Testimony, Public Hearing on the Proposed Fine Particulate Matter Health Standard, NJ Clean Air Council, Trenton, NJ, April 1997.

EOHSI Symposium Featured Lecture, "Organic Aerosols: Personal Monitoring and Characterization," Presented at the Tenth Anniversary Symposium of the Exposure Measurement and Assessment Division, Environmental and Occupational Health Sciences Institute (EOHSI), Rutgers University and UMDNJ, December 1995.

Environmental Sciences Graduate Student Seminar, "The Other Side of the Canyon," Rutgers University, November 1995.

EOHSI Graduate Student Seminar, "Atmospheric Aerosol Characterization, Exposure and Health Research," Environmental and Occupational Health Sciences Institute (EOHSI), Rutgers University/UMDNJ, November 1995.

Rutgers Cooperative Extension Seminar, "Techniques for Investigating Atmospheric Transformations Affecting Particulate Pollutants," Rutgers University, New Brunswick, NJ, April 1994.

Colorado State University Seminar, "Techniques for Investigating Atmospheric Transformations Affecting Particulate Pollutants," Dept. of Atmospheric Sciences, Colorado State University, Fort Collins, CO, March 1994.

University of Illinois Seminar, "Techniques for Investigating Atmospheric Transformations Affecting Particulate Pollutants," Department of Mechanical Engineering, University of Illinois, Chicago, IL, March 1994.

University of Santa Barbara Seminar, "The Study of Atmospheric Transformations Affecting Particulate Pollutants," University of California, Santa Barbara, CA, October 1993.

Pacific Northwest Laboratories Seminar, "The Study of Atmospheric Transformations Affecting Particulate Pollutants," Battelle: Pacific Northwest Laboratories, Richland, WA, February 1993.

Carnegie Mellon University Seminar, "Techniques for Investigating Atmospheric Transformations Affecting Particulate Pollutants," Department of Chemical Engineering, Carnegie Mellon University, Pittsburgh, PA, January 1993.

University of California – Berkeley Seminar, "Secondary Formation of Organic Aerosol: Investigation of the Diurnal Variations of Organic and Elemental Carbon," Department of Civil Engineering, University of California, Berkeley, CA, April 1992.

Clarkson University Seminar, "Secondary Formation of Organic Aerosol: Investigation of the Diurnal Variations of Organic and Elemental Carbon," Department of Civil Engineering, Clarkson University, Potsdam, NY, March 1992.

New Mexico Institute of Technology Seminar, "Secondary Formation of Organic Aerosol: Investigation of the Diurnal Variations of Organic and Elemental Carbon," New Mexico Institute of Technology, Socorro, NM, May 1991.

## Selected Conference Presentations

Underline indicates speaker; \*\*indicates member of Turpin research group

- Rawat, M.S., Eichler, \*\* C.M.A., Chang, \*\* N.Y., Brown, E., Fernando, S., **Turpin, B.J.**, Morrison, G.C., Holsen, T., Ferro, A.R. “Characterizing Size Distribution Patterns of PFAS in Indoor Dust for Improving Exposure Estimates,” For presentation at the International Society of Exposure Science, Montreal, CA, October 2024.
- Cooke, M.E., Armstrong, N.C., Fankhauser, A.M., Chen, Y., Lei, Z., Zhang, Y., Ledsky, I.R., **Turpin, B.J.**, Zhang, Z., Gold, A., McNeill, V.F., Surratt, J.D., Ault, A.P., “Decreases in Epoxide-Driven Secondary Organic Aerosol Production Under Highly Acidic Conditions: The Importance of Acid-Base Equilibria,” For presentation at the European Aerosol Conference, September 2024.
- Rawat, M.S., Eichler, \*\* C.M.A., Chang, \*\* N.Y., Brown, E., Fernando, S., **Turpin, B.J.**, Morrison, G., Holsen, T., Ferro, A.R., “Indoor Dust Analysis of PFAS: Unravelling Size Distribution Patterns for Source and Exposure Insights,” For presentation at Indoor Air, Honolulu, HI, July 2024.
- Bi, C., Davern, M., Eichler, \*\* C., Alton, M., Avery, A., **Turpin, B.J.**, Surratt, J., Jayne, J., Manjula Canagaratna, M., “Automated liquid calibration and aerosol sampling inlet for online measurements of airborne PFAS in indoor environments,” For presentation at Indoor Air, Honolulu, HI, July 2024.
- Eichler, \*\* C.M.A., Davern, M., Surratt, J.D., Morrison, G., **Turpin, B.J.**, “Emission profiles of neutral PFAS in waterproof clothing materials, For presentation at Indoor Air, Honolulu, HI, July 2024.
- Chang, \*\* N.Y., Eichler, \*\* C.M.A., Amparo, \*\* D.E., Surratt, J.D., Morrison, G.C., **Turpin, B.J.** “Ionic PFAS on Indoor Surfaces and PM<sub>2.5</sub> Quartz Fiber Filters in North Carolina Homes: Findings from the Indoor PFAS Assessment (IPA) Campaign,” For presentation at Indoor Air, Honolulu, HI, July 2024.
- Gagan, S., Niu, S., Davern, M., Doderio, A., Kim, Y., West, G., **Turpin, B.J.**, Surratt, J.D., Zhang, Y. “Real-time measurement and characterization of 2,3,3,3-tetrafluoropropene (HFO-1234yf) using Vocus 2R chemical ionization mass spectrometer (CIMS) in PTR mode in ambient air at Corpus Christi,” presented at the American Geophysical Union Fall Conference, San Francisco, CA, December 2023.
- Eichler, \*\* C.M.A., Chang, \*\* N.Y., Davern, M.J., Amparo, \*\* D.E., Surratt, J.D., Morrison, G.C., **Turpin, B.J.** “Sources and fate of neutral per- and polyfluoroalkyl substances (PFAS) in the indoor environment and beyond,” ASTM International Workshop on PFAS in Air, November 2023.
- Eichler, \*\* C.M.A., Chang, \*\* N.Y., Amparo, \*\* D.E., Zhou, \*\* J., Surratt, J., Morrison, G., Turpin, B.J. Chang. “Partitioning of neutral per- and polyfluoroalkyl substances (PFAS) from the indoor gas phase to dust, cloth, and particles,” Presented at the Chemistry of Indoor Environments Conference, National Academies, Washington, DC October 2023.
- Chang, \*\* N.Y., Eichler, \*\* C.M.A., Amparo, \*\* D.E., Zhou, \*\* J., Surratt, J.D., Morrison, G.C., Turpin, B.J. “Partitioning of Neutral PFAS Between Indoor Air and Various Reservoirs in North Carolina Homes: Results from the Indoor PFAS Assessment (IPA) Campaign,” Presented at the Chemistry of Indoor Environments Conference, National Academies, Washington, DC October 2023.
- West, G.V., Chang, \*\* N.Y., Eichler, \*\* C.M.A., Turner, R.L., **Turpin, B.J.**, Surratt, J.D. “Chemical Characterization of Airborne Per- and Polyfluoroalkyl Substances (PFAS) in North Carolina Firehouses,” To be presented at the Southeast Regional Meeting of the American Chemical Society (SERMACS), October 2023.
- Eichler, \*\* C.M.A., Chang, \*\* N.Y., Zhou, \*\* J., Amparo, \*\* D.E., Cohen-Hubal, E., Surratt, J., Morrison, G., **Turpin, B.J.** “Partitioning of Neutral Per- and Polyfluoroalkyl Substances (PFAS) Between Indoor Air and Various Reservoirs in North Carolina Homes: Results from the Indoor PFAS Assessment (IPA) Campaign,” to be presented at the Annual Conference of the American Association for Aerosol Research, October 2023.



- Chang, \*\* N.Y., Eichler, \*\* C.M.A., Amparo, \*\* D.E., Zhou, \*\* J., Cohen-Hubal, E., Surratt, J.D., Morrison, G.C., **Turpin, B.J.** “Particle-Phase Ionic Per- and Polyfluoroalkyl Substance (PFAS) Profiles, Concentrations, and Artifacts in the Indoor Environment: Findings from the Indoor PFAS Assessment (IPA) Campaign,” to be presented at the Annual Conference of the American Association for Aerosol Research, October 2023.
- Moschos, \* V., Christensen, C., Fiddler, M.N., **Turpin, B.J.**, Bililign, S., Surratt, J.D. “Quantifying the light absorption properties and molecular composition of brown carbon aerosol from African biomass combustion,” Gordon Research Conference, Newry, ME, 2023.
- Moschos, \* V., Christensen, C., Fiddler, M.N., **Turpin, B.J.**, Bililign, S., Surratt, J.D. “Quantifying the light absorption properties and molecular composition of brown carbon aerosol from African biomass combustion,” European Aerosol Conference, Malaga, Spain, 2023.
- Chang, \*\* N., Eichler, \*\* C., Amparo, \*\* D., Siesel, \*\* I., Zhou, \*\* J., Surratt, J., Hubal, E.C., Morrison, G., **Turpin, B.J.** “Ionic per- and polyfluoroalkyl substances (PFAS) in PM<sub>2.5</sub> from 10 homes in North Carolina: Insights from the Indoor PFAS Assessment Campaign,” Presented at the American Association for Aerosol Research Annual Conference, Raleigh, NC, October 2022.
- Eichler, \*\* C., Chang, \*\* N., Hubal, E.C., Zhou, \*\* J., Surratt, J., Morrison, G., **Turpin, B.J.** “Profiles of neutral, volatile per- and polyfluoroalkyl substances (PFAS) in residential indoor air and particle samples from the indoor PFAS assessment campaign,” Presented at the American Association for Aerosol Research Annual Conference, Raleigh, NC, October 2022.
- Armstrong, N.C., Chen, Y., Cui, T., Zhang, Y., Zhang, Z., **Turpin, B.J.**, Chan, M.N., Gold, A., Ault, A., Surratt, J. “Isoprene epoxydiol-derived sulfated and non-sulfated oligomers suppress particulate mass loss during oxidative aging of secondary organic aerosol,” Presented at the American Association for Aerosol Research Annual Conference, Raleigh, NC, October 2022.
- Webb, \*\* M., Morrison, G., Chang, \*\* N., Baumann, K., Vance, M., Farmer, D., Pependieck, D., **Turpin, B. J.**, “Dynamics of particle- and gas-phase total water-soluble organic carbon at the CASA indoor air study,” Presented at the American Association for Aerosol Research Annual Conference, Raleigh, NC, October 2022.
- Amparo, \*\* D.E., Liberatore, H.K., Strynar, M.J., Chang, \*\* N.Y., Eichler, \*\* C.M.A., Zhou, \*\* J., Morrison, G.C., **Turpin, B.J.** “Organic fluorine and per- and polyfluoroalkyl substances (PFAS) in residential air conditioning condensate,” Presented at Indoor Air 2022, Kuopio, Finland (virtual), June 2022.
- Chang, \*\* N.Y., Eichler, \*\* C.M.A., Amparo, \*\* D.E., Siesel, \*\* I.J., Zhou, \*\* J., Hubal, E.A.C., Atkin, J.M., Surratt, J.D., Morrison, G.C., **Turpin, B.J.** “Measurements of Per- and Polyfluoroalkyl Substances on Indoor Surfaces during the IPA Campaign,” Presented at Indoor Air 2022, Kuopio, Finland (virtual), June 2022.
- Eichler, \*\* C.M.A., Chang, \*\* N.Y., Hubal, E.A.C., Zhou, \*\* J., Surratt, J.D., Morrison, G.C., **Turpin, B.J.** “Profiles of Neutral, Volatile Per- and Polyfluoroalkyl Substances (PFAS) in Residential Indoor Air and Particle Samples From the Indoor PFAS Assessment Campaign,” Presented at Indoor Air 2022, Kuopio, Finland, June 2022.
- Amparo, \*\* D.E., Moravec, R.P., **Turpin, B.J.**, Morrison, G.C. “Estimating SARS-CoV-2 infection risk in university residence halls using CO<sub>2</sub> pulse injections,” Presented at the American Association for Aerosol Research Annual Conference, Albuquerque, NM, October 2021.
- Zhou, \*\* J., Baumann, K., Mead, R.N., Skrabal, S.A., Kieber, R.J., Avery, G.B., Shimizu, M., Sun, M., Vance, S.A., Bodnar, W., Zhang, Z., Collins, L.B., Surratt, J.D., **Turpin, B.J.** “Regional and Nearfield Per- and Polyfluoroalkyl Substances (PFASs) in Ambient Fine Aerosol (PM<sub>2.5</sub>) in North Carolina, USA,” Presented at the American Association for Aerosol Research Annual Conference, Albuquerque, NM, October 2021.
- Zhang, Y., Yan, J., Chen, Y., Armstrong, N.C., Zhang, Z., Gold, A., **Turpin, B.J.**, Surratt, J.D. “Synergistic Multiphase Chemistry of Isoprene Hydroxy Hydroperoxides (ISOPOOH) with Sulfur Dioxide in Acidic Sulfate Aerosols Leading to Secondary Inorganic and Organic Aerosol

- Formation,” Presented at the American Association for Aerosol Research Annual Conference, Albuquerque, NM, October 2021.
- Webb,\*\* M., Cui, L., Baumann, K., Surratt, J., Morrison, G., **Turpin, B.J.**, “Humidity and the Uptake of a Model Organic Peroxide on Naturally Soiled Indoor Window Surfaces,” Presented at the American Association for Aerosol Research Annual Conference, Albuquerque, NM, October 2021.
- Yan, J., Zhang, Y., Chen, Y., Armstrong, N.C., Zhang, Z., Gold, A., Lambe, A.T., **Turpin, B.J.**, Ault, A.P., Surratt, J.D. “Kinetics and Products of Heterogeneous Hydroxyl Radical (OH) Oxidation of Isoprene Epoxydiol (IEPOX)-Derived SOA” Presented at the American Association for Aerosol Research Annual Conference, Albuquerque, NM, October 2021.
- Webb,\*\* M., Cui, L., Baumann, K., Surratt, J., Morrison, G., **Turpin, B.J.**, “Humidity and the Uptake of a Model Organic Peroxide on Naturally Soiled Indoor Window Surfaces,” Presented at IndoorChem2021, Virtual, May 2021.
- Zhou,\*\* J., Baumann, K., Chang, N., Morrison, G., Bodnar, W., Zhang, Z., Atkin, J.M., Surratt, J.D., **Turpin B.J.** “Per- and Polyfluoroalkyl Substances (PFASs) in Airborne Particulate Matter (PM<sub>2.0</sub>) Emitted During Floor Waxing,” Presented at IndoorChem2021, Virtual, May 2021.
- Eichler,\*\* C.M.A., Chang,\*\* N.Y., Amparo,\*\* D.E., Surratt, J.D., Morrison, G.C., **Turpin, B.J.** “Indoor PFAS Assessment Campaign: Study Design and Preliminary Results,” Presented at IndoorChem2021, Virtual, May 2021.
- Webb,\*\* M., Cui, L., Morrison, G., Surratt, J., **Turpin, B.J.** “The Effect of Humidity on the Uptake of a Model Organic Peroxide on Naturally Soiled Indoor Window Surfaces,” Presented at the NIOSH ERC Southeast Regional Research Symposium, Virtual, February 2021.
- Eichler,\*\* C.M.A., Chang,\*\* N.Y., Amparo,\*\* D.E., Surratt, J.D., Morrison, G.C., **Turpin, B.J.** “The Indoor PFAS Assessment Campaign: Study Design,” Presented at the NIOSH ERC Southeast Regional Research Symposium, Virtual, February 2021.
- Shimizu, M.S., Mott, R., Potter, A., Harfmann, J., Avery, B., Kieber, R.J., Mead, R.N., Skrabal, S.A., Willey, J.D., **Turpin, B.J.**, Zhou,\*\* J., Baumann, K., “Atmospheric Flux of Legacy and Emerging Per- and Polyfluoroalkyl Substances (PFAS) through Wet and Dry Deposition at Wilmington North Carolina,” Poster presentation at the American Geophysical Union (AGU) Fall Virtual Meeting held December 1-17, 2020.
- Eichler,\*\* C.M.A., Zhou, J., **Turpin, B.J.**, Little, J.C., Morrison, G.C. “Accumulation of per- and polyfluoroalkyl substances (PFAS) in clothing in indoor environments, Presented at the Indoor Air Conference, Seoul, Korea, Virtual, November 2020.
- Armstrong, N.C., Chen, Y., Cui, T., Zhang, Y., Yan, J., Zhang, Z., **Turpin, B.J.**, Chan, M.N., Ault, A., Gold, A., Surratt, J. (2020) Heterogeneous Hydroxyl Radical Oxidation of Isoprene Epoxydiol (IEPOX)-Derived Secondary Organic Aerosol: Identification of Highly Oxygenated Products by HILIC/ESI-HR-QTOFMS, Presented at the American Association for Aerosol Research Annual Conference, Raleigh, NC, Virtual, October 2020.
- Chen, Y., Zhang, Y., Lambe, A., Xu, R., Lei, Z., Olson, N., Zhang, Z., Szalkowski, T., Cui, T., Vizuete, W., Gold, A., **Turpin, B.**, Ault, A., Chan, M.N, Surratt, J., Heterogeneous Hydroxyl Radical Oxidation of Isoprene Epoxydiol-Derived Methyltetrol Sulfates: Plausible Formation Mechanisms of Previously Unexplained Organosulfates in Ambient Fine Aerosols, Presented at the American Association for Aerosol Research Annual Conference, Raleigh, NC, Virtual, October 2020.
- Chang,\*\* N., Zhou,\*\* J., Baumann, K., Zhang, Z., Bodnar, W., Morrison, G., **Turpin, B.J.** “Measurements of particle phase (PM<sub>2.5</sub>) per- and polyfluoroalkyl substances (PFAS) in indoor air,” Presented at the American Association for Aerosol Research Annual Conference, Raleigh, NC, Virtual, October 2020.
- Zhou,\*\* J., Baumann, K., Chang,\*\* N., Surratt, J., Bodnar, W., Zhang, Z., Morrison, G., Atkin, J., **Turpin, B.J.** “Per- and polyfluoroalkyl substances (PFASs) in fine aerosols (PM<sub>2.5</sub>) during floor

- waxing,” Presented at the American Association for Aerosol Research Annual Conference, Raleigh, NC, Virtual, October 2020.
- Zhang, Y., Yan, J., Chen, Y., Armstrong, N.C., Zhang, Z., Gold, A., Turpin, B., Surratt, J. Rapid Formation of Sulfate Aerosols through Aqueous Aerosol Oxidation by Isoprene Hydroxy Hydroperoxides (ISOPOOH), Presented at the American Association for Aerosol Research Annual Conference, Raleigh, NC, Virtual, October 2020.
- Zhou,\*\* J., Baumann, K., Surratt, J., Mead, R., Skrabal, S., Kieber, R., Avery, G., Shimizu, M., Bodnar, W., Zhang, Z., DeWitt, J., Sun, M., Collins, L., Turpin, B.J., Per- and Polyfluoroalkyl Substances (PFASs) in Ambient Fine Aerosol (PM<sub>2.5</sub>) in North Carolina, Presented at the American Association for Aerosol Research Annual Conference, Raleigh, NC, Virtual, October 2020.
- Zhou,\*\* J., Baumann, K., Chang,\*\* N., Morrison, G., Bodnar, W., Zhang, Z., Atkin, J. M., Surratt, J. D., Turpin, B.J. “Per- and polyfluoroalkyl substances (PFASs) in fine particulate matter (PM<sub>2.0</sub>) during floor waxing,” Poster presentation at the International Society of Exposure Science 30th Annual Virtual Meeting, Sept. 20-24, 2020.
- Eichler,\*\* C.M.A., Zhou,\*\* J., Turpin, B.J., Morrison, G.C. “Accumulation of Per- and Polyfluoroalkyl Substances (PFAS) in Clothing in Indoor Environments.” Presented at the International Society for Exposure Science 2020 Annual Meeting, California/Virtual, September 21-22, 2020.
- Zhou,\*\* J., Baumann, K., Mead, R., Skrabal, S., Kieber, R. J., Avery, G.B., Shimizu, M., DeWitt, J. C., Sun, M., Bodnar, W., Zhang, Z., Collins, L. B., Surratt, J. D., Turpin, B. J. “Per- and Polyfluoroalkyl Substances (PFASs) in fine particulate matter (PM<sub>2.5</sub>) in North Carolina,” Poster presentation at the International Society of Exposure Science 30th Annual Virtual Meeting, Sept. 20-24, 2020.
- Turpin, B.J., “Laboratory and field measurements to further predictive capabilities for surface chemistry: Water soluble organics,” Platform presentation at Surface Chemistry of the Indoor Environment Workshop, San Diego, CA, January 2020.
- Zhou,\*\* J., Baumann, K., Surratt, J.D., Mead, R., Skrabal, S., Kieber, R.J., Avery, G.G., Willey, J.D., Shimizu, M., DeWitt, J.C., Sun, M., Bodnar, W., Zhang, Z., Collins, L.B., Turpin, B.J. “Air Concentrations of Per- and Polyfluoroalkyl Substances (PFAS) in North Carolina,” Poster presentation at the SETAC (Society of Environmental Toxicology and Chemistry) North America 40th Annual Meeting, Toronto, Canada, November 2019.
- Turpin, B.J., “Air Emissions and Atmospheric Deposition,” Platform presentation at the Research Triangle Environmental Health Collaborative 2019 Summit: PFAS: Integrating Science and Solutions in North Carolina, October 2019, RTP, NC.
- Turpin, B.J., “Atmospheric Concentrations and Deposition of PFAS,” Platform presentation at PFAS Full Network Science Meeting, Chapel Hill, NC, August 2019.
- Webb,\*\* M., Morrison, G., Surratt, J., Atkin, J., Turpin, B. “Reactive uptake onto authentic indoor surfaces as a function of RH,” Indoor Chemistry Modeling Workshop, Chapel Hill, NC, July 2019.
- Mott, R.K., Zhou, J., Shimizu, M., Surratt, J.D., Mead, R., Skrabal, S., Kieber, R.J., Avery, G.B., Willey, J.D., DeWitt, J.C., Sun, M., Baumann, K., Bodnar, W., Zhang, Z., Collins, L.B., Turpin, B.J., “Air Emissions and Atmospheric Deposition of Per- and Polyfluoroalkyl Substances (PFAS) in North Carolina,” Poster presented at the PFAST Network Public Forum “What’s in Our Water?” A Public Forum on Emerging Contaminants, sponsored by the NC Coastal Federation, Wilmington, NC, May 2019.
- Zhou,\*\* J., Surratt, J.D., DeWitt, J.C., Sun, M., Mead, R., Skrabal, S., Kieber, R.J., Avery, G.B., Willey, J.D., Shimizu, M., Baumann, K., Bodnar, W., Zhang, Z., Collins, L.B., Turpin, B.J. “Air Concentrations of Per- and Polyfluoroalkyl Substances (PFAS) in North Carolina,” Poster presentation at NC Breathe Meeting, Wilmington, NC, April 2019.

- Webb,\*\* M., Morrison, G., Surratt, J., Atkin, J., **Turpin, B.** “Reaction probabilities and deposition velocities of isoprene derivatives on "dirty" interior window surfaces under dry and humid conditions,” poster presentation, Chemistry of Indoor Environments Science Meeting, Boulder, CO, October 2018.
- Turpin, B.J.**, “Water-Soluble Organic Gases and their Influence on Chemistry in Diverse Environments,” ACS Creative Advances talk, American Chemical Society Spring Meeting, March 2018.
- Duncan,\*\* S., Tomaz,\*\* S., Webb,\*\* M., Surratt, J., Morrison, G., Atkin, J., **Turpin, B.** “Dynamics of Residential Oxidized Organic Gases: Insights into Sources and Sinks” Indoor Air, Philadelphia, PA, July 2018.
- Turpin, B.J.**, “The Quest to Understand the Impacts of Multiphase Chemistry on a Wet Planet: Similarities across Disparate Environments,” presented at the Atmospheric Chemistry Gordon Conference, August 2017.
- Tomaz,\*\* S., Cui, T., Chen, Y., Sexton, K.G., Surratt, J.D., **Turpin, B.J.** « Characterizing Potential Aqueous Secondary Organic Aerosol Formation from Biomass Burning Emissions During FIREX,” presented at the International Aerosol Conference, September 2018.
- Cui, T., Tomaz, S., Zeng, Z., Chen, Y., Tarun, S., Sexton, K.G., Jathar, S., Surratt, J.D., **Turpin, B.J.** “Chemical Characterization and Evolution of Brown Organic Aerosol from Primary and Photochemically-Aged Biomass Burning Emissions during 2016 FIREX Campaign,” presented at the International Aerosol Conference, September 2018.
- Webb,\*\* M., Duncan, S., Cui, L., Atkin, J., Surratt, J., **Turpin, B.** “Using Aerosol Principles to Advance Exposure Science: Development of a Better Understanding of the Roles of Water and Water-Soluble Gases on Indoor Surface Chemistry and Indoor Air Composition.” Poster Presentation, American Association for Aerosol Research, Raleigh, NC October 2017.
- Tomaz,\*\* S., Cui, T., Chen, Y., Sexton, K., Surratt, J.D., **Turpin, B.J.** “Characterizing Oxidized North American Fire Emissions and Their Aqueous/Multiphase Atmospheric Transformations Through the FIREX Campaign,” presented at the American Association for Aerosol Research Annual Conference, October 2017.
- Cui, T., Tomaz, S., Chen, Y., Tarun, S., Jathar, S., **Turpin, B.J.**, Surratt, J.D. “Chemical Characterization of Brown Carbon from Primary and Aged Biomass Burning Emissions during 2016 FIREX Campaign,” presented at the American Association for Aerosol Research Annual Conference, October 2017.
- Turpin, B.J.** “Secondary Organic Aerosol Formation through Aqueous Chemistry,” tutorial presented at the American Association for Aerosol Research Annual Conference, October 2017.
- Cui, T., Tomaz, S., Zeng, Z., Chen, Y., Sexton, K., Tarun, S., Jathar, S., Surratt, J.D., **Turpin, B.J.** “Chemical Characterization of Brown Carbon (BrC) from Primary and Aged Biomass Burning Emissions during 2016 FIREX Campaign,” presented at the NOAA FIREX meeting, November 2017.
- Tomaz,\*\* S., Cui, T., Chen, Y., Sexton, K., Surratt, J.D., **Turpin, B.J.** “Characterizing Oxidized North American Fire Emissions and Their Aqueous/Multiphase Atmospheric Transformations Through the FIREX Campaign,” presented at the American Geophysical Union Fall Conference, December 2017.
- Duncan,\*\* SM, Sexton, KG, Lauck, R, Collins, LB, **Turpin, BJ**, “Reactive and Water-Soluble Organic Gases inside Several Residences in New Jersey and North Carolina,” Platform presentation, International Society of Exposure Science Annual Conference, Utrecht, The Netherlands, October 2016.
- Duncan,\*\* SM, Sexton, KG, Lauck, R, **Turpin, BJ**, “Water-Soluble Organic Gases Collected Inside Homes in New Jersey and North Carolina,” Poster, North Carolina Breathe Conference, Charlotte, North Carolina, April 2016.

**Turpin, BJ**, “Indoor Air Characterization Provides Insights into PM Sources and Transformations,” National Academy of Medicine Health Risks of Indoor Particulate Matter Exposure Workshop Talk, Washington, DC, February 2016.

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**Duncan,\*\* S, Turpin, BJ**, “Aqueous Chemistry as a Sink and Source of Organic Compounds in Indoor Air and its Effects on Exposure,” Poster presentation at the International Society of Exposure Science Annual Conference, Henderson, NV, October 2015.

**Sullivan, A, Hodas,\*\* N, Turpin, BJ**, Skog, K, Keutsch, F, Gilardoni, S, Paglione, M, Rinaldi, M, Decesari, S, Facchini, MC, Poulain, L, Herrmann, H, Wiedensohler, A, Nemitz, E, Twigg, M, Collett, J, “Evidence for Ambient Dark Aqueous SOA Formation in the Po Valley, Italy,” Platform presentation at the American Association for Aerosol Research Annual Conference, Minneapolis, MN, October 2015.

**Nakao, S, Lim, YB, Turpin, BJ**, Boris, A, Collett Jr, JL, Kreidenweis, SM, “The role of aqueous chemistry in cloud formation: impact of oligomerization,” Platform presentation at the American Association for Aerosol Research Annual Conference, Orlando, FL October 2014.

**Duncan,\*\* SM, Lim,\*\* YB, Kirkland,\*\* JR, Turpin, BJ**, “Preliminary Evidence for Aqueous Oxidation of Organic Compounds in Indoor Air,” Poster presentation at the American Association for Aerosol Research Annual Conference, Orlando, FL, October 2014.

**Sareen,\*\* N, Carlton, AG, Turpin, BJ**, “Identifying precursors and aqueous organic aerosol formation pathways in the humid, photochemically-active Southeastern US during the SOAS campaign,” Platform presentation at the American Association for Aerosol Research Annual Conference, Orlando, FL October 2014.

**Kirkland,\*\* JR, Lim,\*\* YB, Mazzoleni, L, Collett Jr, JL, Decesari, S, Facchini, MC, Sullivan, AP, Keutsch, F, Turpin, BJ**, “Characterization of Organic Precursors and Products during Aqueous Hydroxyl Radical Oxidation of Po Valley, Italy and Fresno, CA Fog Water,” Poster presentation at the American Association for Aerosol Research Annual Conference, Orlando, FL October 2014.

**Sareen,\*\* N, Carlton, AMG, Turpin, BJ**, “Organic aerosol formation in the humid, photochemically-active Southeastern US: SOAS experiments and simulations,” poster presentation at the International Global Atmospheric Chemistry Conference, Natal, Brazil, September 2014.

**Sareen,\*\* N, Carlton, AMG, Turpin, BJ**, "Organic Aerosol Formation in the Humid, Photochemically-Active Southeastern US: SOAS Experiments and Simulations," Southeast Atmospheres Study Workshop, Boulder, CO, March 2014.

**Sareen,\*\* N, Lim,\*\* YB, Carlton, AMG, Turpin, BJ**, "Organic Aerosol Formation in the Humid, Photochemically-Active Southeastern US: SOAS Experiments and Simulations," Poster presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, December 2013.

**Ervens, B, Lim,\*\* YB, Sorooshian, A, Turpin, BJ**, “Key Parameters Controlling the Formation of Secondary Organic Aerosol in the Aqueous Phase (aqSOA),” Presented at the American Geophysical Union Fall Conference, San Francisco, CA, December 2013.

**Turpin, BJ**, Kirkland,\*\* J., Lim,\*\* YB, Ortiz-Montalvo,\*\* D., Sullivan, A, Häkkinen, S, Schwier, A, Tan, Y, McNeill, VF, Collett Jr., J, Skog, K, Keutsch, F, Carlton, AG, Decesari, S, Facchini, MC, “Exploring atmospheric aqueous chemistry (and secondary organic aerosol formation) through OH radical oxidation experiments, droplet evaporation and chemical modeling,” Presented at the American Geophysical Union Fall Conference, San Francisco, CA, December 2013.

**Hodas,\*\* N, Turpin, BJ**, “Shifts in the gas- particle partitioning of ambient organics with transport into the indoor environment,” Platform presentation at the American Association for Aerosol Research Annual Conference, Portland, OR, October 2013.

Kirkland, J, Lim, YB, Decesari, S, Facchini, MC, Collett, JL, **Turpin, BJ**, “Aqueous photooxidation of Fresno, CA and Po Valley, Italy fog water,: Poster presentation at the American Association for Aerosol Research Annual Conference, Portland, OR, October 2013.

**Turpin, BJ**, Kirkland, J, Lim, YB, Sullivan, A, Sareen, N, Collett Jr., J., Keutsch, F, Carlton, AG, Decesari, S, Facchini, MC, “Exploring aqueous photooxidation in real atmospheric waters: Insights into secondary organic aerosol formation,” Poster presentation at the Atmospheric Chemistry Gordon Research Conference, Mt Snow, VT, July 2013.

Hodas, N, **Turpin, BJ**, “Shifts in the gas- particle partitioning of ambient organics with transport into the indoor environment,” Poster presentation at the Atmospheric Chemistry Gordon Research Conference, Mt Snow, VT, July 2013.

**Turpin, BJ**, Ervens, B, Lim, YB, “Oxidant Supply and Aqueous Photochemical SOA Formation in Cloud Droplets and Aqueous Aerosol,” Platform presentation at the American Geophysical Union Fall Conference, San Francisco, CA, December 2012.

Kirkland, J, Lim, YB, Sullivan, AP, Decesari, S, Facchini, C, Collett, JL, Keutsch, FN, **Turpin, BJ**, “Aqueous Photooxidation of Ambient Po Valley Italy Air Samples: Insights into Secondary Organic Aerosol Formation,” Poster presentation at the American Geophysical Union Fall Conference, San Francisco, CA, December 2012.

Lim, YB, Tan, Y, Ortiz-Montalvo, DL, **Turpin, BJ**, “Aqueous Chemistry and Yields of Secondary Organic Aerosol Formed from Glyoxal and Methylglyoxal in Atmospheric Waters,” Platform presentation at the American Geophysical Union Fall Conference, San Francisco, CA, December 2012.

**Turpin, BJ**, Lim, YB, Ortiz-Montalvo, D, Schwier, A, McNeill, VF, “SOA Formation through Aqueous Chemistry: Volatility and Yields,” Platform presentation at the American Association for Aerosol Research Annual Conference, Minneapolis, MN, October 2012.

Hodas, N, Meng, QY, Lunden, MM, **Turpin, B**, “Refined Estimates of Ambient PM<sub>2.5</sub> Exposure: Validation and Refinement of a Mechanistic Indoor Transport Model,” Platform presentation at the American Association for Aerosol Research Annual Conference, Minneapolis, MN, October 2012.

**Turpin, B**, Kirkland, J, Ramos, A, Ortiz-Montalvo, D, Lim, YB, “Isoprene and Secondary Organic Aerosol: The Case for Aqueous Chemistry,” invited platform presentation at the American Chemical Society National Meeting, Philadelphia, PA, August 2012.

Ervens, B, Lim, YB, **Turpin, BJ**, “Aerosol Modification by Secondary Organic Aerosol Formation in the Aqueous Phase,” poster presentation at the 22<sup>nd</sup> International Symposium on Gas Kinetics, Boulder, CO, June 2012.

Özkaynak, H, Isakova, V, Baxter, L, Graham, SE, Sarnat, SE, Sarnat, JA, Mulholland, J, **Turpin, B**, Rich, DQ, Lunden, M, Evaluating “Alternative Exposure Metrics Used for Multi-pollutant Air Quality and Human Health Studies,” Presented at the 32<sup>nd</sup> NATO/SPS International Technical Meeting on Air Pollution Modeling and its Application, Utrecht, Netherlands, May 2012.

**Turpin, B**, Ramos, A, Kirkland, J, Lim, YB, Seitzinger, S, “Insights into Atmospheric Aqueous Organic Chemistry through Controlled Experiments with Cloud Water Surrogates,” invited symposium talk at the American Geophysical Union Fall Conference, San Francisco, December 2011.

**Turpin, B**, Özkaynak, H, Lunden, M, Hodas, N, Baxter, L, Ohman-Strickland, P, Burke, J, Thevenet-Morrison, K, Meng, Q, Kipen, H, Kostis, J, Zhang, J, Rich, D, “Use of Refined Exposure Surrogates to Investigate Associations between Myocardial Infarction and PM<sub>2.5</sub> Exposure,” platform presentation at the International Society for Exposure Science, Baltimore, October 2011.

Baxter, L, Burke, J, Lunden, M, Crooks, J, Hodas, N, **Turpin, B**, Rich, D, Thevenet-Morrison, K, and Özkaynak, H, Comparison of five different exposure surrogates used in two established epidemiological studies in New Jersey, platform presentation at the International Society for Exposure Science, Baltimore, October 2011.

- Hodas,\*\* N, Lunden, M, **Turpin, B**, “Refined Ambient PM<sub>2.5</sub> Exposure Surrogates: Validating A Mechanistic Model with RIOPA Measurements, platform presentation at the International Society for Exposure Science, Baltimore, October 2011.
- Turpin, B**, Ramos,\*\* A, Seitzinger, S, “SOA Formation Through Aqueous Chemistry: Insights Gained Through OH Radical Reactions in Filtered Rainwater, platform presentation at the American Association for Aerosol Research Annual Conference, Orlando, October 2011.
- Ortiz-Montalvo,\*\* D, Perri,\*\* M, Seitzinger, S, **Turpin, B**, “Volatility and yield of secondary organic aerosol (SOA) formed through simulated cloud chemistry and cloud droplet evaporation,” poster presentation at the Gordon Research Conference on Atmospheric Chemistry, July 2011.
- Lunden, M, Hodas,\*\* N, Baxter, L, Rich, D, Ozkaynak, H, **Turpin, B**, “Improving exposure estimates to outdoor PM<sub>2.5</sub> by modeling time-resolved and species-specific aerosol penetration and persistence into homes,” platform presentation at the conference, Indoor Air, Austin, TX, June 2011.
- Lim,\*\* YB, Tan,\*\* Y, Altieri, K, Perri,\*\* M, Carlton,\*\* AG, Seitzinger, S, **Turpin, BJ**, “Secondary organic aerosol formation from aqueous chemistry of glyoxal, methylglyoxal, and glycolaldehyde in atmospheric waters: Chemical insights and kinetic model studies,” platform presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, December 2010.
- Lim,\*\* YB, Tan,\*\* Y, Altieri, K, Perri,\*\* M, Carlton,\*\* AG, Seitzinger, S, **Turpin, BJ**, “SOA Formation from Aqueous Chemistry of Glyoxal and Methylglyoxal in Atmospheric Waters: Chemical Insights and Kinetic Modeling Studies,” poster presentation at the Atmospheric Chemical Mechanisms Meeting, Davis, CA December 2010.
- Kirkland,\*\* J, Lim, YB, Tan, Y, Altieri, KE, Seitzinger, S, **Turpin, BJ**, “Aqueous Glyoxal Photooxidation in the Presence of Inorganic Nitrogen: A Potential Source of Organic Nitrogen in Aerosols and Wet Deposition,” poster presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, December 2010.
- Lunden, M, Hodas,\*\* N, **Turpin, B**, “Improving Exposure Estimates to Outdoor PM<sub>2.5</sub> by Modeling Time-Resolved and Species-Specific Aerosol Penetration and Persistence into Homes,” platform presentation at the American Association for Aerosol Research Annual Conference, Portland, OR, October 2010.
- Hodas,\*\* N, Lunden, M, Meng, QY, Rich, D, Ozkaynak, H, **Turpin, B**, “The Effect of PM<sub>2.5</sub> Composition on the Fraction of Outdoor-Generated PM<sub>2.5</sub> in Indoor Air,” platform presentation at the American Association for Aerosol Research Annual Conference, Portland, OR, October 2010.
- Ortiz-Montalvo, D, Perri, M, Seitzinger, S, and **Turpin, BJ**, “Investigating the Volatility and Yield of SOA Formed from Aqueous Chemistry and Droplet Evaporation,” platform presentation at the American Association for Aerosol Research Annual Conference, Portland, OR, October 2010.
- Baxter, L, Barzyk, T., Burke, J, **Turpin, BJ**, Rich, D, Lunden, M, Hodas,\*\* N, Özkaynak, H, “Comparison of exposures estimated using ambient PM<sub>2.5</sub> concentrations with those estimated by the Stochastic Human Exposure and Dose Simulation Model (SHEDS) for two New Jersey cohorts,” Platform presentation, International Society for Environmental Epidemiology, Seoul, South Korea, August 2010.
- Rich, DQ, **Turpin, BJ**, Lunden, M, Özkaynak, H, Baxter, L, Hodas,\*\* N, Barzyk, T, Burke, J, Ohman-Strickland, P, “Refined Exposure Surrogates for Ambient PM in Epidemiology: Accounting for Temporal/Spatial Variations in Infiltration,” Platform presentation, International Society for Environmental Epidemiology, Seoul, South Korea, August 2010.
- Altieri, KE, Hastings, M, Peters, A, Seitzinger, S, Sigman, D, **Turpin, B**, “The Composition of Organic Nitrogen in Rainwater,” poster presentation, NOAA Climate and Global Change Post-Doctoral Fellows Summer Institute, Steamboat Springs, CO, July 2010.
- Özkaynak, H, Sarnat, SE, Sarnat, JA, Sheppard, L, Sampson, P, **Turpin, BJ**, Rich, D, “Overview of USEPA/NERL Cooperative Agreement Research Program on Air Pollution Exposure and

- Health,” platform presentation, AAAR Specialty Conference – Air Pollution and Health: Bridging the Gap from Sources to Health Outcomes, San Diego, CA, March 2010.
- Hodas,\*\* N, Lunden, M, Rich, D, Özkaynak, H, **Turpin, BJ**, “The Importance of Species-Specific Size Distributions in the Development of Refined Surrogates for Exposure to PM<sub>2.5</sub> of Outdoor Origin,” poster presentation, AAAR Specialty Conference – Air Pollution and Health: Bridging the Gap from Sources to Health Outcomes, San Diego, CA, March 2010.
- Turpin, BJ**, Lunden, M, Hodas,\*\* N, Rich, D, Kamat, L, Ozkaynak, H, Barzyk, T, Burke, J, Baxter, L, Ohman-Strickland, P, “Refined Exposure Surrogates for Ambient PM in Epidemiology Studies: Accounting for Temporal/Spatial Variations in Infiltration,” Platform presentation at the International Society of Exposure Science Annual Conference, Minneapolis, MN, November 2009.
- Barzyk, TM, Burke, J, Baxter, L, Özkaynak, H, **Turpin, BJ**, Lunden, MM, Rich, DQ, Kamat, K, Hodas,\*\* N, “Modeled Estimates of Human Exposure to PM<sub>2.5</sub> with an Emphasis on Time-Activity Patterns and Air Exchange Rates,” Platform presentation at the International Society of Exposure Science Annual Conference, Minneapolis, MN, November 2009.
- Lim,\*\* YB, Tan,\*\* Y, Perri,\*\* M, Altieri, K, Seitzinger, S, **Turpin, BJ**, “Chemical Mechanisms in Aerosol Water and Their Role in Secondary Organic Aerosol (SOA) Formation,” Platform presentation at the American Association for Aerosol Research Annual Conference, Minneapolis, MN, November 2009.
- Tan,\*\* Y., Seitzinger, S., **Turpin, BJ**, “Organic Acid Products of Aqueous Methylglyoxal Oxidation and Implications to Secondary Organic Aerosol Formation,” Poster presentation at the American Association for Aerosol Research Annual Conference, Minneapolis, MN, November 2009.
- Ortiz-Montalvo,\*\* D., Perri,\*\* M, Ramos-Busot,\*\* A., **Turpin, BJ**, “Evaluating In-Cloud Secondary Organic Aerosol Formation by Simulating Cloud Droplet Evaporation,” Poster presentation at the American Association for Aerosol Research Annual Conference, Minneapolis, MN, November 2009.
- Tolocka, MP, **Turpin, BJ**, “Contribution of Organosulfur Compounds to Organic Aerosol Mass,” Poster presentation at the American Association for Aerosol Research Annual Conference, Minneapolis, MN, November 2009.
- Ozkaynak, H, Sarnat, SE, Sheppard, L, **Turpin, BJ**, “Overview of USEPA/NERL Cooperative Agreement Research Program on Air Pollution Exposure and Health, Poster Presentation at the International Society of Environmental Epidemiology Annual Conference, Dublin, Ireland, August 2009.
- Lim,\*\* YB, Tan,\*\* Y, Perri,\*\* M, Altieri, K, **Turpin, BJ**, “Secondary Organic Aerosol Formation Through Reactions in Atmospheric Waters,” Platform presentation at the Goldschmidt Conference, Davos, Switzerland, June 2009.
- Rich, DQ, Kipen, HM, Zhang, JJ, Kamat, L, **Turpin, BJ**, Wilson, AC, Kostis, JB, “Triggering of Transmural Infarction, But Not Non-Transmural Infarction By Ambient Fine Particles and Fine Particle Species,” Poster presentation at the American Thoracic Society Conference, San Diego, May 2009.
- Perri,\*\* M, Ortiz,\*\* D, Seitzinger, S, **Turpin, BJ**, “Secondary Organic Aerosol Production from Aqueous Photooxidation of Glycolaldehyde – Laboratory Studies,” Platform presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, December 2008.
- Turpin, B. J.**, “Cloud Processing,” Invited platform presentation at The Atmospheric Chemical Mechanisms Conference, Davis, CA, December 2008.
- Ramos,\*\* A, **Turpin, BJ**, Tan,\*\* Y, Ortiz,\*\* D, “Secondary Organic Aerosol Formation from Aqueous Glyoxal Oxidation Products,” Poster presentation at the Annual Biomedical Research Conference for Minority Students (ABRCMS), Orlando, Florida, November 2008.
- Turpin, BJ**, Carlton,\*\* AG, Ervens, B, Altieri, KE, Perri,\*\* MJ, Tan,\*\* Y, Moore,\*\* M, Seitzinger, S, “Problems and Prospects for Predicting SOA Production Through Cloud Processing,” Poster



- presentation at the Annual Meeting of the American Association for Aerosol Research, Orlando, FL, October 2008.
- Tan,\*\* Y, Perri,\*\* M, Carlton,\*\* A, Seitzinger, S, **Turpin, BJ**, “In-Cloud SOA Formation: Effects of Acidic Sulfate and Precursor Concentration on Organic Acid Yields,” Platform presentation at the Annual Meeting of the American Association for Aerosol Research, Orlando, FL, October 2008.
- Meng,\*\* Q, Pinto, J, Lau,\*\* G, **Turpin B**, Suh H, Wheeler A, “Exposures of a Panel of Senior Citizens with COPD to Multiple Air Pollutants in Los Angeles,” Poster presentation at the International Society for Environmental Epidemiology and International Society of Exposure Analysis, Pasadena, CA, October 2008.
- Ramos,\*\* A, **Turpin, BJ**, Tan,\*\* Y, Ortiz,\*\* D, “Secondary Organic Aerosol Formation from Aqueous Glyoxal Oxidation Products,” Poster and Platform presentations, Research In Science and Engineering (RISE) Undergraduate Summer Research Program, Rutgers University, July and August 2008.
- Altieri, KE, Perri,\*\* MJ, **Turpin, BJ**, Seitzinger, SP, “In-cloud photochemistry produces complex DOM,” Platform presentation at the American Geophysical Union/American Society of Limnology and Oceanography, Ocean Sciences Meeting, Orlando, FL, January 2008.
- Ervens, B, Carlton,\*\* AG, **Turpin, BJ**, Altieri, KE, Kreidenweis, SM, Feingold, G, “SOA Formation by Chemical Processes in Cloud Droplets,” Platform presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, December 2007.
- Altieri, KE, Seitzinger, SP, Carlton,\*\* AG, **Turpin, BJ**, Klein, GC, Marshall, AG, “Chemical Characterization of Secondary Organic Aerosol Formed Through Cloud Processing of Methylglyoxal,” Poster presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, December 2007.
- Perri,\*\* M, Seitzinger, S, Tan,\*\* Y, **Turpin, BJ**, “SOA Production from Cloud Processing of Glycolaldehyde,” Platform presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, December 2007.
- Turpin, BJ**, Meng,\*\* QY, Polidori,\*\* A, Reff,\*\* A, Naumova, Y, Weisel, C, Zhang, J, Morandi, M, Stock, T, Colome, S., Winer, A, “Exposure to Ambient Fine Particulate Matter (PM2.5): Insights Relevant to PM Epidemiology,” Platform presentation at the International Society of Exposure Assessment Annual Conference, Durham, NJ, October 2007.
- Anderson,\*\* CB, Maimone,\*\* F., **Turpin BJ**, Zwierling, E, “Time-Activity Characterization for a Train Noise Exposure Assessment Study: Teaneck, NJ,” Poster presentation at the International Society of Exposure Assessment Annual Conference, Durham, NJ, October 2007.
- Altieri, K, Carlton,\*\* AG, Tan,\*\* Y, Seitzinger, S, **Turpin, BJ**, “Secondary Organic Aerosol Formation through Cloud Processing: Acids and Oligomers from Aqueous Methylglyoxal Photooxidation,” Platform presentation at the American Association for Aerosol Research Annual Conference, Reno, NV, September 2007.
- Laskin, DL, Laumbach, R, Sunil, V, **Turpin, BJ** and Mainelis, G. “Design and Characterization of a Small Engine Diesel Exhaust Animal Exposure System for Studies to Assess Mechanisms Underlying Particulate Matter-induced Toxicity in the Elderly,” Poster presentation at the Health Effects Annual Conference, April 2007.
- Ervens, B, Carlton,\*\* AM, **Turpin, BJ**, Kreidenweis, S, and Feingold, G. “Isoprene as SOA precursor: Aerosol mass formation by processes in haze particles and clouds,” Poster presentation at the American Geophysical Union Conference, San Francisco, CA, December 2006.
- Maimone,\*\* F, **Turpin, BJ**, Robinson, A, “The Solomon method of organic artifact estimation: A quantitative assessment of assumptions and method performance,” Platform presentation at the International Aerosol Conference, St. Paul, MN, September 2006.
- Reff,\*\* A, **Turpin, BJ**, Weisel, CP, Zhang, J, Morandi, M, Stock, T, Colome, S, Winer, A, “PM2.5 exposures chemically characterized by functional group: RIOPA study results,” Poster presentation at the International Aerosol Conference, St. Paul, MN, September 2006.

- Polidori, \*\* A, Turpin, BJ, Naumova, Y, Eisenreich, S, Meng, \*\* QY, Cui, \*\* W, Giovanetti, \*\* R, Kwon, J, Weisel, C, “Effects of source proximity on residential outdoor concentrations of PM<sub>2.5</sub> and its carbonaceous components,” Platform presentation at the International Aerosol Conference, St. Paul, MN, September 2006.
- Carlton, \*\* AG, Altieri, K, Seitzinger, S, Turpin, BJ, Lim, HJ, “Secondary organic aerosol formation through cloud processing: Kinetics and products of aqueous-phase glyoxal/methylglyoxal and hydroxyl radical reactions,” Platform presentation at the International Aerosol Conference, St. Paul, MN, September 2006.
- Carlton, \*\* AG, Turpin, BJ, Altieri, K, Seitzinger, S, “SOA production from isoprene: Aqueous-phase mechanisms,” Platform presentation at the American Association for Aerosol Science Annual Conference, Austin, TX, October 2005.
- Altieri, K. E., Carlton, \*\* A. G., Turpin, B. J., Seitzinger, S., “Oligomers in cloud processing: Reactions of isoprene oxidation products,” Poster presentation, American Association for Aerosol Research, Austin, TX, October 2005.
- Carlton, \*\* A. G., Lim, \*\* H. J., Altieri, K., Seitzinger, S., Turpin, B. J., “Secondary organic aerosol potential from isoprene: Aqueous-phase mechanisms,” Platform presentation, Atmospheric Chemistry Colloquium for Emerging Senior Scientists, Yellowstone National Park, September 2005.
- Carlton, \*\* A. G., Lim, H. J., Altieri, K., Seitzinger, S., Turpin, B. J., “Secondary organic aerosol potential from isoprene: Aqueous-phase mechanisms,” Gordon Research Conference on Atmospheric Chemistry, Big Sky, MT, September 2005.
- Altieri, K. E., Carlton, \*\* A. G., Turpin, B. J., Seitzinger, S., “Oligomers in cloud processing: Reactions of isoprene oxidation products,” Platform and poster presentation, Surface Ocean Lower Atmosphere Study (SOLACE) Meeting, August 2005, Corsica, France.
- Polidori, \*\* A, Turpin, BJ, Meng, \*\* QY, Naumova, Y, Reff, \*\* A, Eisenreich, SJ, Weisel, C, Zhang, JJ, Morandi, M, Stock, T, Colome, S, Winer, A, Spektor, D, Lee, JH, “Organics dominate indoor-generated PM<sub>2.5</sub> in RIOPA homes,” Platform presentation at the International Society of Exposure Analysis Annual Conference, Philadelphia, PA, October 2004.
- Lim, \*\* HJ, Turpin, BJ, Carlton, \*\* AC, “Isoprene and in-cloud formation of secondary organic aerosol,” Platform presentation at the American Association for Aerosol Research Annual Conference, Atlanta, GA, October 2004.
- Turpin, BJ, Weisel, C, Morandi, M, Colome, S, Stock, T, Eisenreich, SJ, Buckley, B, “Contributions of outdoor PM sources to indoor concentrations and personal exposures: Analysis of RIOPA PM species concentrations,” Poster presentation at the Annual Conference of the Health Effects Institute, Boston, MA, May 2004.
- Turpin, BJ, Meng, \*\* QY, Lau, \*\* G, Polidori, \*\* A, Reff, \*\* A, Porcja, \*\* R, Naumova, Y, Offenberg, \*\* J, Eisenreich, S, Weisel, C, Suh, H, Morandi, M, Stock, T, Colome, S, Winer, A, “Speciated PM<sub>2.5</sub> exposures provide insights into PM epidemiology and public health protection,” Presented at the American Association for Aerosol Research Annual Conference, Anaheim, CA, October 2003.
- Maria, SF, Russell, LM, Turpin, BJ, Porcja, \*\* RJ, Weber, RJ, Huebert, BJ, “Source signatures of carbon monoxide and organic functional groups in ACE-Asia submicron aerosol types,” Presented at the American Association for Aerosol Research Annual Conference, Anaheim, CA, October 2003.
- Turpin, BJ, Meng, \*\* QY, Naumova, Y, Reff, \*\* A, Polidori, \*\* A, Porcja, \*\* RJ, Lee, \*\* JH, Weisel, CP, Korn, L, Eisenreich, S, Buckley, B, Morandi, MT, Stock, TH, Colome, S, Winer, A, Spektor, DM, “Composition and origin of fine particulate matter exposures: Insights from the RIOPA study,” Poster presentation at the Health Effects Institute Annual Conference, Boulder, CO, May 2003.
- Cabada, JC, Pandis, SN, Wittig, B, Robinson, AL, Subramanian, R, Polidori, \*\* A, Turpin, BJ, “Secondary organic aerosol contribution to carbonaceous PM<sub>2.5</sub> concentrations in Pittsburgh,”

- Poster presentation at Particulate Matter: Atmospheric Sciences, Exposure, and the Fourth Colloquium on PM and Human Health, Pittsburgh, PA, April 2003.
- Offenberg,\*\* JH, Naumova, Y, Eisenreich, SJ, **Turpin, BJ**, Weisel, CP, Morandi, M, Stock, T, Colome, S, Winer, A, “Chlordanes in the indoor and outdoor air of three US cities,” Poster presentation at Particulate Matter: Atmospheric Sciences, Exposure, and the Fourth Colloquium on PM and Human Health, Pittsburgh, PA, April 2003.
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