# Jun Wang, Ph.D., PE, CIH, CSP, CHMM

Division of Environmental and Industrial Hygiene Department of Environmental and Public Health Sciences College of Medicine, University of Cincinnati (UC) Office: Kettering Lab Complex Room 429, 160 Panzeca Way, Cincinnati, OH Lab: Kettering 161 (BARS) 172 (ESCAPE) 314 (FUME) 414 (Student) 418 (RTAC) 438 (WANG) 445 (AIDE) Phone: (513)558-4301 (Office) | (513)558-4397 (Fax) | (352)870-0024 (Cell) Mailing: PO Box 670056, Cincinnati, OH, 45267-0056 E-mails: jun.wang@uc.edu (external) | wang6ju@ucmail.uc.edu (internal) Websites: https://uclab.wang | https://researchdirectory.uc.edu/p/wang6ju

# **EDUCATION**

Ph.D. in Environmental Engineering Sciences, University of Florida, 2009-2013
MBA, Master of Business Administration, University of Oklahoma, 2015-2019
M.S. in Environmental Management and Economics, Nankai University, 2006-2009
B.S. in Environmental Engineering, Nankai University, 2002-2006

# **PROFESSIONAL EXPERIENCES**

- Sep 2023-present Associate professor (tenured), Division of Environmental and Industrial Hygiene, Department of Environmental and Public Health Sciences, College of Medicine, University of Cincinnati, Cincinnati, OH.
- Jan 2020-Aug 2023 Assistant professor (tenure track), Division of Environmental and Industrial Hygiene, Department of Environmental and Public Health Sciences, College of Medicine, University of Cincinnati, Cincinnati, OH.
- Aug 2013-Dec 2019 Assistant professor (tenure track), Department of Occupational and Environmental Health, Hudson College of Public Health, University of Oklahoma Health Sciences Center, Oklahoma City, OK.
- Aug 2009-Aug 2013 Graduate research assistant, Department of Environmental Engineering Sciences, University of Florida, Gainesville, FL.

# **PROFESSIONAL CERTIFICATIONS**

- Professional Engineer (PE, registered with Oklahoma Board, #28816, active)
- Certified Industrial Hygienist (CIH, #11484, active)
- Certified Safety Professional<sup>®</sup> (CSP, #34655, active)
- Certified Hazardous Materials Manager (CHMM, #30004, active)
- Certified in Public Health (CPH, #12066, expired)

# **Other Training**

- Foundations of Python, Data Manipulation, Data Visualization (Cincinnati, OH, Mar 2024)
- o OUHSC Faculty Leadership Program (Oklahoma City, OK, 2016-2017, 128 hours program)
- OSCTR Translating Practice into Research (Oklahoma City, OK, 2016~2017 full-year program)
- Bayesian Statistics Methods Training (Oklahoma City, OK, May 2016)
- AIHA Leadership Workshop (Fall Church, VA, Jun 2016)
- Ethics for the EHS Professional (Webinar, Oct 2015
- Introduction to Mammalian Cell Culture Techniques (Gainesville, FL, Jul 2011)

## **PROFESSIONAL MEMBERSHIPS**

#### **Current Membership**

- American Association for Aerosol Research (AAAR, since 2010)
- American Industrial Hygiene Association (AIHA, since 2012)
- American Conference of Governmental Industrial Hygienists (ACGIH, since 2016)

#### **Elapsed or Not Active**

0		Oklahoma Center for Respiratory & Infectious Diseases (OCRID, 2014-2019)
0		Stephenson Cancer Center (SCC, 2014-2019)
	0	Associate member of cancer health disparities research program (2014-2019)
0		Air & Waste Management Association (AWMA, 2008-2014)
	0	University of Florida Student Section (2009-2013)
0		Association of Environmental Engineering & Science Professors (AEESP, 2013-2017)
0		American Public Health Association (APHA, 2015-2016)
0		Chinese-American Professors in Environmental Engineering and Science (CAPEES, 2014-)
0		International Society of Exposure Science (ISES, 2013-2016)
0		National Environmental Health Association (NEHA, 2015-2019)

# Awards & Honors

#### Honors

Apr 2022	NIOSH Bullard-Sherwood Research to Practice (r2p) Award
Oct 2021	UC International Fellowship
Jan 2021	UC Research Launch Award
Apr 2020	CEG New Investigator Award
Jul 2018	OU Ben Barnett Memorial Fund
May 2018	AIHA Golden Seed Award

Apr 2018	COPHSA Faculty Teaching Award
Jul 2017	OUHSC Faculty Leadership Fellow
Jul 2016	OU Ben Barnett Memorial Fellowship
May 2012	FL-AWMA Scholarship
Mar 2012	The HDR Engineering, Inc Scholarship
Nov 2011	UF College of Engineering Outstanding Academic Achievement Award
Oct 2011	The Elmer L. Hann award from the Society of Naval Architects and Marine Engineers
	(SNAME)
Oct 2011	UFIC Outstanding International Student Award
Nov 2008	Young Voices Award on Better Air Quality (4 awardees worldwide)
Jun 2008	Nankai University Graduate Student Award 2 <sup>nd</sup> Place

## **Presentation Award**

Oct 2012	31 <sup>st</sup> AAAR annual conference student poster competition winner
Aug 2012	2012 Southern California Chinese American Environmental Protection Association (SCCAEPA)
	student best research award 3 <sup>rd</sup> place
Sep 2011	2011 FL-AIHA fall conference 1 <sup>st</sup> place student poster award
Oct 2010	2010 FL-AWMA annual conference 1 <sup>st</sup> place student poster award

## **Travel Grants**

Apr 2019	ASSP Terrance M. Hennessy professional education grant
Sep 2012	AAAR student travel grant
Sep 2012	2012 University of Florida Graduate Student Council travel fund
Sep 2019	2011 University of Florida Graduate Student Council travel fund
Jan 2011	National Science Foundation Civil, Mechanical and Manufacturing Innovation (NSF-CMMI)
	travel grant

# **GRANTS & PROJECTS**

#### **Pending Grants**

- Southwest Ohio Research and Demonstration (SWORD): Improving School Air Quality Agency: US EPA | Proposed project cost: \$7,751,432
   Role: Principal investigator (40%) | Proposed period: 10/1/2024-9/30/2029
- Airborne Microplastics Exposure and Health Outcomes of School-Aged Children Agency: UK-CCTS | Proposed project cost: \$50,000
   Role: Principal investigator (15%) | Proposed period: 7/1/2024-6/30/2025

#### **Ongoing Grants**

 Evaluation of the new Generation Respirator Protection Monitor (RePM) for Loose-Fitting Powered Air-Purifying Respirator (PAPR)
 Agency: CDC/NIOSH | #75D30123P17111 | Total project cost: \$156,613

Role: Principal investigator (15%) | Period: 8/1/2023-8/30/2024

- Occupational Exposure and Interventions among Granite Countertop Fabrication Workers Agency: U-M COHSE pilot project | Total project cost: \$21,501 Role: Principal investigator | Period: 7/1/2023-6/30/2024
- Enhance Performance and Applications of Exposure-Protection Integrated Communicator (EPIC)
   Agency: Ohio BWC | #WISC24-230331-027 | Total project cost: \$1,474,198
   Role: Principal investigator (40%) | Period: 7/1/2023-6/30/2024
- Michigan-Ohio Occupational Research Education (MOORE)
   Agency: NIEHS | R25ES033042 | Total project cost: \$1,298,837 (per FY)
   Role: Collaborator (8.3%) | PI: Batterman | Period: 9/1/2021-8/31/2026
- University of Cincinnati Education and Research Center (UC ERC)
   Agency: CDC/NIOSH | #T42OH008432 | Total center cost: \$1,800,000 (per FY)
   Role: Outreach director, EIH Deputy Director (22.8%) | PI: Bhattacharya | Period: 7/1/2021-6/30/2026

#### **Completed Grants**

- NIOSH Intergovernmental Personnel Act (IPA) Agency: NIOSH | #22IPA2014120 | Total project cost: \$51,017 Role: Principal investigator (40%) | PI: Wang | Period: 9/1/2022-8/31/2023
   Exposure-Protection Integrated Communicator (EPIC) to Improve and Promote PPE Usages in Ohio Workplace
  - Agency: Ohio BWC | #WISC23-220513-001 | Total project cost: \$1,023,359
  - Role: Principal investigator (40%) | Period: 7/1/2022-6/30/2023
- Center for Environmental Genetics
   Agency: NIEHS | #P30ES006096 | Total center Cost: \$1,604,738
   Role: ITS core | PI: Pinney | Period: 3/30/2022-4/1/2023

0	NIOSH COVID-related Intergovernmental Personnel Act (IPA)
	Agency: NIOSH   #21IPA2014120   Total project cost: \$27,856
	Role: Principal investigator (20%)   PI: Wang   Period: 9/1/2021-8/31/2022
0	Chemical and Toxicological Paradigm shift of Air Pollution in a Post Pandemic World
	Agency: CEG Pilot Project   # P30ES006096   Total project cost: \$20,000
	Role: Principal investigator   Period: 7/1/2021-6/30/2022
0	Investigation of Occupationally-Related Stress of At-Risk Workers During COVID-19
	Agency: UC ERC Pilot Project   # P30ES006096   Total project cost: \$7,550
	Role: Mentor   PI: Gerding   Period: 7/1/2021-6/30/2022
0	Center for Environmental Genetics
	Agency: NIEHS   #P30ES006096   Total center cost: \$1,604,738 (per FY)
	Role: New investigator (25%)   PI: Pinney   Period: 4/1/2020-3/30/2022
0	NIOSH COVID-related Intergovernmental Personnel Act (IPA)
	Agency: NIOSH   # 20IPA2014120   Total project cost: \$27,786
	Role: Principal investigator (20%)   PI: Wang   Period: 9/1/2020-8/31/2021
0	University of Cincinnati Education and Research Center (UC ERC)
	Agency: CDC/NIOSH   #T42OH008432   Total center cost: \$1,702,965 (per FY)
	Role: EIH deputy director (6.5%)   PI: Reponen   Period: 7/1/2016-6/30/2021
0	Field-portable nano-sized aerosol sampler and analyzer for industrial hygiene research and education
	Agency: PHF through OUHSC VPR   #C5112901   Total direct cost: \$89,450
	Role: Principal investigator (5%)   Period: 7/1/2018-6/30/2019
0	Development of a low-cost high-efficiency LEV retrofit kit for small business
	Agency: Sooner Innovation Fund   Total direct cost: \$5,000
	Role: Mentor   Period: 9/1/2018-11/30/2018
0	Ozone and vapor emission from a desktop stereolithography 3-D printer
	Agency: NIGMS through OK-INBRE   #P20GM103447   Total direct cost: \$2,200
	Role: Summer mentor   Period: 5/1/2018-7/30/2018
0	Oxidative gases emission and particulates' oxidative potential from non-conventional welding
	Agency: NIOSH through SWCOEH   #T42OH008421   Total project cost: \$9,259
	Role: Principal investigator/mentor (5%)   Period: 1/1/2018-6/30/2018
0	Fume emission and toxicity from 3-D fabrication
	Agency: PHF through OUHSC-VPR   #C509311   Total direct cost: \$49,996
	Role: Principal investigator (15%)   Period: 7/1/2016-12/31/2017
0	Balancing sustainability, clean air, healthy learning interiors, and structural safety when designing and
	building schools
	Agency: USEPA   #83563401-0   Total direct cost: \$646,633
	Role: Investigator (6%)   PI: Lisa Holliday   1/1/2015-12/31/2017
0	Ultrafine particle emission from multi-nozzle 3-D printer
	Agency: NIGMS through OK-INBRE   #P20GM103447   Total direct cost: \$2,200
	Role: Summer mentor   Period: 5/1/2016-7/30/2016

- Representativeness of chamber sampling in occupational metal fume exposure assessment Agency: NIOSH through SWCOEH | #T42OH008421 | Total project cost: \$9,180
   Role: Principal investigator (10%) | Period: 7/1/2015-6/30/2016
- Characterization of e-cigarette emissions from current generation modifiable systems Agency: OTRC | #C1082808 | Total direct cost: \$49,544
   Role: Co-investigator (6%) | PI: Evan Floyd | Period: 7/1/2014-6/30/2015

## **PUBLICATIONS**

#### **Peer-reviewed Journal Paper**

#### Link to Google Scholar | Link to PubMed

- 1. **Wang, J.**; Singletary J.; Reponen T.; Grinshpun, S.; Yermakov, M.; Bunte, J., Aerosol emission, transmission, and mitigation from performing singing and wind instruments, *Journal of Occupational and Environmental Hygiene*, **2024**, in press
- 2. Niu, X.; Hall, P.; **Wang, J.**; Lange, S., Airborne hexavalent chromium and particulate matter emissions during the laser cutting of leathers, *ACS Chemical Health & Safety*, **2024**, in press
- 3. Gerding, T.; **Wang, J.**; Newman, N., Examining work stress and air pollutants exposure of home healthcare workers, *Atmosphere*, **2023** 14 (9), 1393
- 4. Fang, R.; Mohammed, A.; Yadav, J.; Wang, J., Cytotoxicity and characterization of ultrafine particles from desktop three-dimensional printers with multiple filaments, *Toxics*, **2023** 11 (9) ,720
- 5. Gerding, T.; Davis, K.; **Wang, J.**, An investigation into occupational related stress of at-risk workers during COVID-19, *Annals of Work and Exposure Health*, **2023** 67(1):118-128
- Gerding, T.; Wang, J., Stressed at work: investigating the relationship between occupational stress and salivary cortisol fluctuations, *International Journal of Environmental Research and Public Health*, 2022 19(19). 12311
- McCann A.; Singerman, K.; Coxe J.; Singletary, J.; Wang, J.; Collar, R.; Hsieh T-Y., Quantifying aerosol generation in maxillofacial trauma repair techniques, *Craniomaxillofacial Trauma & Reconstruction*, 2022 15(4):362-368
- 8. Ward, R.; Tilly, T.; Mazhar, S.; Robinson, S.; Eiguren-Fernandez, A.; **Wang, J.**; Sabo-Attwood, T.; Wu, C., Mimicking the human respiratory system: Online in vitro cell exposure for toxicity assessment of welding fume aerosol. *Journal of Hazardous Materials*, **2020** 395: 122687
- Fang, L.; Qiu, F.; Li, Y.; Wang, S.; DeGuzman, J.; Wang, J.; She, J., Determination of carbazole and halogenated carbazoles in human serum samples using GC-MS/MS. *Ecotoxicology and Environmental Safety*, 2019 184: 109609
- 10. Su, W.; Chen, Y.; Bezerra, M.; **Wang, J.**, Respiratory deposition of ultrafine welding fume particles. *Journal of Occupational and Environmental Hygiene*, **2019** 16(10):694-706
- 11. Zhao, J.; Feng, Y.; Bezerra, M.; **Wang J.**; Sperry, T., Numerical simulation of welding fume lung dosimetry. *Journal of Aerosol Sciences*, **2019** 135: 113-129
- 12. Li, H.; Zhao, J.; Zhang, W.; Yang, J.; **Wang, J.**; Zhang M.; Yang Z.; Li L.; Shih K., NH<sub>3</sub> inhibits mercury oxidation over low-temperature MnOx/TiO<sub>2</sub> SCR catalyst. *Fuel Processing Technology*, **2018** 176: 124-130
- 13. Floyd, E.; Queimado, L.; **Wang, J.**; Regens, J.; Johnson, D., Electronic cigarette power affects count concentration and particle size distribution of vaping aerosol. *PLOS One* **2018** 13(12): e0210147
- Feng, Y.; Zhao, J.; Kleinstreuer, C.; Wang, Q.; Wang, J.; Wu, D.; Lin, J., An in silico inter-subject variability study of extra-thoracic morphology effects on inhaled particle transport and deposition. *Journal of Aerosol Sciences* 2018 123: 185-207
- 15. Johnson, D.; Lynch, R.; Floyd, E.; **Wang, J.**; Bartels, J., Indoor air quality in classrooms: environmental measures and effective ventilation rate modeling in urban elementary schools. *Building and Environment*

**2018** 136: 185-197

- 16. Li, H.; Zhang, W.; **Wang, J.**; Yang, Z.; Li, L.; Shih, K., Copper slag as a catalyst for mercury oxidation in coal combustion flue gas. *Waste Management* **2018** 74: 253-259
- 17. Jiang, S.; Liu, X.; Li, H.; **Wang, J.**; Yang, Z.; Peng, H.; Shih, K., Synergistic effect of HCl and NO in elemental mercury catalytic oxidation over La<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> catalyst. *Fuel* **2018** 215(1):232-238
- 18. Floyd, E.; **Wang, J.**; Regens, J., Fume emissions from a low-cost 3-D printer with various filaments. *Journal of Occupational and Environmental Hygiene* **2017** 14 (7): 523-533
- Li, H.; Zhang, W.; Wang, J.; Yang, Z.; Li, L.; Shih, K., Coexistence of enhanced Hg<sup>0</sup> oxidation and induced Hg<sup>2+</sup> reduction on CuO/TiO<sub>2</sub> catalyst in the presence of NO and NH<sub>3</sub>. *Chemical Engineering Journal* 2017 330: 1248-1254
- 20. Wang, J.; Li, H.; Bezerra, M., Assessment of shooter's task-based exposure to airborne lead and acidic gas at indoor and outdoor ranges. *Journal of Chemical Health and Safety* **2017** 24 (4): 14-21
- 21. Li, H.; Zhu, L.; **Wang, J.**; Li, L.; Lee, P. H.; Feng, Y.; Shih, K., Effect of nitrogen oxides on elemental mercury removal by nanosized mineral sulfide. *Environmental Science & Technology* **2017** 51(15): 8530-8536
- Wang, J.; Hoang, T.; Floyd E.; Regens, J., Characterization of particulate fume and oxides emission from stainless steel plasma cutting. *Annals of Work Exposures and Health (formerly known as Annals of Occupational Hygiene)* 2017 61 (3): 311-320
- 23. Fang, H.; **Wang, J.**; Lynch, R., Migration of di(2-ethylhexyl)phthalate (DEHP) and di-n-butylphthalate (DBP) from polypropylene food containers. *Food Control* **2017** 73 Part B: 1298-1302
- Li, H.; Zhu, L.; Wang, J.; Li, L.; Shih, K., Development of nano-sulfide sorbent for efficient removal of elemental mercury from coal combustion fuel gas. *Environmental Science & Technology* 2016 50 (17): 9551-9557
- 25. Li, H.; Wu, S; Li, L.; **Wang, J.**; Ma, W.; Shih, K., CuO-CeO<sub>2</sub>/TiO<sub>2</sub> catalyst for simultaneous NO reduction and Hg<sup>0</sup> oxidation at low temperatures. *Catalysis Science & Technology* **2015** 5: 5129-5138
- 26. Li, H.; Wu, S.; Wu, C.-Y.; **Wang, J.**; Li, L.; Shih, K., SCR atmosphere induced reduction of oxidized mercury over CuO/CeO<sub>2</sub>-TiO<sub>2</sub> catalyst. *Environmental Science & Technology* **2015** 49 (12): 7373-7379
- Hayes, J.; Wang, J.; Roessler J.; Ferraro C.; Wu, C.-Y.; Deford D.; Townsend T., Evaluation of leaching of trace metals from concrete amended with cement kiln baghouse filter dust. Resources, *Conservation and Recycling* 2015 94: 92-98
- 28. Li, H.; Wu, X.; Wang, M.; **Wang, J.**; Wu, S.; Yao, X.; Li, L., Separation of elemental sulfur from zinc concentrate direct leaching residue by vacuum distillation. *Separation and Purification Technology* **2014** 138: 41-46
- Wang, J.; Hayes, J.; Wu, C.-Y.; Townsend, T.; Schert J.; Vinson T.; Deliz K.; Bonzongo J.-C., Characterization of vapor phase mercury released from concrete processing with baghouse filter dust added cement. *Environmental Science & Technology* 2014 48 (4): 2481-2487
- 30. Jin, T.; Qu, L.; Liu, S.; Gao, J.; **Wang, J.**; Wang, F.; Zhang P.; Bai, Z.; Xu, X., Chemical characteristics of particulate matter emitted from a heavy duty diesel engine and correlation among inorganic and PAH components. *Fuel* **2014** 116: 655-661
- 31. **Wang, J.**; Wu, C.-Y.; Franke, G., Effectiveness of amorphous silica encapsulation technology on welding fume particles and its impact on mechanical properties of welds. *Materials & Design* **2014** 54: 79-86
- 32. Wang, J.; Jin, L.; Gao, J.; Shi, J.; Zhao, Y.; Liu, S.; Jin, T.; Bai, Z.; Wu, C.-Y., Investigation of speciated VOC in

gasoline vehicular exhaust under ECE and EUDC test cycles. *Science of the Total Environment* **2013** 445-446: 110-116

- 33. **Wang, J.**; Kalivoda, M.; Guan J.; Theodore, A.; Sharby, J.; Wu, C.-Y.; Paulson, K., Es-Said, O., Double shroud delivery of silica precursor for reducing hexavalent chromium in welding fume. *Journal of Occupational and Environmental Hygiene* **2012** 9 (12): 733-742
- 34. Zhao, C.; Liu, L.; Zhang, Q.; **Wang, J.**; Li, Y., Photocatalytic conversion of CO<sub>2</sub> and H<sub>2</sub>O to fuels by nanostructured Ce-TiO<sub>2</sub>/SBA-15 composites. *Catalysis Science & Technology* **2012** 2: 2558-2568
- 35. Hall, D.; Wu, C.-Y.; Hsu, Y.-M.; Stormer, J.; Engling, G.; Capeto, K.; Wang, J., Brown S.; Li, H.-W.; Yu, K.-M., PAHs, carbonyls, VOCs and PM<sub>2.5</sub> emission factors for pre-harvest burning of Florida sugarcane. *Atmospheric Environment* 2012 55: 164-172
- 36. Topham, N.; Wang, J.; Kalivoda, M.; Huang, J.; Yu, K.-M.; Hsu, Y.-M.; Wu, C.-Y.; Oh, S.; Cho, K.; Paulson, K., Control of Cr<sup>6+</sup> emissions from gas metal arc welding using a silica precursor as a shielding gas additive. *Annals of Occupational Hygiene* 2012 56 (2): 242-252
- 37. **Wang, J.**; Topham, N.; Wu, C.-Y., Determination of silica coating efficiency on metal particles using multiple digestion methods. *Talanta* **2011** 85 (5): 2655-2661
- Paulson, K.; Wang, J.; Topham, N.; Wu, C.-Y.; Alexandrov, B.; Lippold, J.; Es-Said, O., Alternatives for joining stainless steel to reduce Cr(VI) emissions and occupational exposures. *Journal of Ship Production & Design* 2011 27 (2): 91-97
- Li, W.; Peng, Y.; Shi, J.; Qiu, W.; Wang, J.; Bai, Z., Particulate polycyclic aromatic hydrocarbons in the urban Northeast Region of China: Profiles, distributions and sources. *Atmospheric Environment* 2011 45 (40): 7664-7671
- 40. Yu, K.-M.; Topham, N.; **Wang, J.**; Kalivoda, M.; Tseng, Y.; Wu, C.-Y.; Lee, W.-J.; Cho, K., Decreasing biotoxicity of fume particles produced in welding process. *Journal of Hazardous Materials* **2011** 185 (2-3): 1587-1591

## **Books & Chapters**

- 1. Zhipeng Bai, **Jun Wang**, and Yan You, Environmental Risk Assessment. Higher Education Press, Beijing, China, Dec 2008, ISBN 978-7-04-025339-9.
- 2. Zhipeng Bai and **Jun Wang**, Environmental Management. China Chemical Industry Press Ltd., Beijing, China, Sep 2007, ISBN 978-7-122-00893-0.

#### Reports

- 1. Assessment of potential concerns associated with the use of cement kiln dust in FDOT concrete mixes. FDOT BDK75-977-43, May 2013.
- 2. Innovative welding technologies to control hazardous air pollutant (HAP) emissions using silicon additives. ESTCP NO. WP-0903, Aug 2012.

#### **Conference Presentations**

\* platform presentation | # poster presentation | \$ poster competition winner

^ presented on behalf of the first author | % presented by my students or associates on behalf of me

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American Industrial Hygienist Association (AIHA) Connect 2024, Columbus, OH, May 2024

- 1. PDC 305 Direct reading instruments for students and young Professionals \*
- 2. D9 Real-time measurement of workplace protection factor \*
- 3. Emissions from desktop laser cutting and engraving of various common materials %

Ohio Safety Congress & Expo (OSC) 2024, Columbus, OH, Mar 2024

- 4. Exposure-protection integrated communicator (EPIC) \*
- 5. Enhance performance and applications of exposure-protection integrated communicator (EPIC) **#** Aerosol Day 2024, Cincinnati, OH, Mar 2024
  - 6. Characterization of aerosol emission from ultra-high speed 3D printing %
  - 7. Aerosol emissions from desktop laser cutting and engraving of various common materials %
- Ohio Safety Congress & Expo (OSC) 2023, Columbus, OH, Mar 2023
  - 8. Exposure-protection integrated communicator (EPIC) to improve and promote PPE usages in Ohio workplace **#**

American Industrial Hygienist Conference & Expo (AIHce) 2022, Nashville, TN, May 2022

- 9. An investigation into occupational related stress of at-risk workers during COVID-19 %
- 10. Cytotoxicity and characterization of ultrafine particles from desktop three-dimensional printers with multiple filaments **%**

American Association for Aerosol Research (AAAR) 38th Annual Conference, virtual, Oct 2020

11. Aerosol generation and transmission from performing singing and wind instruments. No. 6.ID.3 st

American Industrial Hygienist Conference & Expo (AIHce) 2019, Minneapolis, Mn, May 2019

- 12. H6 Novel experimental approaches to study emission and exposure of welding fume \*
- 13. M13 University of Oklahoma Health Sciences Center OEH student presentations %

10th International Aerosol Conference (IAC), St. Louis, MO, Sep 2018

- 14. Emission and oxidative potential of particulates from alternating current tungsten inert gas welding on aluminum, No. 9.WA.7 \*
- 15. Link the oxidation level between gaseous and particulates compounds: a study on nitrogen-enriched stainless steel welding and cutting, No. 10.WA.7 **#**

NIOSH ERC PPRTP Symposium, the University of Texas School of Public Health, Houston, TX. Jun 2018

16. Oxidative gases emission and particulates' oxidative potential from non-conventional welding **%** <u>American Industrial Hygienist Conference & Expo (AIHce) 2018</u>, Philadelphia, PA, May 2018

- 17. K1 Sampling, measurement and numerical simulation of respiratory deposition of metal fume particles \*
- 18. A4 Frontier research on welding fume emission and engineering control \*
- 19. I13 Low-cost 3-D printing and fabrication: not low in fume emission \*

20. Emission of oxidative gases and ultrafine particles from nitrogen-enriched welding, No. 862 **%** <u>American Association for Aerosol Research (AAAR) 36<sup>th</sup> Annual Conference, Raleigh, NC, Oct 2017</u>

21. Aerosol and gaseous pollutants emission from a desktop laser cutter and engraver, No. 2.AE.12 #

22. High oxidative potential of metal oxides in welding and plasma cutting fume, No. 8.OP.14 # <u>American Industrial Hygienist Conference & Expo (AIHce) 2017, Seattle, WA, Jun 2017</u>

23. Respirable and ultrafine aerosol emissions from a desktop laser cutter and engraver, No. 927 **#%** <u>American Association for Aerosol Research (AAAR) 35<sup>th</sup> Annual Conference, Portland, OR, Oct 2016</u>

- 24. Particulate hexavalent chromium, aerosol size distribution, and respiratory deposition of pulsed metal inert gas welding fume, No. 11.CM.4 \*
- 25. Aerosol emission from low-cost metal and thermoplastic 3-D fabrication, No. 8.AE.4 #
- 26. A comparison of respirable welding fume aerosol exposure reduction by low-cost and commercial local exhaust ventilations, No. 11.CM.3 \*

American Industrial Hygienist Conference & Expo (AIHce) 2016, Baltimore, MD, May 2016

27. Effects of pulse parameters on welding fume aerosol size distribution and respiratory deposition, No. PO-120-08 \*

28. Aerosol and volatile organic compounds emissions from a low-cost 3-D printer, No. PO-120-02 \* <u>American Association for Aerosol Research (AAAR) 34<sup>th</sup> Annual Conference, Minneapolis, MN, Oct 2010</u>

29. Effects of pulse parameters on welding fume aerosol size distribution and respiratory deposition. No. 8.AE.10 **#%** 

30. Volatile organic compounds and aerosol emissions from a low-cost desktop 3-D printer. No. 2.IA.5 # <u>American Industrial Hygienist Conference & Expo (AIHce) 2015, Salt Lake City, UT, Jun 2015</u>

31. Characterization of metal fume emitted from stainless steel plasma cutting. No. SR-120-06 \* <u>Oklahoma Center for Respiratory & Infectious Diseases (OCRID)</u> 2<sup>nd</sup> Annual Research Retreat, Stillwater, OK, Apr

2015

32. A preliminary study on respiratory exhaled aerosol diagnosis of pulmonary diseases. No. 119 **#** <u>American Association for Aerosol Research (AAAR) 33<sup>rd</sup> Annual Conference, Orlando, FL, Oct 2014</u>

33. Characterization of aerosols generated from stainless steel plasma cutting. No. 2.AE.1 **#** <u>American Industrial Hygienist Conference & Expo (AIHce) 2014, San Antonio, TX, Jun 2014</u>

- 34. Assessment of lead particle and acidic gas exposure during gun firing. No. SR-124-04 \*
- 35. Characterization of mercury in baghouse filter dust (BFD) and the release of vapor phase mercury from concrete processing, No. SR-125-03 \*
- 36. A novel amorphous silica encapsulation technology for reducing the toxicity of welding fume particles, No. SR-402-04 **#**

American Association for Aerosol Research (AAAR) 32<sup>nd</sup> Annual Conference, Portland, OR, Oct 2013

37. Assessment of lead particle and acidic gas exposure during gun firing. No. 8AE.8 **#** 106<sup>th</sup> Air & Waste Management Association (AWMA) Conference and Expo, Chicago, IL, Jun 2013

38. Characterization of Hg speciation and release from cement kiln baghouse dust, (No. 12761) **\*%** American Association for Aerosol Research (AAAR) 31<sup>st</sup> Annual Conference, Minneapolis, MN, Oct 2012

39. Amorphous silica encapsulation on welding fume particles. AAAR 31<sup>st</sup> Annual Conference, Minneapolis, MN, 2012.10. (No. 8NM.8) **#\$** 

American Industrial Hygienist Conference & Expo (AIHce) 2012, Indianapolis, IN, Jun 2015

40. Development of silica precursor technology on reducing welding fume toxicity. No. SR-129-7 \*

41. Development of a novel porous membrane denuder. No. SR-128-3 \*^

105<sup>th</sup> Air & Waste Management Association (AWMA) Conference and Expo, San Antonio, TX, Jun 2012

42. Development of silica precursor Technology on reducing welding fume toxicity, No. 41 **#%** <u>American Association for Aerosol Research (AAAR)</u> 30<sup>th</sup> Annual Conference, Orlando, FL, Oct 2011

43. Decreasing Cr<sup>6+</sup> in stainless steel welding fume using silica precursor as reducer, No. 10D.2 \*

- 44. Determination of silica coating efficiency on metal particles using multiple digestion methods. AAAR 30<sup>th</sup> Annual Conference, No. 8A.4 \*
- Florida Section of American Industrial Hygienist Association (FL-AIHA) Fall Conference, St. Augustine, FL, Sep 2011
  - 45. Reducing Cr<sup>6+</sup> exposure in welding process using silica precursor technology, #\$

American Association for Aerosol Research (AAAR) 29<sup>th</sup> Annual Conference, Portland, OR, Oct 2010

- 46. Application of silica precursor to reduce toxic metal emissions from stainless steel welding process, No. 3D.6 \*
- 47. Study of air toxics released from the pre-harvest burning of sugarcane, No. 2C.11 #^

2010 Florida Section of Air & Waste Management Association Annual Conference, Crystal River, FL, Oct 2010

48. Application of silica precursor to reduce toxic metal emissions from welding process #\$

- <u>103<sup>rd</sup> Air & Waste Management Association (AWMA) Conference and Expo, Calgary, Alberta, Canada, Jun 2010</u> 49. Application of silica precursor to reduce toxic metal emissions from gas metal arc welding process. **\*%**
- Air & Waste Management Association (AWMA) International Specialty Conference, Xi'an, China, May 2010
  - 50. Application of silica precursor to reduce toxic metal emissions from gas metal arc welding process, pp. 419 \*

51. Study of air toxics released from the pre-harvest burning of sugarcane, pp. 346 \*^

Air & Waste Management Association (AWMA) Air Quality Measurement Symposium, Chapel Hill, NC, Nov 2008

52. Continuous on-board vehicle emission measurement system. \*

- 101st Air & Waste Management Association (AWMA) Conference and Expo, Portland, OR, Jun 2008
  - 53. Particulate matters component profile of exhaust emission from heavy-duty diesel vehicle at Tianjin, China \*

## **Invited Talks**

\* graduate/research seminar talk | # plenary speech at conference/symposium

- 1. AI applications in industrial hygiene, Midwest Regional ERC Symposium, Chicago, IL, Apr 2024 #
- 2. Chemical and toxicological paradigm shift of air pollution in a post pandemic world, CEG Symposium, Cincinnati, OH, Nov 2023 \*
- 3. Applications of low-cost real-time direct-reading aerosol sensors in environment studies, DCEE Graduate Seminar, Cincinnati, OH, Feb 2023 \*
- 4. Air and waste research and education at UC, All-Ohio A&WMA Meeting, Hamilton, OH, Oct 2022 #
- COVID-19 pandemic and its impact on vulnerable population and work-related stress, DEPHS Graduate Seminar, Cincinnati, OH, Apr 2022 \*
- 6. Airborne transmission risks and mitigations in potential aerosol generation scenario, NIOSH COVID IPA Science Summit, virtual, Aug 2021 #
- Education certification and industrial standards in US industrial hygiene, 1<sup>st</sup> Occupational Hygiene Engineering Conference, China University of Labor Relations, Beijing, China, Dec 2020 #
- 8. Music performance and COVID-19, DEPHS Graduate Seminar, Cincinnati, OH, Nov 2020 \*
- 9. Characterization of aerosols from musical performance and risk mitigation related to COVID-19 pandemic,

University of Cincinnati ERC Webinar, Cincinnati, OH, July 2020 \*

- 10. Arrival of Additive Manufacturing: what we learned from an industrial hygiene perspective? West Virginia University, Morgantown, WV, Nov 2019 \*
- 11. Welding and 3-D printing: clash of conventional and futuristic fabrication processes from an industrial hygiene perspective, University of Cincinnati, Cincinnati OH, July 2019 \*
- 12. Welding and 3-D printing: clash of conventional and futuristic fabrication processes from an industrial hygiene perspective, University of Washington, Seattle, WA, May 2019 \*
- 13. A historical review of industrial hygiene in the US, to Challenges of education, training, and research after the Chinese government restructure, Zhoushan Municipal CDC, Zhoushan City, China, May 2018. **#**
- 14. Emerging issues related to aerosols around globe workplace: where do they come from and how do we control them? 1<sup>st</sup> International Occupational Health Forum, Beijing, China, Aug 2017 **#**
- 15. Challenges and opportunities: industrial hygiene practices, research, and education in US and China, COPHSA Meeting, Oklahoma City, OK, Oct 2016 \*
- 16. Aerosols in the workplace: research conducted by industrial hygienists, Oklahoma Christian University, Edmond, OK, Oct 2016 \*
- 17. Education, practice, and research framework of industrial hygiene: a comparison between US and China, Chongqing Safety Engineering Institute, Chongqing, China, Sep 2016 \*
- 18. Emerging exposure and risks from low-cost metal and thermoplastic 3-D printers, 2<sup>nd</sup> China-US Occupational Health Symposium, Guangzhou, Guangdong, China, Jul 2016 #
- 19. Representativeness of chamber sampling in occupational metal fume exposure assessment. NIOSH ERC PPRTP Symposium, the University of Texas School of Public Health, Houston, TX. Jun 2016 \*
- 20. Fume characteristics and controls from innovative welding technology and other metal fabrication processes. Central South University, School of Energy Science and Engineering, Changsha, Hunan, China, Jul 2015 \*
- 21. Risk assessment lesson learned from BP Deepwater Horizon oil spill. International Symposium on Marine and Aquatic Food Safety Risk Assessment, Qingdao, Shandong, China, Jul 2015 #
- 22. Aerosol lung deposition model and its applications in occupational and environmental health, Chinese Research Academy of Environmental Sciences, Beijing, China, Jul 2015 \*
- 23. Characterization of emerging occupational aerosol exposure & development of next generation engineering controls. University of Arizona, Tucson, AZ, Aug 2014 \*
- 24. Conversion from science to policy in Asian Cities. Better Air Quality 2008, Bangkok, Thailand, Nov 2008 #

## Media Appearance

- 1. Interviewed by WKEF, "Environmental concerns after lithium-ion battery burns", Nov 2023
- 2. Interviewed by Local 12/WKRC, "Study shows workplace stress increased during the pandemic, still affects us", Nov 2022
- 3. Interviewed by WVXU/NPR, "2 UC projects win 1M each from the Bureau of Workers' Comp", Sep 2022
- 4. Interviewed by Cincinnati Enquirer/USA Today, "Coronavirus in Ohio: UC study examines effects of singers, band instruments" Aug 2020
- 5. Interviewed by COPH Magazine, "Averting assaults on health by air", Sep 2018

6. Interviewed by AIHA Synergist, "Pole to pole Series: China", Oct 2016

# **TEACHING**

## Department of Environmental and Public Health Sciences, College of Medicine,

#### Primary instructor

2023-present	EIH 8035/MECH 6050 Ventilation for Safety and Health
2023-2024	EIH 7042 Practice in Occupational Exposure Assessment II
	* Offer in Spring every year, 2 credits.
2022-2023	EIH 7041 Practice in Occupational Exposure Assessment I
	* Offer in Fall every year, 2 credits.
2022-present	EIH 7043C Physical and Biological Aspects of Aerosol
	* Offer in Spring every year, 2 credits.
2021-present	EIH 8034 Hazardous Materials Management
	* Offer in Fall every year, 2 credits.
2020-present	EIH/PH 7007 Principles of Occupational Exposure Assessment
	* Offer in Fall every year, 2 credits.

# Department of Occupational and Environmental Health, College of Public Health, University of Oklahoma Health Sciences Center

2016-2019	OEH 6683 Applied Modeling Technology in Occupational and Environmental Health
	Research
	* Offer in Fall biannually, in-class, 3 credit hours
	* New course developed for doctoral students and inaugural offering in Sep 2016
2014-2019	<b>OEH 5553</b> Occupational & Environmental Toxicology
	* Offer in Spring every year, hybrid format (75%/25%), 3 credit hours.
	* Course changed from 100% in-class to 75%/25% hybrid format in Jan 2018.
	* Course number changed from OEH 6553 to OEH 5553 in Jan 2018.
2014-2019	<b>OEH 5743</b> Industrial Hygiene & Environmental Measurements
	* Co-lectured the course in May 2014, guest lectured "Transport and fate of air pollutants"
	annually.
2014-2018	OEH 5752 Occupational Hazards Control
	* Offer in Spring every year, in-class, 2 credit hours.
	* Course number will change from OEH 6752 to OEH 5752 in Jan 2018.
	* Course reassigned to another faculty to reduce teaching load starting Jan 2019.
2014-2018	OEH 5013 Environmental Health (online)
	* Developed as an online core course and started offering in Fall since 2014.
	* Course reassigned to another faculty to reduce teaching load starting Sep 2018.

#### **Continue Education and Outreach Efforts**

- 1. Aerosol Day: UC-NIOSH, Cincinnati, OH, Mar 2024
- 2. Workshop: best practices in occupational exposure protection, 32<sup>nd</sup> Annual Sustainability & EHS Symposium, Cincinnati, OH, Mar 2023
- 3. Conference organizer: 2019 American Industrial Hygiene Association Oklahoma Section (OK-AIHA) Annual Conference, Oklahoma City, OK, Oct 2019
- 4. Continue education course: concepts of modern occupational health: industrial hygiene and safety, Dongfeng Honda Automobile, Wuhan, China, Nov 2018
- 5. Tutorial: control of indoor aerosol exposure, AAAR 35<sup>th</sup> Annual Conference, Portland, OR, Oct 2016

# MENTORING

## **Research Associates & Visiting Scholars**

Environmental and Industrial Hygiene, University of Cincinnati

- Xiangjing Gao, PhD, visiting scholar, Zhejiang Provincial Center for Disease Control and Prevention, 2024-2025
- Justin Murrow, PhD, research scientist, University of Cincinnati, 2023-present
- o Michael Yermakov, MD, senior research associate, University of Cincinnati, 2022-present

Occupational and Environmental Health, University of Oklahoma Health Sciences Center

- Yuchao Wang, visiting scholar, Zhoushan Municipal Center for Disease Control and Prevention, 2019
- o Yan Chen, visiting scholar, Zhoushan Municipal Center for Disease Control and Prevention, 2019
- o Shuzhuan Li, visiting scholar, Beijing Institute of Technology, 2018
- o Zhichao Fang, visiting scholar, Zhoushan Municipal Center for Disease Control and Prevention, 2017
- Li Fang, visiting scholar, Zhoushan Municipal Center for Disease Control and Prevention, 2016-2017
- o Heng Wang, visiting scholar, Institute of Urban Environment, Chinese Academy of Sciences, 2015-2016
- Haiqin Fang, postdoctoral researcher, China National Center for Food Safety Risk Assessment, 2014-2015

## **Graduate Students**

Environmental and Industrial Hygiene, University of Cincinnati

Advised as committee chair (by expected graduation date)

- $\circ$   $\;$  Judith Arthur, Ph.D. student, expect graduate in 2027  $\;$
- o Kunj Patel, MPH student (capstone), expect graduate in 2024
- o John Singletary, Ph.D. student, expect graduate in 2024
- Xinyi Niu, Ph.D. candidate, expect graduate in 2024
   Dissertation short title: "Respirator design and demographics on N95 performance"
- Christina Kander, Ph.D., graduated in 2023
   Dissertation short title: "PPE and fireground vapor and particulate protection factors"
- Thomas Gerding, Ph.D., graduated in 2023
   Dissertation short title: "Stress at work: fluctuation of cortisol levels"
- Jacob Brock, M.S., course completed Thesis short title: "Particles during stainless steel welding and cutting"
- Runcheng Fang, M.S., graduated in 2022
   Thesis short title: "Cytotoxicity of 3-D printing fume"
- Jory Gould, M.S., graduated in 2022
   Thesis short title: "Aerosols and VOCs during Polygel® application"
- Logan Tipton, M.S., graduated in 2021
   Thesis short title: "Emissions from pulsed TIG welding"

Advised as committee member (by last name)

Ryan Bellacov, PhD, Reshmasri Deevi, M.S., Jiajian Ding, M.S., Deepishikha, Ola, M.S., Alyssa Yerkesen, M.S.

Advised as an external committee member (department/school) Jinho Lee, PhD (University of Texas Health Sciences Center)

## Occupational and Environmental Health, University of Oklahoma Health Sciences Center

## Advised as committee chair (by final date)

- Marcio Bezerra, Ph.D., graduated in 2020 (Current position: Assistant Professor, University of Central Oklahoma, Edmond, OK)
   Dissertation short title: "Innovative assessment and control of Welding Fume"
- Jacob Bartels, Ph.D. candidate, graduated as MS in 2019 (Current position: Service fellow, NIOSH, Cincinnati, OH)

Dissertation short title: "Oxidative potential of occupational-related aerosols"

- Shalayne Sims, M.S., NIOSH TPG trainee, graduated in 2018
   Thesis short title: "*particle and gas emission from aluminum-TIG welding*"
- Kevin O'Neil, M.S., NIOSH TPG trainee, graduated in 2017
   Thesis short title: "Laser-generated airborne contaminants from cutting and engraving"
- o Timothy Bearden, MPH, US Army, graduated in 2017
- Tien Hoang, M.S., NIOSH TPG trainee, graduated in 2016
   Thesis short title: "Wellness and exposure of nail salon workers"
- o Robin Reddix, MPH, graduated in 2015

## Advised as committee member (by last name)

Sarah Abhayagoonawardhana, M.S., Kathleen Aithinne, Ph.D., Folasade Arkande, M.S., Aryal Subekchhya, M.S., Cory Buchanan, M.S., Casey Cooper Ph.D., Clay Enis, M.S., Doga Karyaldiz, M.S., Jack Kerr, M.S., Elizabeth Kruger, M.S., Abigail Lansdown, M.S., Michael Long, M.S., Curtis Martin, M.S., Taylor Saley, MPH., Anthony Van, M.S., Laine Wheatley, M.S.

## **Undergraduate Students**

Occupational and Environmental Health, University of Oklahoma Health Sciences Center

- o Emily Sample, B.S., mentored in summer 2019
- o Jenna Schmitt, B.S., mentored in summer 2018
- o Jose Muniz, B.S., mentored in summer 2016

## Environmental Engineering Sciences, University of Florida

- $\circ$   $\;$  Jessica Sharby, B.S., mentored in 2012  $\;$
- Jianying Guan, B.S., mentored in 2012
- o Mark Kalivoda, B.S., mentored in 2011

# **SERVICES**

#### **Professional Associations & Conferences**

Air & Waste Management Association

- Poster abstract reviewer (2013), platform paper award judge (2014).
- Secretary, University of Florida Student Section (2012-2013)

#### American Association for Aerosol Research

- Committee member: internet (2016-2019, chair in 2018)
- Working group member: mitigation and control technology (since 2011), indoor aerosol and aerosol exposure (since 2014), health-related aerosol (since 2014)
- Special task: chair of *Meet Aerosol Pioneers* (2018), social media special taskforce (since 2018)
- Tutor lecturer (2016)
- Student poster judge (2013-2015)
- Annual meeting session chair (2012-2014, 2016-2018)
- Founding president, University of Florida Student Section (2011-2012)
- Faculty advisor, AAAR University of Cincinnati student chapter (2022-present)

## American Industrial Hygiene Association

- o Faculty advisor, AIHA University of Cincinnati student chapter (2021-present)
- Secretary (2015-2016), vice chair (2016-2017), chair (2017-2018) of Aerosol Technology Committee
- David Swift Award review (2018-2024)
- NIOSH Alice Hamilton Award (2024)
- Conference Program Committee member (2017-2020)
- Conference PDC and technical session reviewer (2016-2018)
- Student poster abstract review committee (2016-2018)
- American Industrial Hygiene Foundation Scholarship Advisory Committee member (2017-2019)
- President of Oklahoma Local Section (2018-2019)

## American Public Health Association

• Student poster judge (2015)

International Occupational Health Association

• Technical abstract reviewer (2018)

National Occupational Research Agenda (NORA)

- Manufacturing council (since 2020)
- Construction council (since 2020)

#### **Editorial Board**

1. Guest editor for special issue "Aerosols from Conventional and Emerging Sources: Emission, Exposure, Toxicity and Respiratory Effects", Toxics, Oct 2022

2. Guest editor for special issue "Emission and Exposure of Aerosols and Gases in Occupational Environment", Atmosphere, Dec 2021

#### **Ad-hoc Reviewer**

Journals: (counts) Aerosol and Air Quality Research (3) Aerosol Science & Technology (10) AIMS Environmental Science (2) Annals of Work Exposures and Health, formerly known as Annals of Occupational Hygiene (8) Atmosphere (3) Chemical Engineering Journal (1) Chemical Physics (3) Chemical Research in Toxicology (1) Chemosphere (2) Critical Reviews in Environmental Science and Technology (3) Energy & Fuels (1) Environmental Engineering Research (4) Environmental International (1) Environmental Pollution (1) Environmental Science: Processes & Impacts, formerly known as Journal of Environmental Monitoring (17) **Environmental Research Letters (4)** Environmental Science & Technology (3) Environmental Technology (2) Food control (1) Fuel Processing Technology (4) Geology, Ecology, and Landscapes (1) Indoor and Build Environment (2) Industrial & Engineering Chemistry Research (1) Industrial Health (2) International Archives of Occupational and Environmental Health (10) International Journal of Environment and Health (1) International Journal of Environmental Research and Public Health (3) International Journal of Environmental Technology and Management (1) International Journal of Occupational and Environmental Health (4) International Journal of Toxicology (3) Journal of Chemical Health and Safety (1) Journal of Engineering Manufacture (1) Journal of Hazardous Materials (2) Journal of Nanoparticle Research (2) Journal of Occupational & Environmental Hygiene (29) Journal of Physics D: Applied Physics (2) Journal of the Air & Waste Management Association (3)

	Material Research Express (3)
	Measurement Science and Technology (1)
	Microchemical Journal (1)
	PloS One (17)
	RSC Advances (1)
	Safety and Health at Work (2)
	Science of The Total Environment (1)
	Scientific Reports (1)
	Sustainable Cities and Society (2)
	Toxicology and Industrial Health (4)
	Toxicology Research (1)
Grants:	Beijing Natural Science Foundation
	CCHMC Pilot Project Program
	CDC/NIOSH Intramural Grants
	CDC/NIOSH Special Emphasis Panel
	CURES Pilot Grants
	National Geographic Society
	National Science Foundation Graduate Research Fellowship
	National Science Foundation SBIR
	NIOSH pre-publication review
	UC-ERC Pilot Grants
Publishing:	Elsevier Science & Technology Books
	Wiley-Blackwell

**Colleges & Local** 

Apr 2023-present	Co-director, CEG Shared Equipment ESCAPE
Apr 2022-present	DEPHS Radiation Authorized User
Aug 2022	Member, UC China Strategy Group
Apr 2022	Member, DEPHS Space Committee
July 2021-2022	UC International Fellow on Developing Strategic Partners
Apr 2021	Reviewer, UC Undergraduate Scholarly Showcase
Feb 2021	Member, DEPHS/UCCC Biostatistics Director Search Committee
Apr 2020-present	Member, DEPHS Industrial Hygiene Faculty Search Committee
Mar 2020-present	Member, DEPHS Environmental and Industrial Hygiene Admission Committee
Mar 2020-2023	Panelist, ERC Research Capacity Building Workshop
Sep 2018-2019	OUHSC Graduate College Representative (alternative) on Faculty Senate
Jun 2018-2021	OU College of Public Health Academic Appeal Board
Jul 2018-2021	Member, OUHSC Graduate College Preparing Future Faculty Committee
Jul 2018-	Summer undergraduate research mentor, OK-INBRE
Jul 2017-2020	OUHSC Faculty Senator (also served on campus discrimination and harassment committee)

Updated: Apr 2024

Jul 2016	Summer undergraduate research mentor, OK-INBRE
Mar 2016	Judge, OU GREAT Symposium graduate students oral competition
Jul 2015-2017	Mentor, OSCTR Summer research program
Mar 2015	Judge, OU GREAT Symposium postdoctoral fellow oral competition
Jun 2014-2017	Chair, OU College of Public Health Awards Committee.

#### **Community Outreach**

Aug 2021First Lego League: Team Coach for Transportation ThemeApr 2020Mason Public School Enrichment Program: 3-D printing for kids, Mason, OHFeb 2018Engineer Career Show, Edmond, OK.

# **ACRONYMS IN THIS CV**

(by alphabetical order) **AAAR** American Association for Aerosol Research **ACGIH** American Conference of Governmental **Industrial Hygienists AEESP** Association of Environmental Engineering and Science Professors AIDE Aerosol Instrument Development & Experiment **AIHA** American Industrial Hygiene Association AIHce American Industrial Hygiene Conference & Exposition **APHA** American Public Health Association **ASSP** American Society of Safety Professionals **AWMA** Air & Waste Management Association **BARS** Bioaerosol Research & Studies **BWC** Bureau of Workers' Compensation **CAPEES** Chinese-American Professors in **Environmental Engineering and Science CCHMC** Cincinnati Children's Hospital Medical Center **CDC** Center for Disease Control and Prevention **CEG** Center for Environmental Genetics CHRAS Center for Health Related Aerosol Studies **CIH** Certified Industrial Hygienist **CMMI** Civil, Mechanical and Manufacturing Innovation **COPH** College of Public Health **COPHSA** College of Public Health Student Association **CURES** Center for Urban Responses to **Environmental Stressors CPH** Certified in Public Health **CSP**<sup>®</sup> Certified Safety Professional **DCEE** Department of Chemical and **Environmental Engineering DEPHS** Department of Environmental and Public **Health Sciences EPA** Environmental Protection Agent

**ERC** Education and Research Center **ESCAPE** Environmental Simulating Chamber for Aerosol and Particle Exposure **ESCTP** Environmental Security Technology **Certification Program** FDA Food and Drug Administration **FDOT** Florida Department of Transportation FL-AIHA Florida Local Section of AIHA **FL-AWMA** Florida Section of A&WMA FUME Fine & Ultrafine Metal Emission **GREAT** Graduate Research Education And Technology Symposium **INBRE** IDeA Network of Biomedical Research Excellence **ISES** International Society of Exposure Science LAESEC Laboratory for Aerosol Exposure Science and Engineering Control **MBA** Master of Business Administration **MPH** Master of Public Health **MS** Master of Science **NEHA** National Environmental Health Association **NIEHS** National Institute of Environmental Health Sciences **NIGMS** National Institute of General Medical Sciences **NIH** National Institutes of Health **NIOSH** National Institute for Occupational Safety and Health **NSF** National Science Foundation **OCAST** Oklahoma Center for the Advancement of Science and Technology **OCRID** Oklahoma Center for Respiratory and Infectious Diseases **OEH** Occupational and Environmental Health **OK-AIHA** Oklahoma Section of AIHA **OSCTR** Oklahoma Shared Clinical and Translational Resources **OTRC** Oklahoma Tobacco Research Center **OU** University of Oklahoma **OUHSC** University of Oklahoma Health Sciences

Center **OVS** Ohio Valley Section **PDC** Professional Development Course PE Professional Engineer Ph.D. Doctor of Philosophy **PHF** Presbyterian Health Foundation **PFF** Preparing Future Faculty **RTAC** Respiratory Test Aerosol Chamber SCC Stephenson Cancer Center SCCAEPA Southern California Chinese American **Environmental Protection Association SNAME** Society of Naval Architects and Marine Engineers **SWCOEH** Southwest Center for Occupational and **Environmental Health TPG** Training Program Grant UC University of Cincinnati U-M COHSE University of Michigan Center for Occupational Health and Safety Engineering **VPR** Vice President for Research WANG Workplace Aerosol and Gaseous Lab