

● 个人简介

吴卫东，教授，省创新型科技团队、省发改委空气污染急性健康效应流动检测工程研究中心以及省国际联合实验室及负责人。兼任中国环境诱变剂学会、中国毒理学会、中华预防医学会和中国环境科学学会专委会副主任委员、常委和委员；河南省预防医学会常务理事、河南省预防医学会劳动卫生职业病专业委员会副主任委员以及河南省医学类硕士专业学位教指委副主任委员。主持 4 项国家自然科学基金项目、参与 2 项国家重点研发计划项目。发表科研论文 340 余篇，其中 SCI 论文 167 篇（单篇影响因子最高 14 分）。

● 联系方式

新乡医学院北校区科技楼二楼

邮箱: wdwu2013@126.com

● 研究方向

空气污染健康效应及其机制

● 招生方向

学硕: 空气污染健康效应及其机制

专硕: 空气污染健康效应与干预

● 教育经历

1982/09 - 1987/06 河南医科大学, 卫生系, 医学学士

1987/09 - 1990/06 硕士, 哈尔滨医科大学, 硕士

1990/09 - 1993/06 博士, 北京医科大学公共卫生学院, 博士

● 工作经历

1993.6-1997.12 北京医科大学公共卫生学院

1998.1-2012.12 美国北卡罗来纳大学教堂山分校医学院

2013.1-至今 河南省新乡医学院公共卫生学院

● 承担项目

1. 国家自然科学基金委国际(地区)合作与交流项目 (中美) (81961128031), 大气颗粒物暴露对人呼吸系统宿主防御反应的影响及其机制, 2020.1-2024.12, 主持人。
2. 国家重点研发计划“现代食品加工及粮食收储运技术与装备”重点专项 (2017YFD0400301), 益生菌健康功能与基于肠道微生物组学的食品营养代谢机理研究, 2017.1-2020.12, 分课题负责人。
3. 国家重点研发计划“精准医学”研究专项 (2016YFC0900803), 华中区域常见慢性非传染性疾病前瞻性队列研究: 河南省农村常见慢性非传染性疾病前瞻性队列研究, 2016.07-2021.06, 分课题负责人。
4. 国家自然科学基金面上项目 (81573112), GSTM1 基因缺失对雾霾所致急性呼吸道炎症的影响及其机制, 2016.1-2019.12, 主持人。

● 代表性论文(近五)

1. Xu F, Wu Q, Yang Y, Zhang L, Yan Z, Li H, Li J, An Z, Wu H, Song J, **Wu W***. (2023) High temperature exacerbates ozone-induced airway inflammation: Implication of airway microbiota and metabolites. *Sci Total Environ.* 166795.
2. Li W, Sun B, Li H, An Z, Li J, Jiang J, Song J, **Wu W***. (2023) Association between short-term exposure to PM_{2.5} and nasal microbiota dysbiosis, inflammation and oxidative stress: A panel study of healthy young adults. *Ecotoxicol Environ Saf.* 262:115156.
3. Song J, Qu R, Sun B, Wang Y, Chen R, Kan H, An Z, Wu H, Li J, Jiang J, Zhang Y, **Wu W***. (2023) Acute effects of ambient nitrogen dioxide exposure on serum biomarkers of nervous system damage in healthy older adults. *Ecotoxicol Environ Saf.* 249:114423.
4. Wang Y, Zhang R, Yang F, Yang L, Li Q, Guo J, Liu X, Song J, Zhang G, Li J, An Z, Alexis NE, Jaspers I, **Wu W***. (2023)

Potential mechanisms mediating PM2.5-induced alterations of H3N2 influenza virus infection and cytokine production in human bronchial epithelial cells. *Ecotoxicol Environ Saf.* 259:115069.

5. Zeng X, Tian G, Zhu J, Yang F, Zhang R, Li H, An Z, Li J, Song J, Jiang J, Liu D, **Wu W***. (2023) Air pollution associated acute respiratory inflammation and modification by GSTM1 and GSTT1 gene polymorphisms: a panel study of healthy undergraduates. *Environ Health.* 22(1):14.
6. Li W, Li H, Wang S, Han K, Liu Y, An Z, Wu H, Li J, Song J, **Wu W***. (2022) Regional pattern and signatures of gut microbiota in rural residents with coronary heart disease: A metagenomic analysis. *Front Cell Infect Microbiol.* 12:1007161.
7. Song J, Han K, Wang Y, Qu R, Liu Y, Wang S, Wang Y, An Z, Li J, Wu H, **Wu W***. (2022) Microglial Activation and Oxidative Stress in PM2.5-Induced Neurodegenerative Disorders. *Antioxidants (Basel).* 11(8):1482.
8. Song J, An Z, Zhu J, Li J, Qu R, Tian G, Wang G, Zhang Y, Li H, Jiang J, Wu H, Wang Y, **Wu W*** (2022). Subclinical cardiovascular outcomes of acute exposure to fine particulate matter and its constituents: A glutathione S-transferase polymorphism-based longitudinal study. *Sci Total Environ.* 157469.
9. Dong X, Yao S, Deng L, Li H, Zhang F, Xu J, Li Z, Zhang L, Jiang J, **Wu W***. (2022) Alterations in the gut microbiota and its metabolic profile of PM2.5 exposure-induced thyroid dysfunction rats. *Sci Total Environ.* 156402.
10. Song J, Qu R, Sun B, Chen R, Kan H, An Z, Jiang J, Li J, Zhang Y, **Wu W***. (2022) Associations of Short-Term Exposure to Fine Particulate Matter with Neural Damage Biomarkers: A Panel Study of Healthy Retired Adults. *Environ Sci Technol.* 56(11):7203-7213.
11. Li J, Zhang Y, Zhang L, An Z, Song J, Wang C, Ma Y, Gu Q, Luo Q, Yang W, Du Y, **Wu W***. (2021) Fine particulate matter exposure exacerbated nasal mucosal damage in allergic rhinitis mice via NLRP3 mediated pyroptosis. *Ecotoxicol Environ Saf.* 228:112998.
12. Sun B, Song J, Wang Y, Jiang J, An Z, Li J, Zhang Y, Wang G, Li H, Alexis NE, Jaspers I, **Wu W***. (2021) Associations of short-term PM2.5 exposures with nasal oxidative stress, inflammation and lung function impairment and modification by GSTT1-null genotype: A panel study of the retired adults. *Environ Pollut.* 285:117215.
13. Li J, An Z, Song J, Du J, Zhang L, Jiang J, Ma Y, Wang C, Zhang J, **Wu W***. Fine particulate matter-induced lung inflammation is mediated by pyroptosis in mice. *Ecotoxicol Environ Saf.* 219:112351.
14. Zhang L, Yuan M, An Z, Zhao X, Wu H, Li H, Wang Y, Sun B, Li H, Ding S, Zeng X, Chao L, Li P, **Wu W***. (2020) Prediction of hypertension, hyperglycemia and dyslipidemia from retinal fundus photographs via deep learning: A cross-sectional study of chronic diseases in central China. *PLoS One.* 15(5):e0233166.
15. Wang G, Zhang G, Gao X, Zhang Y, Fan W, Jiang J, An Z, Li J, Song J, **Wu W*** (2020) Oxidative stress-mediated epidermal growth factor receptor activation regulates PM2.5-induced over-secretion of pro-inflammatory mediators from human bronchial epithelial cells. *Biochim Biophys Acta Gen Subj.* 129672.
16. Wu Z, He C, Han W, Song J, Li H, Zhang Y, Jing X, **Wu W***. (2020) Exposure pathways, levels and toxicity of polybrominated diphenyl ethers in humans: A review. *Environ Res.* 187:109531.
17. Wu H, Li H, Ding Y, Jiang J, Guo P, Wang C, Tang N, **Wu W***. (2020) Is triglyceride associated with adult depressive symptoms? A big sample cross-sectional study from the rural areas of central China. *J Affect Disord.* 273:8-15.
18. Song J, Zhu J, Tian G, Li H, Li H, An Z, Jiang J, Fan W, Wang G, Zhang Y, and **Wu W***. (2020) Short time exposure to ambient ozone and associated cardiovascular effects: A panel study of healthy young adults. *Environ Int.*, 137:105579.
19. Zeng X, Liu D, Zhao X, Chao L, Li Y, Li H, Li W, Gui L, **Wu W***. (2019) Association of bone mineral density with lung function in a Chinese general population: the Xixiang rural cohort study. *BMC Pulm Med.* 19(1):239.
20. Li F, An Z, Li H, Gao X, Wang G, **Wu W***. Involvement of Oxidative Stress and the Epidermal Growth Factor Receptor in Diesel Exhaust Particle-Induced Expression of Inflammatory Mediators in Human Mononuclear Cells. *Mediators Inflamm.* 2019:3437104.
21. Li H, Liu B, Song J, An Z, Zeng X, Li J, Jiang J, Xie L, **Wu W***. (2019) Characteristics of Gut Microbiota in Patients

with Hypertension and/or Hyperlipidemia: A Cross-Sectional Study on Rural Residents in Xinxiang County, Henan Province. *Microorganisms*.7(10). pii: E399.

22. Li H, Shan Y, Huang Y, An Z, Xu G, Fan W, Zhang G, **Wu W***. (2019) Bacterial Community Specification in PM_{2.5} in Different Seasons in Xinxiang, Central China. *Aerosol and Air Quality Research*, 19: 1355–1364.
23. Li J, Li H, Li H, Guo W, An Z, Zeng X, Li W, Li H, Song J, **Wu W***. (2019) Amelioration of PM_{2.5}-induced lung toxicity in rats by nutritional supplementation with fish oil and Vitamin E. *Respir Res*. 20(1):76.
24. Zhao Y, Xu G, Wang S, Yi X, **Wu W***. (2018) Chitosan oligosaccharides alleviate PM_{2.5}-induced lung inflammation in rats. *Environ Sci Pollut Res Int*. 5(34):34221-34227..
25. Wu W, Jin Y, Carlsten C. (2018) Inflammatory health effects of indoor and outdoor particulate matter. *J Allergy Clin Immunol*, 141(3):833-844.
26. An Z, Jin Y, Li J, Li W, **Wu W***. (2018) Impact of Particulate Air Pollution on Cardiovascular Health. *Curr Allergy Asthma Rep*. 18(3):15.
27. Yan Z, Jin Y, An Z, Liu Y, Samet JM, and **Wu W***. (2016) Inflammatory cell signaling following exposures to particulate matter and ozone. *Biochim Biophys Acta*. 1860(12):2826-2834.
28. Feng F, Jin Y, Duan L, Yan Z, Wang S, Li F, Liu Y, Samet JM, **Wu W***. (2016) Regulation of ozone-induced lung inflammation by the epidermal growth factor receptor in mice. *Environ Toxicol*. 31(12):2016-2027.
29. **Wu W***, R Devlin, D Diaz-Sanchez, and JM Samet. (2015) Src-mediated EGFR activation regulates ozone-induced IL-8 expression. *Environ Health Perspect*, 123(3):231-236.
30. **Wu W***, Muller R, Berhane K, Fruin S, Liu F, Jaspers I, Diaz-Sanchez D, Peden DB, McConnell R. (2014) Inflammatory Response of Monocytes to Ambient Particles Varies by Highway Proximity. *Am J Respir Cell Mol Biol*. 51(6):802-809.
31. Yan Z, Xu L, Han J, Wu YJ, Wang W, Yao W, **Wu W***. (2014) Transcriptional and posttranscriptional regulation and endocytosis were involved in zinc oxide nanoparticle-induced interleukin-8 overexpression in human bronchial epithelial cells. *Cell Biol Toxicol*, 30(2):79-88.
32. **Wu W***, V Doreswamy, JM Samet, M Kesic, D Diaz-Sanchez, L Dailey, W Zhang, I Jaspers, and DB Peden. (2011) GSTM1 modulation of IL-8 production in human bronchial epithelial cells exposed to ozone. *Free Radic Biol Med*, 51(2):522-529.
33. **Wu W***, JM Samet, DB Peden, and PA Bromberg. (2010) Phosphorylation of p65 is required for zinc oxide-induced IL-8 expression in human airway epithelial cells. *Environ Health Perspect*, 118(7):982-987.

● 成果奖励

1. 国家实用新型专利, 主持, 一种检测臭氧毒性的动物暴露装置, 2021-8-6, 中国, ZL 2020 2 3236258.1
2. 国家实用新型专利, 主持, 用于实验研究的快速无创鼻粘液采样盒, 2020-8-14, 中国, ZL 2019 2 2209552.4