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Airway epithelial responses to rhinovirus, coronavirus and cigarette smoke

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List of Publications

1. Dysregulated mitochondrial metabolism upon cigarette smoke exposure in various human bronchial epithelial cell models.
Tulen CBM*, **Wang Y***, Beentjes D, Jessen PJJ, Ninaber DK, Reynaert NL, van Schooten FJ, Opperhuizen A, Hiemstra PS, Remels AHV. *Dis Model Mech.* 2022 Mar 1;15(3):dmm049247. *These authors contributed equally to this work.
2. Impact of changes in human airway epithelial cellular composition and differentiation on SARS-CoV-2 infection biology.
Thaler M*, **Wang Y***, van der Does AM, Faiz A, Ninaber DK, Ogando NS, Beckert H, Taube C, Salgado-Benvindo C, Snijder EJ, Bredenbeek PJ, Hiemstra PS, van Hemert MJ. Submitted for publication. Published as preprint version in *bioRxiv* 2021.07.21.453304. *These authors contributed equally to this work.
3. Functional involvement of interferons and metabolism in increased susceptibility to viral infection of cigarette smoke-exposed airway epithelium.
Wang Y, Ninaber DK, Faiz A, van der Linden AC, van Schadewijk A, Lutter R, Hiemstra PS, van der Does AM, Ravi A. Submitted for publication.
4. Suramin Inhibits SARS-CoV-2 Infection in Cell Culture by Interfering with Early Steps of the Replication Cycle.
Salgado-Benvindo C, Thaler M, Tas A, Ogando NS, Bredenbeek PJ, Ninaber DK, **Wang Y**, Hiemstra PS, Snijder EJ, van Hemert MJ. *Antimicrob Agents Chemother.* 2020 Jul 22;64(8):e00900-20.
5. Tiotropium and Fluticasone Inhibit Rhinovirus-Induced Mucin Production via Multiple Mechanisms in Differentiated Airway Epithelial Cells.
Wang Y, Ninaber DK, van Schadewijk A, Hiemstra PS. *Front Cell Infect Microbiol.* 2020 Jun 19;10:278.
6. SARS-CoV-2 infection of human airway epithelial cell cultures uniquely lacks interferon and immediate early gene responses compared to other coronaviruses.
Wang Y[#], Thaler M[#], Salgado Benvindo da Silva C, Ly N, Leijs A, Ninaber DK, van Hemert MJ, Hiemstra PS, van der Does AM*, Faiz A*. [#] Shared first authorship.
* Corresponding author. Submitted for publication.
7. Composition, antioxidant activities and hepatoprotective effects of the water extract of *Ziziphus jujuba* cv. Jinsixiaozao.
Liu N, Yang M, Huang W, Wang Y, Yang M, **Wang Y** and Zhao Z. *RSC Advances.* 2017, 7(11):6511-6522

Appendix

8. Novel galactosylated biodegradable nanoparticles for hepatocyte-delivery of oridonin. **Wang Y***, Liu X*, Liu G, Guo H, Li C, Zhang Y, Zhang F, Zhao Z, Cheng H. *Int J Pharm.* 2016 Apr 11;502(1-2):47-60. *These authors contributed equally to this work.
9. Preparation and Application of Modified VEGFR-2 Cell Membrane Chromatographic Separation System.
Wang Y*, Fang S*, Zhao G, Wang W, Zhao Z. *Chromatographia* 79, 675–684 (2016). *These authors contributed equally to this work.
10. Inhibitory effects of S-allylmercaptocysteine against benzo(a)pyrene-induced precancerous carcinogenesis in human lung cells.
Wang K, **Wang Y**, Qi Q, Zhang F, Zhang Y, Zhu X, Liu G, Luan Y, Zhao Z, Cai J, Cao J, Li S. *Int Immunopharmacol.* 2016, 34: 37-43.
11. Allyl methyl disulfide inhibits IL-8 and IP-10 secretion in intestinal epithelial cells via the NF- κ B signaling pathway.
Zhang Y, **Wang Y**, Zhang F, Wang K, Liu G, Yang M, Luan Y, Zhao Z, Zhang J, Cao X, Zhang D. *Int Immunopharmacol.* 2015, 27:156-63.
12. Analysis of Bioactive Components of Novel Jujube Beverage from Laoling *Zizyphus Jujuba* cv. Jinsixiaozao.
Yang M, **Wang Y**, Zhao Z. *Chinese Biochemical Pharmacology.* 2015, 11: 1005-1678. (in Chinese)

Curriculum Vitae

Ying Wang was born on 9th of May 1990 in Taian, Shandong province, China. In September of 2009, she started her bachelor's study in Pharmacy at the College of Pharmacy in Shandong University, China. She obtained her bachelor degree in June, 2013. She received a postgraduate recommendation from Shandong University and started her master's study in Pharmacy at the College of Pharmacy in Shandong University. Her master thesis was entitled: "Anti-inflammation of isoeugenol in lipopolysaccharide (LPS)-stimulated RAW264.7 macrophages and in cigarette smoke (CS)-induced lung inflammation mouse models". Under the supervision of Prof. dr. Zhongxi Zhao, she obtained her master's degree in June, 2016. During her bachelor and master studies, she obtained a "National scholarship". From September, 2016, she was awarded financial support from the China Scholarship Council and started her PhD research at the PulmoScience Laboratory of the Department of Pulmonology, Leiden University Medical Center, the Netherlands. During her PhD study, she studied rhinovirus-airway epithelial cell interactions in asthma and chronic obstructive pulmonary disease under the supervision of Prof. dr. Pieter S. Hiemstra and Dr. Anne M. van der Does. Since March 2020, she extended her PhD work to studies on airway epithelial responses to SARS-CoV-2 infection in a collaboration of the PulmoScience Laboratory with the Department of Medical Microbiology (Dr. Martijn J. van Hemert), and continued to work on this topic as a researcher on a ZonMw supported project since September 2021.

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