# **Curriculum vitae**

Name: Qianjiang Hu (QJ), DVM, MS, PhD

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#### **EDUCATION AND TRAINING**

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2018 - 2023 Munich Medical Research School, Ludwig-Maxi- PhD, 2023 Medical Research

milians-Universität, Germany

Mentor: Prof. Dr. Dr. Melanie Königshoff

Dissertation: Epithelial Cell Reprogramming in Idiopathic Pulmonary Fibrosis

2015 - 2018 University of Chinese Academy Sciences, MS, 2018 Cell Biology

China

2010 - 2015 College of Veterinary Medicine, South China DVM, 2015 Veterinary Medicine

Agricultural University, China

**Training:** 

2023 - current University of Pittsburgh School of Medicine, USA Postdoc Associate

The Ohio State University, USA

Mentor:

Prof. Melanie Königshoff, PhD (Wet lab)

Prof. Ma Qin, PhD (Dry Lab)

2021 - 2023 University of Pittsburgh School of Medicine, USA Health Sciences Research Fellow

Mentor:

Prof. Melanie Königshoff, PhD

2017 - 2017 School of Engineering, Università di Padova, It- Visiting Scholar

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## MEMBERSHIP IN PROFESSIONAL AND SCIENTIFIC SOCIETIES

2022 - current American Thoracic Society (ATS)

2019 - current European Respiratory Society (ERS)

2019 - current German Thoracic Society (DGP)

#### **EXPERTISE**

## Wet Lab:

Research Field Idiopathic Pulmonary Fibrosis (IPF); Lung Aging; Cellular Senescence; Lung Epi-

thelial Cells; Developmental Signaling Pathway; Mitochondrion

Lab Skills Single Cell-Omics; LC-MS/MS; Flow Cytometry; Fluorescence Imaging; Histology;

human/mouse Precision Cut Lung Slides (h/mPCLS); Animal Surgery; Genetic

Mice Models; Lung Organoids

## Dry Lab:

Research Field Signature Discovery of Lung Aging and Chronic Lung Disease

Programming Python; R; Bash

Packages Python: Scanpy, Numpy, Pandas, Matplotlib, Seaborn, SciPy, Scikit-learn

R: Seurat, DESeq2, ggplot2, dplyr, tidyr

Tools Linux, Github, Git, Anaconda, Globus

Repositories <a href="https://github.com/KonigshoffLab/GPR87">https://github.com/KonigshoffLab/GPR87</a> IPF 2022

https://github.com/KonigshoffLab/COPD Hu 2022

#### **PUBLICATIONS**

- 1. <u>Hu Q.</u>, Saleem K., Pandey J., Charania A.N., Zhou Y., He C., Cell Adhesion Molecules in Fibrotic Diseases. *Biomedicines*. 2023; 11(7):1995. https://doi.org/10.3390/biomedicines11071995
- Gurkar A., Gerencser A., ..., <u>Hu Q.</u>, et al., "Spatial mapping of cellular senescence: emerging challenges and opportunities. *Nat Aging* 2023. https://doi.org/10.1038/s43587-023-00446-6 (authors alphabetically ordered)
- 3. Wang X., Zhang H., Wang Y., Bramasole L., Guo L., Mourtada F., Meul T., <u>Hu Q.</u>, Viteri V., Kammerl I., Konigshoff M., Lehmann M., Magg T., Hauck F., Fernandez I., Meiners S. "DNA sensing via the cGAS/STING pathway activates the immunoproteasome and adaptive T-cell immunity." *EMBO J.* 2023. doi: 10.15252/embj.2022110597
- Sui J, Boatz JC, Shi J, <u>Hu Q</u>, Li X, Zhang Y, Königshoff M, Kliment CR. Loss of ANT1 Increases Fibrosis and Epithelial Cell Senescence in Idiopathic Pulmonary Fibrosis. *Am J Respir Cell Mol Biol*. 2023 Jul 24. doi: 10.1165/rcmb.2022-0315OC. PMID: 37487137.
- Hu Q, Königshoff M. Powering the formation of alveoli. eLife. 2022 Jun 9;11:e79651. doi: 10.7554/eLife.79651. PMID: 35678384; PMCID: PMC9183231.
- 6. <u>Hu Q\*</u>, Heinzelmann K\*, Hu Y, Dobrinskikh E, Ansari M, Melo-Narváez MC, Ulke HM, Leavitt C, Mirita C, Trudeau T, Saal ML, Rice P, Gao B, Janssen WJ, Yang IV, Schiller HB, Vladar EK, Lehmann M, Königshoff M. Single-cell RNA sequencing identifies G-protein coupled receptor 87 as a basal cell marker expressed in distal honeycomb cysts in idiopathic pulmonary fibrosis. *Eur Respir J*. 2022 Jun 16;59(6):2102373. doi: 10.1183/13993003.02373-2021. PMID: 35604813; PMCID: PMC9203838.
  - \* Equally contribution
- Hu Y, Ciminieri C, <u>Hu Q</u>, Lehmann M, Königshoff M, Gosens R. WNT Signalling in Lung Physiology and Pathology. *Handb Exp Pharmacol*. 2021;269:305-336. doi: 10.1007/164\_2021\_521. PMID: 34463851; PMCID: PMC8969078.
- Lehmann M, <u>Hu Q</u>, Hu Y, Hafner K, Costa R, van den Berg A, Königshoff M. Chronic WNT/β-catenin signaling induces cellular senescence in lung epithelial cells. *Cell Signal*. 2020 Jun;70:109588. PMID: 32109549.
- Michielin F, Giobbe GG, Luni C, <u>Hu Q</u>, Maroni I, Orford MR, Manfredi A, Di Filippo L, David AL, Cacchiarelli D, De Coppi P, Eaton S, Elvassore N. The Microfluidic Environment Reveals a Hidden Role of Self-Organizing Extracellular Matrix in Hepatic Commitment and Organoid Formation of hiPSCs. *Cell Rep.* 2020 Dec 1; 33(9):108453. PMID: 33264615.
- 10. Giobbe GG, Crowley C, Luni C, Campinoti S, Khedr M, Kretzschmar K, De Santis MM, Zambaiti E, Michielin F, Meran L, <u>Hu Q</u>, van Son G, Urbani L, Manfredi A, Giomo M, Eaton S,

- Cacchiarelli D, Li VSW, Clevers H, Bonfanti P, Elvassore N, De Coppi P. Extracellular matrix hydrogel derived from decellularized tissues enables endodermal organoid culture. *Nat Commun.* 2019 Dec 11; 10(1):5658. PMID: 31827102.
- 11. <u>Hu Q</u>, Luni C, Elvassore N. Microfluidics for secretome analysis under enhanced endogenous signaling. *Biochem Biophys Res Commun*. 2018 Mar 4; 497(2):480-484. PMID: 29425822.
- 12. Zhang S, Sun J, Liao XP, <u>Hu QJ</u>, Liu BT, Fang LX, Deng H, Ma J, Xiao X, Zhu HQ, Liu YH. Prevalence and plasmid characterization of the qnrD determinant in Enterobacteriaceae isolated from animals, retail meat products, and humans. *Microb Drug Resist*. 2013 Aug; 19(4):331-5. PMID: 23557071.

#### HONORS AND SCHOLARSHIPS

| 2022 | Best Poster Award of Annual Aging Research Day, Aging Institute                                   |
|------|---|
| 2021 | ERS Young Scientist Sponsorships, European Respiratory Society                                    |
| 2019 | HELENA Travel Grant for International Conferences, Helmholtz Graduate School Environmental Health |
| 2017 | Short-Term International Visiting Research Fellowship, ShanghaiTech University                    |
| 2015 | Outstanding Graduate Student Awards, South China Agricultural University                          |
| 2014 | National Scholarship for Outstanding Students Award, Ministry of Education of P.R.C., China       |
| 2013 | National Scholarship for Outstanding Students Award, Ministry of Education of P.R.C., China       |

## **ACADEMIC SERVICE**

### **Conference Service:**

2022 Conference Assistant, Tissue Fibrosis and Repair: Mechanisms, Human Disease and Therapies (Z4), Keystone Symposia on Molecular and Cellular Biology

## **Journal Reviewing:**

| 2023- | Reviewer for International Immunopharmacology                 |
|-------|---|
| 2023- | Topic Coordinators and reviewer for Frontiers in Pharmacology |
| 2022- | Early-career reviewer for European Respiratory Journal        |
| 2021- | Early-career reviewer for eLife                               |