# **Curriculum vitae**

Name: Qianjiang Hu, DVM, MS, PhD

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#### **EDUCATION AND TRAINING**

**Education:** 

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

Maximilians-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 DVM, 2015 Veterinary Medicine

China Agricultural University, China

Training:

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

USA

Mentor: Prof. Dr. Dr. Melanie Königshoff

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

USA

Mentor: Prof. Dr. Dr. Melanie Königshoff

2017 - 2017 School of Engineering, Università di Pa-Visiting Scholar

dova, Italy

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 Ep-

ithelial Cells; Developmental Signaling Pathway; Mitochondrion

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

ogy; human/mouse Precision Cut Lung Slides (h/mPCLS); Animal Surgery; Ge-

netic 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 https://github.com/KonigshoffLab/GPR87 IPF 2022

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

#### **PUBLICATIONS**

- Gurkar A., Gerencser A., ..., <u>Hu Q.</u>, ..., and Passos F., "Spatial mapping of cellular senescence: emerging challenges and opportunities", *Nat. Aging.*, in press (authors alphabetically ordered)
- 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
- Boatz J, Sui J, <u>Hu Q</u>, Li X, Zhang Y, Königshoff M, Kliment C. Loss of ANT1 Increases Fibrosis and Epithelial Cell Senescence in Idiopathic Pulmonary Fibrosis. *bioRxiv* 2022.09.09.507271
- Hu Q, Königshoff M. Powering the formation of alveoli. eLife. 2022 Jun 9;11:e79651. doi: 10.7554/eLife.79651. PMID: 35678384; PMCID: PMC9183231.
- 5. <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.
- 8. 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.
- 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.

- 10. <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.
- 11. 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 for Frontiers in Pharmacology
2022-	Early-career reviewer for European Respiratory Journal
2021-	Early-career reviewer for eLife