

## Curriculum Vitae

**A. Önder Yildirim** Professor, Dr.  
d.o.b. August 20<sup>th</sup> 1974

### University Education

2002-2004 Participant Graduate Program of the "Sonderforschungsbereich 534 Grundlagen der vaskulären Medizin", University Hospital Giessen  
1999-2002 Doc. Vet. Med. Veterinary Medicine, Justus Liebig University, Giessen

### Scientific Career

Since 2024 Director CPC-M (Munich site of German Center for Lung Research, DZL)  
Since 2023 Professor Institute of Experimental Pneumology, LMU Clinic Munich  
Since 2020 Director of Institute for Lung Health and Immunity (LHI)/Comprehensive Pneumology Center (CPC), Helmholtz Munich, Germany  
Since 2019 Editorial Board member of Frontier Immunology, Allergy and PlosOne  
Since 2019 PI and Visiting Scientist in University of Koc, Istanbul, Turkey  
Since 2012 Member of Helmholtz Virtual Institute of Complex Molecular Systems in Environmental Health (HICE)  
Since 2012 PI and member, German Center for Lung Research (DZL) in Disease Area COPD, DPLD, ELD and Platform Imaging  
2010-2012 Deputy Director of Institute of Lung Biology and Disease (iLBD), Helmholtz Zentrum München, Munich, Germany  
Since 2009 Group Leader "Immunopathology of COPD", Comprehensive Pneumology Center (CPC), Helmholtz Zentrum München, Institute of Lung Biology and Disease; Munich, Germany  
2008-2009 Postdoctoral fellow, Department of Clinical Chemistry & Molecular Diagnostics, Univ. Hospital Giessen & Marburg GmbH, Marburg, Germany

### Most significant discoveries to date

- I. LT $\beta$ R-signaling induced epithelial apoptosis and reduces Wnt-induced lung damages (Conlon et al. Nature, 2020)
- II. B cell signature in COPD (John-Schuster et al. 2015 and 2014; Jie et al. EMBO MM, 2018)
- III. Cathepsin B; as biomarker and promotes collagen biosynthesis driving Bronchiolitis Obliterans Syndrome (BOS) (Morrone et al. ERJ, 2020)
- IV. The involvement of arginine methylation in lung diseases (Yildirim et al 2006, Sarker et al 2015, 2019)
- V. KGF as therapeutic target for emphysema (Yildirim et al. AJRCCM 2010 and 2008)

### Top-10 selected Publications

1. Mayr CH, Sengupta A, Asgharpour S, Ansari M, Pestoni JC, Ogar P, Angelidis I, Liontos A, Rodriguez-Castillo JA, Lang NJ, Strunz M, Porras-Gonzalez D, Gerckens M, De Sadeleer LJ, Oehrle B, Viteri-Alvarez V, Fernandez IE, Tallquist M, Irmeler M, Beckers J, Eickelberg O, Stoleriu GM, Behr J, Kneidinger N, Wuyts WA, Wasnick RM, **Yildirim AÖ**, Ahlbrecht K, Morty RE, Samakovlis C, Theis FJ, Burgstaller G, Schiller HB. Sfrp1 inhibits lung fibroblast invasion during transition to injury-induced myofibroblasts. **Eur Respir J.** 2024 Feb 8;63(2):2301326. doi: 10.1183/13993003.01326-2023. Print 2024 Feb.

2. Verleden SE, Hendriks JMH, Snoeckx A, Mai C, Mentens Y, Callebaut W, De Belie B, Van Schil PE, Verplancke V, Janssens A, Jacob J, Pakzad A, Conlon TM, Guvenc G, **Yildirim AÖ**, Pauwels P, Koljenovic S, Kwakkel-Van Erp JM, Lapperre TS. Small Airway Disease in Pre-Chronic Obstructive Pulmonary Disease with Emphysema: A Cross-Sectional Study. **Am J Respir Crit Care Med**. 2024 Mar 15;209(6):683-692. doi: 10.1164/rccm.202301-0132OC.
3. Kapellos TS, Conlon TM, **Yildirim AÖ**, Lehmann M. The impact of the immune system on lung injury and regeneration in COPD. **Eur Respir J**. 2023 Oct 12;62(4):2300589. doi: 10.1183/13993003.00589-2023. Print 2023 Oct.
4. Conlon TM, **Yildirim AÖ**. Oxysterol metabolism dictates macrophage influx during SARS-CoV-2 infection. **Eur Respir J**. 2023 Mar 9;61(3):2202417. doi: 10.1183/13993003.02417-2022. Print 2023 Mar.
5. Günes Günsel G, Conlon TM, Jeridi A, Kim R, Ertüz Z, Lang NJ, Ansari M, Novikova M, Jiang D, Strunz M, Gaianova M, Hollauer C, Gabriel C, Angelidis I, Doll S, Pestoni JC, Edelmann SL, Kohlhepp MS, Guillot A, Bassler K, Van Eeckhoutte HP, Kayalar Ö, Konyalilar N, Kanashova T, Rodius S, Ballester-López C, Genes Robles CM, Smirnova N, Rehberg M, Agarwal C, Krikki I, Piavaux B, Verleden SE, Vanaudenaerde B, Königshoff M, Dittmar G, Bracke KR, Schultze JL, Watz H, Eickelberg O, Stoeger T, Burgstaller G, Tacke F, Heissmeyer V, Rinkevich Y, Bayram H, Schiller HB, Conrad M, Schneider R, **Yildirim AÖ**. The arginine methyltransferase PRMT7 promotes extravasation of monocytes resulting in tissue injury in COPD. **Nat Commun**. 2022 Mar 14;13(1):1303. doi: 10.1038/s41467-022-28809-4.
6. Spix B, Butz ES, Chen CC, Rosato AS, Tang R, Jeridi A, Kudrina V, Plesch E, Wartenberg P, Arlt E, Briukhovetska D, Ansari M, Günsel GG, Conlon TM, Wyatt A, Wetzel S, Teupser D, Holdt LM, Ectors F, Boekhoff I, Boehm U, García-Añoveros J, Saftig P, Giera M, Kobold S, Schiller HB, Zierler S, Gudermann T, Wahl-Schott C, Bracher F, **Yildirim AÖ**, Biel M, Grimm C. Lung emphysema and impaired macrophage elastase clearance in mucolipin 3 deficient mice. **Nat Commun**. 2022 Jan 14;13(1):318. doi: 10.1038/s41467-021-27860-x.
7. Wu X, Bos IST, Conlon TM, Ansari M, Verschut V, van der Koog L, Verkleij LA, D'Ambrosi A, Matveyenko A, Schiller HB, Königshoff M, Schmidt M, Kistemaker LEM, **Yildirim AÖ**, Gosens R. A transcriptomics-guided drug target discovery strategy identifies receptor ligands for lung regeneration **Science Adv**. 2022 Mar 25;8(12):eabj9949.
8. Morrone C, Smirnova NF, Jeridi A, Kneidinger N, Hollauer C, Schupp JC, Kaminski N, Jenne D, Eickelberg O, and **Yildirim AÖ**. Cathepsin B promotes collagen biosynthesis, which drives bronchiolitis obliterans syndrome **Eur Respir J** 2021 May 13;57(5):2001416. doi: 10.1183/13993003.01416-2020
9. Conlon TM, John-Schuster G, Heide D, Pfister D, Lehmann M, Hu Y, Ertüz Z, Lopez MA, Ansari M, Strunz M, Mayr C, Angelidis I, Ciminieri C, Costa R, Kohlhepp MS, Guillot A, Günes G, Jeridi A, Funk MC, Beroshvili G, Prokosch S, Hetzer J, Verleden SE, Alsafadi H, Lindner M, Burgstaller G, Becker L, Irmeler M, Dudek M, Janzen J, Goffin E, Gosens R, Knolle P, Pirotte B, Stoeger T, Beckers J, Wagner D, Singh I, Theis FJ, de Angelis MH, O'Connor T, Tacke F, Boutros M, Dejardin E, Eickelberg O, Schiller

HB, Königshoff M, Heikenwalder M, **Yildirim AÖ**. Inhibition of LT $\beta$ R signalling activates WNT-induced regeneration in lung. **Nature**. 2020 Dec;588(7836):151-156. doi: 10.1038/s41586-020-2882-8. Epub 2020 Nov 4

10. Jia J, Conlon TM, Sarker RS, Taşdemir D, Smirnova NF, Srivastava B, Verleden SE, Güneş G, Wu X, Prehn C, Gao J, Heinzelmann K, Lintelmann J, Irmeler M, Pfeiffer S, Schlöter M, Zimmermann R, Hrabé de Angelis M, Beckers J, Adamski J, Bayram H, Eickelberg O, **Yildirim AÖ**. Cholesterol metabolism promotes B-cell positioning during immune pathogenesis of chronic obstructive pulmonary disease. **EMBO Mol Med**. 2018 May;10(5):e8349. doi: 10.15252/emmm.201708349.