

Miguel A. Alejandro Alcázar Prof. Dr. med. Dr. nat. med.
d.o.b. March 14th, 1980, in Erbach (Odw), Germany

University Education

- 2012 Ph.D. (Dr. nat. med.), Center for Molecular Medicine Cologne (CMMC), University Hospital Cologne, Faculty of Medicine and Natural Sciences, University Cologne (Germany)
- 2012 Doctorate Medicine, Justus Liebig University Gießen (JLU, Germany)
- 1999 – 2006 Studies of Medicine, JLU (Germany), University of Toronto (Canada), Mount Sinai School of Medicine, New York (USA), and School of Medicine, Granada (Spain)

Scientific Career

- Since 2022 Professor for Translational Experimental Medicine, University of Cologne, Cologne (Germany)
- Since 2020 Project leader, CMMC, University Hospital Cologne, Faculty of Medicine, University of Cologne (Germany)
- Since 2020 Head, Independent Research Group at the Institute for Lung Health (ILH) and member of the German Center of Lung Research (DZL), JLU (Germany)
- Since 2020 Associate researcher, Cologne Excellence Cluster Cellular Stress Responses in Aging-Associated Diseases (CECAD) University Hospital Cologne, Faculty of Medicine, University of Cologne (Germany)
- 2017 - 2020 Career Advancement Program (CAP), CMMC, University Hospital Cologne, Faculty of Medicine, University of Cologne (Germany)
- 2016 - 2022 Assistant Professor *Translational Experimental Pediatrics*, Children's Hospital, University Hospital Cologne, Faculty of Medicine, University of Cologne (Germany)
- 2015 Visiting instructor, Rabinovitch/Bland laboratory, Vera Moulton Wall Center for Pulmonary Vascular Diseases, Department of Pediatrics, Stanford University (USA)
- Since 2014 Head, Research Group *Experimental Pulmonology*, Dept. of Pediatric and Adolescent Medicine, University Hospital Cologne, Faculty of Medicine, University of Cologne (Germany)
- 2012 - 2014 DFG-Postdoctoral Research Fellowship, Rabinovitch/Bland laboratory, Vera Moulton Wall Center for Pulmonary Vascular Diseases, Department of Pediatrics (Neonatology), Stanford University School of Medicine, Stanford (USA)
- 2010 - 2012 Ph.D. thesis, Dept. of Pediatric and Adolescent Medicine, (Prof. Dr. Dötsch's lab) and Interdisciplinary Program of Molecular Medicine (IPMM), CMMC, University Hospital Cologne, Faculty of Medicine and Natural Sciences, University of Cologne (Germany)
- 2006 - 2010 Residency, Department of Pediatric and Adolescent Medicine, University Hospital Erlangen (Germany)

Awards and Honors

- 2017 Jürgen Bierich Award of the Gesellschaft für Kinderendokrinologie und -diabetologie
- 2016 Heinrich Nestlé Preis Wissenschaftspreis
- 2015 Scientific Abstract Award, American Thoracic Society (ATS)
- 2015 Scientific Research Award of the Gesellschaft für Neonatologie und Pädiatrische Intensivmedizin
- 2015 Lothar-Bernd Zimmerhackl Research Award of the Gesellschaft für pädiatrische Nephrologie (GPN; german society of pediatric nephrology)
- 2015 American Thoracic Society (ATS) Scholarship
- 2012 Selma-Meyer Dissertation's-Award of the Deutsche Gesellschaft für Kinder- und Jugendmedizin (DGKJ, german society of pediatrics)

Citation Record: Total citations: 1330 h-index: 20 (Google Scholar Sept 1st, 2022)

Top 10 selected Publications:

1. Selle J, Dinger K, Jentgen V, Zanetti D, Will J, Georgomanolis T, Vohlen C, Wilke R, Kojonazarov B, Klymenko O, Mohr J, S VK-R, Rhodes CJ, Ulrich A, Hirani D, Nestler T, Odenthal M, Mahabir E, Nayakanti S, Dabral S, Wunderlich T, Priest J, Seeger W, Dotsch J, Pullamsetti SS, **Alejandro Alcazar MA**. Maternal and perinatal obesity induce bronchial obstruction and pulmonary hypertension via IL-6-FoxO1-axis in later life. *Nat Commun* 2022; 13: 4352.
2. Hirani D, Alvira CM, Danopoulos S, Milla C, Donato M, Tian L, Mohr J, Dinger K, Vohlen C, Selle J, S VK-R, Barbarino V, Pallasch C, Rose-John S, Odenthal M, Pryhuber GS, Mansouri S, Savai R, Seeger W, Khatri P, Al Alam D, Dotsch J, **Alejandro Alcazar MA**. Macrophage-derived IL-6 trans-signalling as a novel target in the pathogenesis of bronchopulmonary dysplasia. *Eur Respir J* 2022; 59.
3. Berghausen EM, Janssen W, Vantler M, Gnatzy-Feik LL, Krause M, Behringer A, Joseph C, Zierden M, Freyhaus HT, Klinke A, Baldus S, **Alcazar MA**, Savai R, Pullamsetti SS, Wong DW, Boor P, Zhao JJ, Schermuly RT, Rosenkranz S. Disrupted PI3K subunit p110alpha signaling protects against pulmonary hypertension and reverses established disease in rodents. *J Clin Invest* 2021; 131.
4. Vohlen C, Mohr J, Fomenko A, Kuiper-Makris C, Grzembke T, Aydogmus R, Wilke R, Hirani D, Dotsch J, **Alejandro Alcazar MA**. Dynamic Regulation of GH-IGF1 Signaling in Injury and Recovery in Hyperoxia-Induced Neonatal Lung Injury. *Cells* 2021; 10.
5. Litzenburger T, Huber EK, Dinger K, Wilke R, Vohlen C, Selle J, Kadah M, Persigehl T, Heneweer C, Dotsch J, **Alejandro Alcazar MA**. Maternal high-fat diet induces long-term obesity with sex-dependent metabolic programming of adipocyte differentiation, hypertrophy and dysfunction in the offspring. *Clin Sci (Lond)* 2020.
6. Mohr J, Voggel J, Vohlen C, Dinger K, Dafinger C, Fink G, Gobel H, Liebau MC, Dotsch J, **Alejandro Alcazar MA**. IL-6/Smad2 signaling mediates acute kidney injury and regeneration in a murine model of neonatal hyperoxia. *FASEB J* 2019: fj201801875RR.
7. **Alejandro Alcazar MA**, Kaschwich M, Ertsey R, Preuss S, Milla C, Mujahid S, Masumi J, Khan S, Mokres LM, Tian L, Mohr J, Hirani DV, Rabinovitch M, Bland RD. Elafin treatment rescues EGFR-Klf4 signaling and lung cell survival in ventilated newborn mice. *Am J Respir Cell Mol Biol* 2018.
8. Nawabi J, Vohlen C, Dinger K, Thangaratnarajah C, Klautdt C, Lopez Garcia E, Hirani DV, Haznedar-Karakaya P, Macheleidt I, Odenthal M, Nusken KD, Dotsch J, **Alejandro Alcazar MA**. Novel functional role of GH/IGF1 in neonatal lung myofibroblasts and in rat lung growth after intrauterine growth restriction. *Am J Physiol Lung Cell Mol Physiol* 2018.
9. Thangaratnarajah C, Dinger K, Vohlen C, Klautdt C, Nawabi J, Lopez Garcia E, Kwapiszewska G, Dobner J, Nuesken KD, van Koningsbruggen-Rietschel S, von Hoersten S, Dotsch J, **Alejandro Alcazar MA**. Novel role of NPY in neuro-immune interaction and lung growth after intrauterine growth restriction. *Am J Physiol Lung Cell Mol Physiol* 2017: ajplung 00432 02016.
10. Diebold I, Hennigs JK, Miyagawa K, Li CG, Nickel NP, Kaschwich M, Cao A, Wang L, Reddy S, Chen PI, Nakahira K, **Alcazar MA**, Hopper RK, Ji L, Feldman BJ, Rabinovitch M. BMP2 preserves mitochondrial function and DNA during reoxygenation to promote endothelial cell survival and reverse pulmonary hypertension. *Cell Metab* 2015; 21: 596-608.