

## Curriculum Vitae

**István Vadász** Dr. biol. hom., dr. med.  
d.o.b. August 24<sup>th</sup>, 1977, in Szolnok, Hungary

### University Education

2020 Doctorate, JLU  
2002 - 2005 International Graduate Program “Molecular Biology and Medicine of the Lung” (MBML), Justus Liebig University (JLU), Giessen, Germany  
2001 Doctorate Medicine, University of Szeged, Szeged, Hungary  
1995 - 2001 Studies of Medicine, Albert Szent-Györgyi School of Medicine, University of Szeged, Szeged, Hungary

### Scientific Career

Since 2021 Vice chair, Department of Internal Medicine, JLU  
Since 2021 Adjunct associate professor, Division of Pulmonary and Critical Care Medicine, Feinberg School of Medicine, Northwestern University, Chicago, Illinois, U.S.A.  
Since 2020 Managing senior physician and head of the Intensive Care Unit, Department of Internal Medicine, JLU  
2020-2021 Adjunct assistant professor, Division of Pulmonary and Critical Care Medicine, Feinberg School of Medicine, Northwestern University, Chicago, Illinois, U.S.A.  
Since 2018 Senior physician, Department of Internal Medicine, JLU  
Since 2018 Board certification, Infectious diseases (LÄK Hessen)  
Since 2017 Board certification, Pulmonology (LÄK Hessen)  
Since 2015 Board certification, Critical care medicine (LÄK Hessen)  
Since 2013 Board certification, Internal medicine (LÄK Hessen)  
Since 2012 Faculty member of the German Center for Lung Research (DZL)  
Since 2011 Faculty member of the Excellence Cluster Cardio-Pulmonary System/Cardio-Pulmonary Institute (ECCPS/CPI)  
Since 2010 Faculty member of the Universities of Giessen and Marburg Lung Center (UGLMC)  
Since 2008 Faculty member of the International Graduate Program “Molecular Biology and Medicine of the Lung” (MBML)  
Since 2007 Independent research group leader, Department of Internal Medicine, JLU  
2007 - 2013 Internship and Residency, Department of Internal Medicine, JLU  
2005 - 2006 Postdoctoral Fellow, Division of Pulmonary and Critical Care Medicine, Feinberg School of Medicine, Northwestern University, Chicago, Illinois, U.S.A.

### Awards and Honors

Since 2021 Associate editor, *Frontiers in Immunology*  
Since 2018 Editorial board member, *American Journal of Physiology – Lung Cellular and Molecular Physiology*  
Since 2017 Editorial board member, *American Journal of Respiratory Cell and Molecular Biology*  
2016 - 2021 Editorial board member, *Frontiers in Immunology*  
2012 - 2016 ECCPS Clinical Career Research Grant  
Since 2010 Editorial board member, *American Journal of Respiratory and Critical Care Medicine*  
2010 - 2012 Else Kröner Fresenius Memorial Stipend  
2007 - 2013 Editorial board member, *Proceedings of the American Thoracic Society*  
2007 - 2008 Postdoctoral research fellowship, Alexander von Humboldt Foundation  
2001 Prize for “Outstanding Dissertation”, Albert Szent-Györgyi School of Medicine

### Citation Record

*Total citations: 3.437; h-index: 35; h-index since 2017: 29* (Google Scholar October 4<sup>th</sup>, 2022)

## Top-10 selected Publications

Kryvenko V, Wessendorf M, Tello K, Herold S, Morty RE, Seeger W, **Vadász I**. Hypercapnia induces inositol-requiring enzyme 1  $\alpha$ -driven endoplasmic reticulum-associated degradation of the Na,K-ATPase  $\beta$ -subunit. **Am J Respir Cell Mol Biol** 2021; 65(6):615-629. doi: [10.1165/rcmb.2021-0114OC](https://doi.org/10.1165/rcmb.2021-0114OC).

Gabrielli NM, Mazzocchi LC, Kryvenko V, Tello K, Herold S, Morty RE, Grimminger F, Dada LA, Seeger W, Sznajder JI, **Vadász I**. TRAF2 is a novel ubiquitin E3 ligase for the Na,K-ATPase  $\beta$ -Subunit that drives alveolar epithelial dysfunction in hypercapnia. **Front Cell Dev Biol** 2021; 9:689983. doi: [10.3389/fcell.2021](https://doi.org/10.3389/fcell.2021).

**Vadász I**, Husain-Syed F, Dorfmüller P, Roller FC, Tello K, Hecker M, Morty RE, Gattenlöhner S, Walmrath HD, Grimminger F, Herold S, Seeger W. Severe organising pneumonia following COVID-19. **Thorax** 2021; 76(2):201-204. doi: [10.1136/thoraxjnl-2020-216088](https://doi.org/10.1136/thoraxjnl-2020-216088).

Vohwinkel CU, Buchäcker Y, Al-Tamari HM, Mazzocchi LC, Eltzschig HK, Mayer K, Morty RE, Herold S, Seeger W, Pullamsetti SS, **Vadász I**. Restoration of megalin-mediated clearance of alveolar protein as a novel therapeutic approach for acute lung injury. **Am J Respir Cell Mol Biol** 2017; 57(5):589-602. doi: [10.1165/rcmb.2016-0358OC](https://doi.org/10.1165/rcmb.2016-0358OC).

Gwoździńska P, Buchbinder BA, Mayer K, Herold S, Morty RE, Seeger W, **Vadász I**. Hypercapnia impairs ENaC cell surface stability by promoting phosphorylation, polyubiquitination and endocytosis of  $\beta$ -ENaC in a human alveolar epithelial cell line. **Front Immunol** 2017; 8:591. doi: [10.3389/fimmu.2017.00591](https://doi.org/10.3389/fimmu.2017.00591).

Peters DM, **Vadász I**, Wujak L, Wygrecka M, Olschewski A, Becker C, Herold S, Papp R, Mayer K, Rummel S, Brandes RP, Günther A, Waldegger S, Eickelberg O, Seeger W, Morty RE. TGF- $\beta$  directs trafficking of the epithelial sodium channel ENaC which has implications for ion and fluid transport in acute lung injury. **Proc Natl Acad Sci U S A** 2014; 111(3):E374-83. doi: [10.1073/pnas.1216382110](https://doi.org/10.1073/pnas.1216382110).

Buchäcker Y, Rummel S, Vohwinkel CU, Gabrielli NM, Grzesik BA, Mayer K, Herold S, Morty RE, Seeger W, **Vadász I**. Megalin mediates transepithelial albumin clearance from the alveolar space of intact rabbit lungs. **J Physiol** 2012; 590(20):5167-81. doi: [10.1113/jphysiol.2012.233403](https://doi.org/10.1113/jphysiol.2012.233403).

**Vadász I**, Dada LA, Briva A, Trejo HE, Welch LC, Chen J, Tóth PT, Lecuona E, Witters LA, Schumacker PT, Chandel NS, Seeger W, Sznajder JI. AMP-activated protein kinase regulates CO<sub>2</sub>-induced alveolar epithelial dysfunction in rats and human cells by promoting Na,K-ATPase endocytosis. **J Clin Invest** 2008; 118(2):752-62. doi: [10.1172/JCI29723](https://doi.org/10.1172/JCI29723).

**Vadász I**, Schermuly RT, Ghofrani HA, Rummel S, Wehner S, Mühlendorfer I, Schäfer KP, Seeger W, Morty RE, Grimminger F, Weissmann N. The lectin-like domain of tumor necrosis factor- $\alpha$  improves alveolar fluid balance in injured isolated rabbit lungs. **Crit Care Med** 2008; 36(5):1543-50. doi: [10.1097/CCM.0b013e31816f485e](https://doi.org/10.1097/CCM.0b013e31816f485e).

**Vadász I**, Morty RE, Kohstall MG, Olschewski A, Grimminger F, Seeger W, Ghofrani HA. Oleic acid inhibits alveolar fluid reabsorption: a role in acute respiratory distress syndrome? **Am J Respir Crit Care Med** 2005; 171(5):469-79. doi: [10.1164/rccm.200407-954OC](https://doi.org/10.1164/rccm.200407-954OC).