

## Curriculum Vitae

**Oliver Weinheimer** Dr. rer. nat., Dipl. Math.  
d.o.b. March 30th, 1973, in Bingen am Rhein, Germany

### University Education

2007 Dr. rer. nat. in Computer Science, Johannes Gutenberg-Universität, Mainz, Germany  
2001 Diploma in Mathematics (Dipl. Math.), Johannes Gutenberg-Universität, Mainz  
1993–2001 Studies in Mathematics with an emphasis on Computer Science and subsidiary subject Business Administration, Johannes Gutenberg-Universität (JGU), Mainz

### Scientific Career

Since 2021 Principal Investigator (PI), Translational Lung Research Center Heidelberg (TLRC), German Center for Lung Research (DZL)  
Since 2013 Member, Translation Lung Research Center Heidelberg (TLRC) and the German Center for Lung Research (DZL)  
Since 2013 Senior Researcher, Diagnostic and Interventional Radiology at the Heidelberg University Hospital  
2012–2013 Postdoctoral Research Fellow, Johannes Gutenberg-Universität Mainz, Project Leader (PI) of DFG funded research project „Entwicklung und Validierung einer automatischen Methode zur Bestimmung der Bronchiengeometrie aus MDCT-Daten“  
2008–2011 Postdoctoral Research Fellow, Johannes Gutenberg-Universität Mainz, Member of DFG research group FOR 474 "Bildgestützte zeitliche und regionale Analyse der Ventilations - Perfusionsverhältnisse in der Lunge"  
2001–2007 Research Assistant (PhD Student), Johannes Gutenberg-Universität Mainz, Employee in different research projects, e.g. DFG project „3D-Rekonstruktion aus mehreren 2D-Projektions-Röntgenaufnahmen mit Hilfe der Referenzkugel-Methode (RSM)“

### Awards and Honors

2022 Best Scientific Poster Award, DZL Annual Meeting 2022, Hannover, Germany (co-author)  
2017 Best Scientific Poster Award, IWPMF 2017, Seoul, South Korea (co-author)  
2011 Runner up of Lobe and Lung Analysis Challenge (LOLA11), Pulmonary Image Analysis Workshop, MICCAI, Toronto, Canada

### Citation Record

*Total citations: 1,734; h-index:22; h-index since 2017: 17* (Google Scholar September 26<sup>th</sup>, 2022)

## Top-10 selected Publications

Do TD, Skornitzke S, Merle U, Kittel M, Hofbauer S, Melzig C, Kauczor H-U, Wielpütz MO, **Weinheimer O** (2022) COVID-19 pneumonia: Prediction of patient outcome by CT-based quantitative lung parenchyma analysis combined with laboratory parameters. **PLoS ONE** 17(7):e0271787.

Röhrich M, Leitz D, Glatting FM, Wefers AK, **Weinheimer O**, Flechsig P, Kahn N, Mall MA, Giesel FL, Kratochwil C, Huber PE, Deimling A von, Heußel CP, Kauczor HU, Kreuter M, Haberkorn U (2022) Fibroblast Activation Protein-Specific PET/CT Imaging in Fibrotic Interstitial Lung Diseases and Lung Cancer: A Translational Exploratory Study. **J Nucl Med** 63(1):127-33.

Guo HH, Persson M, **Weinheimer O**, Rosenberg J, Robinson TE, Wang J (2021) A calibration CT mini-lung-phantom created by 3-D printing and subtractive manufacturing. **J Appl Clin Med Phys** 22(6):183-90.

Konietzke P, Wielpütz MO, Wagner WL, Wuennemann F, Kauczor H-U, Heussel CP, Eichinger M, Eberhardt R, Gompelmann D, **Weinheimer O** (2020) Quantitative CT detects progression in COPD patients with severe emphysema in a 3-month interval. **Eur Radiol** 30(5):2502-12.

Jobst BJ, **Weinheimer O**, Buschulte T, Trauth M, Tremper J, Delorme S, Becker N, Motsch E, Groß M-L, Trotter A, Eichinger M, Kauczor H-U, Wielpütz MO (2019) Longitudinal airway remodeling in active and past smokers in a lung cancer screening population. **European Radiology** 29(6):2968-80.

**Weinheimer O**, Hoff BA, Fortuna AB, Fernández-Baldera A, Konietzke P, Wielpütz MO, Robinson TE, Galbán CJ (2019) Influence of Inspiratory/Expiratory CT Registration on Quantitative Air Trapping. **Academic Radiology** 26(9):1202-14.

Jobst BJ\*, **Weinheimer O\***, Trauth M, Becker N, Motsch E, Groß M-L, Tremper J, Delorme S, Eigentopf A, Eichinger M, Kauczor H-U, Wielpütz MO (2018) Effect of smoking cessation on quantitative computed tomography in smokers at risk in a lung cancer screening population. **Eur Radiol** 28(2):807-15. (\* equal contribution)

Konietzke P, **Weinheimer O**, Wielpütz MO, Savage D, Ziyeh T, Tu C, Newman B, Galbán CJ, Mall MA, Kauczor H-U, Robinson TE (2018) Validation of automated lobe segmentation on paired inspiratory-expiratory chest CT in 8-14 year-old children with cystic fibrosis. **PLoS ONE** 13(4):e0194557.

**Weinheimer O**, Achenbach T, Bletz C, Duber C, Kauczor HU, Heussel CP (2008) About objective 3-d analysis of airway geometry in computerized tomography. **IEEE TRANSACTIONS ON MEDICAL IMAGING** 27(1):64-74.

Achenbach T, **Weinheimer O**, Biedermann A, Schmitt S, Freudenstein D, Gouthma E, Kunz RP, Buhl R, Dueber C, Heußel CP (2008) MDCT assessment of airway wall thickness in COPD patients using a new method: correlations with pulmonary function tests. **European Radiology** 18:2731-8.