

CURRICULUM VITAE

Priv.-Doz. Dr. med. Matthias A. Fink

MHBA, B.Sc. (Biomedical Sciences)

d.o.b. August 2, 1989

Current position	Senior Physician, Clinic for Diagnostic and Interventional Radiology, Heidelberg University Hospital
Affiliation	Clinic for Diagnostic and Interventional Radiology, Heidelberg University Hospital, Im Neuenheimer Feld 420, 69120 Heidelberg, Germany
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University Education

2025	Associate Professor of Radiology, Heidelberg University; thesis: “Natural Language Processing and Machine Learning for Efficient Data Processing Workflows in Radiology”.
2022–2024	Master of Health Business Administration (MHBA), Friedrich-Alexander-University Erlangen-Nürnberg. Master’s thesis: “The Transformation of the Medical Profession through Artificial Intelligence: Fields of Application, Potentials and Challenges”, awarded.
2012–2019	Doctoral research in Pharmacology and Neurosurgery, University Medicine Greifswald; Dr. med. awarded in 2019 with <i>summa cum laude</i> . Thesis: “L-Carnitine-Mediated Tumor Cell Protection and Poor Patient Survival Associated with OCTN2 Overexpression in Glioblastoma Multiforme”.
2011–2016	Studies of Medicine (clinical curriculum), University of Greifswald; medical licensure in 2016.
2012–2014	Bachelor’s studies in Biomedical Sciences, University of Greifswald, Greifswald; B.Sc. awarded.
2009–2011	Studies of Medicine (preclinical curriculum), Johann Wolfgang Goethe-University Frankfurt, Frankfurt am Main.

Professional Career

Since 02/2024	Senior Physician, Clinic for Diagnostic and Interventional Radiology, Heidelberg University Hospital.
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Since 05/2024	Member of the Steering Committee of the Radiological Cooperative Network (RACOON), Network University Medicine (NUM).
07/2022–01/2024	Functional Senior Physician, Clinic for Diagnostic and Interventional Radiology, Heidelberg University Hospital.
09/2022	Board certification in Radiology, State Medical Association of Baden-Wuerttemberg.
Since 02/2022	Lecturer and teaching coordinator for radiology, Faculty of Medicine Heidelberg.
Since 08/2020	Member of the Executive Committee of RACOON; site study lead Heidelberg.
Since 03/2019	Lecturer in cross-sectional imaging and sonography, School of Medical Radiology Technology, Academy for Health Professions, Heidelberg.
03/2017–09/2022	Resident in Radiology, Clinic for Diagnostic and Interventional Radiology, Heidelberg University Hospital.

Awards, Honors, and Fellowships

2023–2025	Physician Scientist Program, Faculty of Medicine Heidelberg.
2023	Participation as “Young Scientist” at the 72nd Lindau Nobel Laureate Meeting (Physiology / Medicine).
2021	Admission to the “Forscher fuer die Zukunft” (FFZ) network of the German Roentgen Society (DRG).
2019	Doctoral Thesis Award for the best dissertation, University of Greifswald.
2016	Travel Grant “Hellste Koepfe der Radiologie”, 97th German Roentgen Congress, German Roentgen Society (DRG).
2013–2014	Deutschlandstipendium, Federal Ministry of Education and Research (BMBF).
2012–2013	Gerhard Domagk Bachelor Scholarship, University of Greifswald.

Citation Record

Google Scholar accessed on April 20, 2026: total citations 1012; h-index 15; i10-index 21; since 2021, 892 citations, h-index 15, and i10-index 21.

Barb A, Uhl C, Bornhak L, **Fink MA**, et al. Accuracy of Fully Automated Iliac Artery Tortuosity Measurements in Patients with Abdominal Aortic Aneurysm Using Deep Learning. *European Journal of Radiology*. 2026;195:112609

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Li J, Zhou Z, Yang J, **Fink MA**, et al. MedShapeNet - a Large-Scale Dataset of 3D Medical Shapes for Computer Vision. *Biomedical Engineering / Biomedizinische Technik*. 2024

Fink MA, Schlamp K. Künstliche Intelligenz: Neue Perspektiven in der Thoraxradiologie. *Pneumo News*. 2024;16(6):35–41

Naas O, Norajitra T, Lückerrath C, **Fink MA**, et al. MRI-Derived Dural Sac and Lumbar Vertebrae 3D Volumetry Has Potential for Detection of Marfan Syndrome. *Diagnostics*. 2024;14(12):1301

Fink MA. From Data to Insights: How Natural Language Processing and Structured Reporting Advance Data-Driven Radiology. *European Radiology*. 2023;33(11):7494–7495

Fink MA, Bischoff A, Fink CA, Moll M, et al. Potential of ChatGPT and GPT-4 for Data Mining of Free-Text CT Reports on Lung Cancer. *Radiology*. 2023;308(3):e231362

Fink MA. Large Language Models such as ChatGPT and GPT-4 for Patient-Centered Care in Radiology. *Radiologie*. 2023

Seibold C, Jaus A, **Fink MA**, Kim M, et al. Accurate Fine-Grained Segmentation of Human Anatomy in Radiographs via Volumetric Pseudo-Labeling. *arXiv*. 2023;2306.03934

Seibold C, Reiß S, Sarfraz S, **Fink MA**, et al. Detailed Annotations of Chest X-Rays via CT Projection for Report Understanding. *arXiv*. 2022;2210.03416

Nagaraj Y, de Jonge G, Andreychenko A, **Fink MA**, et al. Facilitating Standardized COVID-19 Suspicion Prediction Based on Computed Tomography Radiomics in a Multi-Demographic Setting. *European Radiology*. 2022;32(9):6384–6396

Fink MA, Kades K, Bischoff A, Moll M, et al. Deep Learning-Based Assessment of Oncologic Outcomes from Natural Language Processing of Structured Radiology Reports. *Radiology: Artificial Intelligence*. 2022;4(5):e220055

Melzig C, Do TD, Egenlauf B, **Fink MA**, et al. Utility of Automated Cardiac Chamber Volumetry by Nongated CT Pulmonary Angiography for Detection of Pulmonary Hypertension Using the 2018 Updated Hemodynamic Definition. *American Journal of Roentgenology*. 2022;219(1):66–75

Fink MA, Seibold C, Kauczor HU, Stiefelhagen R, et al. Jointly Optimized Deep Neural Networks to Synthesize Monoenergetic Images from Single-Energy CT Angiography for Improving Classification of Pulmonary Embolism. *Diagnostics*. 2022;12(5):1224

Fink MA, Mayer VL, Schneider T, Seibold C, et al. CT Angiography Clot Burden Score from Data Mining of Structured Reports for Pulmonary Embolism. *Radiology*. 2022;302(1):175–184

Liang S, Kades K, **Fink MA**, Full P, et al. Fine-Tuning BERT Models for Summarizing German Radiology Findings. *Proceedings of the 4th Clinical Natural Language Processing Workshop*. 2022:30–40

Shwaiki O, Rashwan B, **Fink MA**, Kirksey L, et al. Lower Extremity CT Angiography in Peripheral Arterial Disease: From the Established Approach to Evolving Technical Developments. *Int J Cardiovasc Imaging*. 2021;37(10):3101–14

Salg GA, Ganten MK, Bucher AM, **Fink MA**, et al. A Reporting and Analysis Framework for Structured Evaluation of COVID-19 Clinical and Imaging Data. *npj Digit. Med.*. 2021;4(1):1–9

Sin D, McLennan G, Rengier F, **Fink MA**, et al. Acute Pulmonary Embolism Multimodality Imaging Prior to Endovascular Therapy. *Int J Cardiovasc Imaging*. 2021;37(1):343–358

Seibold C, **Fink MA**, Goos C, Kauczor H, et al. Prediction of Low-keV Monochromatic Images from Polyenergetic CT Scans for Improved Automatic Detection of Pulmonary Embolism. *IEEE*. 2021