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Communication via extracellular vesicles between immune cells and the human-pathogenic fungus *Aspergillus fumigatus*

Extracellular vesicles (EVs) are produced by nearly all cells. They are in particular important for the exchange of information between immune cells and microbial pathogens. We focus on the characterisation of EVs of immune cells like macrophages and neutrophils and their effects on pathogens and other immune cells. EVs will be characterised for small RNAs and proteins and their effects on targets. This research might also have implications for the improvement of diagnosis and therapy.

Publications

Rafiq M, Rivieccio F, Zimmermann AK, Visser C, Bruch A, Krüger T, González Rojas K, Kniemeyer O, Blango MG, Brakhage AA (2022) PLB-985 Neutrophil-Like Cells as a Model To Study Aspergillus fumigatus Pathogenesis. *mSphere* 7(1), e0094021. <u>Details PubMed</u>

Ewald J, Rivieccio F, Radosa L, Schuster S, Brakhage AA, Kaleta C (2021) Dynamic optimization reveals alveolar epithelial cells as key mediators of host defense in invasive aspergillosis. *PLoS Comput*

Biol 17(12), e1009645. Details PubMed

Blango MG, Pschibul A, Rivieccio F, Krüger T, Rafiq M, Jia L, Zheng T, Goldmann M, Voltersen V, LiJ, Panagiotou P, Kniemeyer O, Brakhage AA (2020) The dynamic surface proteomes of allergenic fungal conidia *J Proteome Res* 19(5), 2092-2104. <u>Details Open Access</u>

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Start of PhD

January 17, 2018

Doctoral Disputation

December 5, 2022