

# Publications

- Acosta-España JD, Ali R, Montañó D, Xiu Yiin PC, Niegisch JS, Voigt K (2024) Trinity of environment, animals, and humans: A résumé in the case of the fungal order Mucorales. In: Brakhage AA, Kniemeyer O, Zipfel PF (eds.) *The Mycota - Human and Animal Relationships* (3), 6, pp. 3-34. Springer, Cham. ISBN: 978-3-031-64852. (Review)
- Nguyen TTT, de A Santiago ALCM, Hallsworth JE, Cordeiro TRL, Voigt K, Kirk PM, Crous PW, Júnior MAM, Elsztein C, Lee HB (2024) New *Mucorales* from opposite ends of the world. *Stud Mycol* 109, 273-321.
- Acosta-España JD, Santamaría BJ, Piñuela LB, Santamaría Salvador CG (2023) Switch to local therapy with metronidazole plus meglumine in a case of otic leishmaniasis due to hepatic toxicity of intramuscular meglumine. *Travel Med Infect Dis* 51, 102513.
- Aguirre C, Acosta-España JD, Patajalo-Villata SJ, Rodriguez-Morales AJ (2023) Necrotising pneumonia caused by *Curvularia hawaiiensis* (syn. *Bipolaris hawaiiensis*) and *Mycobacterium tuberculosis* coinfection in a patient with ascariasis: a case report and review. *Ann Clin Microbiol Antimicrob* 22(1), 36. (Review)
- Herrisse M, Ishida K, Staiger-Creed J, Judd L, Williams SJ, Howden BP, Stinear TP, Dahse HM, Voigt K, Hertweck C, Pidot SJ (2023) Discovery and biosynthesis of the cytotoxic polyene terpenomycin in human pathogenic *Nocardia*. *ACS Chem Biol* 18(8), 1872-1879.
- Rassbach J, Hilsberg N, Haensch VG, Dörner S, Gressler J, Sonnabend R, Semm C, Voigt K, Hertweck C, Gressler M (2023) Non-canonical two-step biosynthesis of anti-oomycete indole alkaloids in Kickxellales. *Fungal Biol Biotechnol* 1010(1), 19.
- Rassbach J, Merseburger P, Wurlitzer JM, Binnemann N, Voigt K, Rohlf M, Gressler M (2023) Insecticidal cyclodepsitrapeptides from *Mortierella alpina*. *J Nat Prod* 86(7), 1715-1722.
- Acosta España J, Voigt K (2022) Mini review: Risk assessment, clinical manifestation, prediction, and prognosis of Mucormycosis: Implications for pathogen- and human-derived biomarkers. *Front Microbiol* 13, 895989. (Review)
- Acosta España J, Voigt K (2022) An old confusion: entomophthoromycosis versus mucormycosis and their main differences. *Front Microbiol* 13, 1035100. (Review)
- Gryganskyi AP, Nie Y, Hajek AE, Hodge KT, Liu XY, Aadland K, Voigt K, Anishchenko IM, Kutovenko VB, Kava L, Vuk A, Vilgalys R, Huang B, Stajich JE (2022) The early terrestrial fungal lineage of *Conidiobolus* - Transition from saprotroph to parasitic lifestyle. *J Fungi (Basel)* 8(8), 789.
- Möckel L, Meusemann K, Misof B, Schwartze VU, De Fine Licht HH, Voigt K, Stielow B, de Hoog S, Beutel RG, Buellesbach J (2022) Phylogenetic revision and patterns of host specificity in the fungal subphylum Entomophthoromycotina. *Microorganisms* 10(2), 256.
- Montañó DE, Hartung S, Wich M, Ali R, Jungnickel B, von Lilienfeld-Toal M, Voigt K (2022) The TLR-NF- $\kappa$ B axis contributes to the monocytic inflammatory response against a virulent strain of *Lichtheimia corymbifera*, a causative agent of invasive mucormycosis. *Front Immunol* 13, 882921.

- Riabova O, Egorova A, Lepioshkin A, Li Y, Voigt K, Kloss F, Makarov V (2022) Thienol[2,3-d]pyrimidine-core compounds show activity against clinically relevant gram-positive bacteria. *ChemMedChem* 17(17), e202200207.
- Zambrano PG, Acosta-España JD, Mosquera Moyano F, Altamirano Jara JB (2022) Sexually or intimately transmitted infections: A look at the current outbreak of monkeypox in 2022. *Travel Med Infect Dis* 49, 102383. (Review)
- Böttcher S, Hartung S, Meyer F, Rummeler S, Voigt K, Walther G, Hochhaus A, von Lilienfeld-Toal M, Jahreis S (2021) Human mucosal-associated invariant T cells respond to Mucorales species in a MR1-dependent manner. *Med Mycol* 59(5), 505-509.
- Bulatov T, Gensel S, Mainz A, Dang T, Koller T, Voigt K, Ebeling J, Wilson D, Genersch E, Süßmuth R (2021) Total synthesis and biological evaluation of paenilamicins from the honey bee pathogen *Paenibacillus larvae*. *J Am Chem Soc* 144(1), 288-296.
- Hassan MIA, Keller M, Hillger M, Binder U, Reuter S, Herold K, Telagathoti A, Dahse HM, Wicht S, Trinks N, Nietzsche S, Deckert-Gaudig T, Deckert V, Mrowka R, Terpitz U, Saluz HP, Voigt K (2021) The impact of episporic modification of *Lichtheimia corymbifera* on virulence and interaction with phagocytes. *Comput Struct Biotechnol J* 19, 880-896.
- Nguyen TTT, Voigt K, Santiago ALCMA, Kirk PM, Lee HB (2021) Discovery of novel *Backusella* (Backusellaceae, Mucorales) isolated from invertebrates and toads in Cheongyang, Korea. *J Fungi (Basel)* 7(7), 513.
- Otgon O, Nadmid S, Paetz C, Dahse HM, Voigt K, Bartram S, Boland W, Dagvadorj E (2021) Chromane derivatives from underground parts of *Iris tenuifolia* and their *in vitro* antimicrobial, Cytotoxicity and antiproliferative evaluation. *Molecules* 26(21), 6705.
- Stanford FA, Matthies N, Cseresnyés Z, Figge MT, Hassan MIA, Voigt K (2021) Expression patterns in reductive iron assimilation and functional consequences during phagocytosis of *Lichtheimia corymbifera*, an emerging cause of mucormycosis. *J Fungi (Basel)* 7(4), 272.
- Voigt K, James TY, Kirk PM, Santiago ALCMA, Waldman B, Griffith GW, Fu M, Radek R, Strasser JFH, Wurzbacher C, Jerônimo GH, Simmons DR, Seto K, Gentekaki E, Hurdeal VG, Hyde KD, Nguyen TTT, Lee HB (2021) Early-diverging fungal phyla: taxonomy, species concept, ecology, distribution, anthropogenic impact, and novel phylogenetic proposals. *Fungal Divers* 109(1), 59-98. (Review)
- Yu Y, Wolf AK, Thusek S, Heinekamp T, Bromley M, Krappmann S, Terpitz U, Voigt K, Brakhage AA, Beilhack A (2021) Direct visualization of fungal burden in filamentous fungus-infected silkworms. *J Fungi (Basel)* 7(2), 136.
- Cseresnyés Z\*, Hassan MIA\*, Dahse HM, Voigt K, Figge MT; \* shared first authors (2020) Quantitative impact of cell membrane fluorescence labeling on phagocytosis measurements in confrontation assays. *Front Microbiol* 11, 1193.
- Hassan MIA, Kruse JM, Krüger T, Dahse HM, Cseresnyés Z, Blango MG, Slevogt H, Hörhold F, Ast V, König R, Figge MT, Kniemeyer O, Brakhage AA, Voigt K (2020) Functional surface proteomic profiling reveals the host heat-shock protein A8 as a mediator of *Lichtheimia corymbifera* recognition by murine alveolar macrophages. *Environ Microbiol* 22(9), 3722-3740.

- Montaño DE, Voigt K (2020) Host immune defense upon fungal infections with mucorales: Pathogen-immune cell interactions as drivers of inflammatory responses. *J Fungi* 6(3), E173. (Review)
- Stanford FA, Voigt K (2020) Iron assimilation during emerging infections caused by opportunistic fungi with emphasis on mucorales and the development of antifungal resistance. *Genes (Basel)* 11(11), E1296. (Review)
- Brkljaca R, Dahse HM, Voigt K, Urban S (2019) Antimicrobial evaluation of the constituents isolated from *Macropidia fuliginosa* (Hook.) Druce. *Nat Prod Commun* 14(10), 1-6.
- Burow K, Grawunder A, Harpke M, Pietschmann S, Ehrhardt R, Wagner L, Voigt K, Merten D, Büchel G, Kothe E (2019) Microbiomes in an acidic rock-water cave system. *FEMS Microbiol Lett* 366(13), fnz167.
- Hassan MIA, Voigt K (2019) Pathogenicity patterns of mucormycosis: Epidemiology, interaction with immune cells and virulence factors. *Med Mycol* 57(Supplement\_2), S245-S256. (Review)
- Hassan MIA<sup>\*</sup>, Cseresnyes Z<sup>\*</sup>, Al-Zaben N, Dahse HM, Vilela de Oliveira RJ, Walther G, Voigt K<sup>\*\*</sup>, Figge MT<sup>\*\*</sup>; <sup>\*</sup> shared first authors; <sup>\*\*</sup> authors contributed equally (2019) The geographical region of origin determines the phagocytic vulnerability of *Lichtheimia* strains. *Environ Microbiol* 21(12), 4563-4581.
- Hussein MA, Voigt K (2019) Phylogenetic and enzymatic variability of *Alternaria* species isolated from various substrates in Qena governorate of Upper Egypt. *Archives of Phytopathology and Plant Protection* 52(5-6), 530-541.
- Mudalungu CM, von Törne WJ, Voigt K, Rückert C, Schmitz S, Sekurova ON, Zotchev SB, Süssmuth RD (2019) Noursamycins, chlorinated cyclohexapeptides identified from molecular networking of *Streptomyces noursei* NTR-SR4. *J Nat Prod* 82(6), 1478-1486.
- Mura E, Edwards J, Kittelmann S, Kaerger K, Voigt K, Mrázek J, Moniello G, Fliegerova K (2019) Anaerobic fungal communities differ along the horse digestive tract. *Fungal Biol* 123(3), 240-246.
- Wagner L, de Hoog S, Alastruey-Izquierdo A, Voigt K, Kurzai O, Walther G (2019) A revised species concept for opportunistic *Mucor* species reveals species-specific antifungal susceptibility profiles. *Antimicrob Agents Chemother* 63(8), e00653-19.
- Wagner L, Stielow JB, de Hoog GS, Bensch K, Schwartz VU, Voigt K, Alastruey-Izquierdo A, Kurzai O, Walther G (2019) A new species concept for the clinically relevant *Mucor circinelloides* complex. *Persoonia - Molecular Phylogeny and Evolution of Fungi* 42, 67-97.
- Arnesen JA, Malagočka J, Gryganskyi A, Grigoriev IV, Voigt K, Stajich JE, De Fine Licht HH (2018) Early diverging insect-pathogenic fungi of the order entomophthorales possess diverse and unique subtilisin-like serine proteases. *G3 (Bethesda)* 8(10), 3311-3319.
- Benndorf R, Guo H, Sommerwerk E, Weigel C, Garcia-Altare M, Martin K, Hu H, Kuefner M, de Beer ZW, Poulsen M, Beemelmans C (2018) Natural products from Actinobacteria associated with fungus-growing termites. *Antibiotics* 7(3), 83.
- de Souza CAF, Voigt K, Sartori-Gurgel L, Cordeiro TL, de Oliveira RJV, Lima DX, de Azevedo Santiago ALCM (2018) A new species of *Mucor* (Mucoromycotina, Mucorales) isolated from an

enclave of upland Atlantic forest in the semi-arid region of Brazil. *Phytotaxa* 351(1), 053-062.

Dudek B, Schnurrer F, Dahse HM, Paetz C, Warskulat AC, Weigel C, Voigt K, Schneider B (2018) Formation of nudicaulins *In Vivo* and *In Vitro* and the biomimetic synthesis and bioactivity of O-methylated nudicaulin derivatives. *Molecules* 23(12), 3357.

Erdenetsogt U, Gotov C, Voigt K, Bartram S, Boland W, Dagvadorj E (2018) Chemical composition and antimicrobial activity of essential oil from *Pyrethrum pulchrum* ledeb. *Mong J Chem* 19(45), 38-43.

Gryganskyi AP, Golan J, Dolatabadi S, Mondo S, Robb S, Idnurm A, Muszewska A, Steczkiewicz K, Masonjones S, Liao HL, Gajdeczka MT, Anike F, Vuck A, Anishchenko IM, Voigt K, de Hoog GS, Smith ME, Heitman J, Vilgalys R, Stajich JE (2018) Phylogenetic and phylogenomic definition of *Rhizopus* species. *G3 (Bethesda)* 8(6), 2007-2018.

Guo H, Benndorf R, König S, Lechnitz D, Weigel C, Peschel G, Berthel P, Kaiser M, Steinbeck C, Werz O, Poulsen M, Beemelmans C (2018) Expanding the rubterolone family: Intrinsic reactivity and directed diversification of PKS-derived pyrans. *Chem Eur J* 24(44), 11319-11324.

Guo H, Schmidt A, Stephan P, Raguž L, Braga D, Kaiser M, Dahse HM, Weigel C, Lackner G, Beemelmans C (2018) Precursor-directed diversification of cyclic tetrapeptidic pseudoxyllallemycins. *ChemBioChem* 19(21), 2307-2311.

Richter A, Rudolph I, Möllmann U, Voigt K, Chung CW, Singh OMP, Rees M, Mendoza-Losana A, Bates R, Ballell L, Batt S, Veerapen N, Fütterer K, Besra G, Imming P, Argyrou A (2018) Novel insight into the reaction of nitro, nitroso and hydroxylamino benzothiazinones and of benzoxacinones with *Mycobacterium tuberculosis* DprE1. *Sci Rep* 8(1), 13473.

Selim KA, El-Ghwas DE, Easa SM, Hassan MIA (2018) Bioethanol a microbial biofuel metabolite; new insights of yeasts metabolic engineering. *Fermentation* 4(1), 16. (Review)

Sieber P, Voigt K, Kämmer P, Brunke S, Schuster S, Linde J (2018) Comparative study on alternative splicing in human fungal pathogens suggests its involvement during host invasion. *Front Microbiol* 9, 2313.

Becker T, Pasteels J, Weigel C, Dahse HM, Voigt K, Boland W (2017) A tale of four kingdoms - isoxazolin-5-one- and 3-nitropropanoic acid-derived natural products. *Natural Product Reports* 34(4), 343-360.

Fichtner M, Voigt K, Schuster S (2017) The tip and hidden part of the iceberg: Proteinogenic and non-proteinogenic aliphatic amino acids. *Biochim Biophys Acta* 1861(1 Pt A), 3258-3269.

Guo H, Benndorf R, Lechnitz D, Klassen JL, Vollmers J, Görls H, Steinacker M, Weigel C, Dahse HM, Kaster AK, de Beer ZW, Poulsen M, Beemelmans C (2017) Isolation, biosynthesis and chemical modifications of rubterolones A-F, rare tropolone alkaloids from *Actinomadura* sp. 5-2. *Chem Eur J* 23(39), 9338-9345.

Guo H, Rischer M, Sperfeld M, Weigel C, Menzel KD, Clardy J, Beemelmans C (2017) Natural products and morphogenic activity of  $\gamma$ -Proteobacteria associated with the marine hydroid polyp *Hydractinia echinata*. *Bioorg Med Chem* 25(22), 6088-6097.

Krieg R, Jortzik E, Goetz AA, Blandin S, Wittlin S, Elhabiri M, Rahbari M, Nuryyeva S, Voigt K,

Dahse HM, Brakhage A, Beckmann S, Quack T, Grevelding CG, Pinkerton AB, Schönecker B, Burrows J, Davioud-Charvet E, Rahlfs S, Becker K (2017) Arylmethylamino steroids as antiparasitic agents. *Nat Commun* 8, 14478.

Lima DX, Souza-Motta CM, Wagner L, Voigt K, de Souza CAF, de Oliveira RJV, da Silva GA, de Azevedo Santiago ALCM, Walther G (2017) *Circinella simplex* - a misapplied name of *Mucor circinatus* sp. nov. *Phytotaxa* 329(3), 269.

Radek R, Wurzbacher C, Gisder S, Nilsson RH, Owerfeldt A, Genersch E, Kirk PM, Voigt K (2017) Morphologic and molecular data help adopting the insect-pathogenic nephridiophagids (Nephridiophagidae) among the early diverging fungal lineages, close to the Chytridiomycota. *MycKeys* 25, 31-50.

Schulze B, Rambach G, Schwartze VU, Voigt K, Schubert K, Speth C, Jacobsen ID (2017) Ketoacidosis alone does not predispose to mucormycosis by *Lichtheimia* in a murine pulmonary infection model. *Virulence* 8(8), 1657-1667.

Selim KA, El Ghwas DE, Selim RM, Hassan MIA (2017) Microbial Volatile in Defense In: Choudhary D., Sharma A., Agarwal P., Varma A., Tuteja N. (eds.) *Volatiles and Food Security* Edition: 1. pp. 135-170. Springer Nature Singapore Pte Ltd., Singapore. ISBN: 978-981-10-5552. (Review)

Steiniger C, Hoffmann S, Mainz A, Kaiser M, Voigt K, Meyer V, Süssmuth RD (2017) Harnessing fungal nonribosomal cyclodepsipeptide synthetases for mechanistic insights and tailored engineering. *Chem Sci* 8(11), 7834-7843.

Tibpromma S, Hyde KD, Jeewon R, Maharachchikumbura SSN, Liu J-K, Bhat DJ, Jones EBG, McKenzie EHC, Camporesi E, Bulgakov TS, Doilom M, de Azevedo Santiago ALCM, Das K, Manimohan P, Gibertoni TB, Lim YW, Ekanayaka AH, Thongbai B, Lee HB, Yang J-B, Kirk PM, Sysouphanthong P, Singh SK, Boonmee S, Dong W, Raj KNA, Latha KPD, Phookamsak R, Phukhamsakda C, Konta S, Jayasiri SC, Norphanphoun C, Tennakoon DS, Li J, Dayarathne MC, Perera RH, Xiao Y, Wanasinghe DN, Senanayake IC, Goonasekara ID, de Silva NI, Mapook A, Jayawardena RS, Dissanayake AJ, Manawasinghe IS, Chethana KWT, Luo Z-L, Hapuarachchi KK, Baghela A, Soares AM, Vizzini A, Meiras-Otoni A, Mešić A, Dutta AK, de Souza CAF, Richter C, Lin C-G, Chakrabarty D, Daranagama DA, Lima DX, Chakraborty D, Ercole E, Wu F, Simonini G, Vasquez G, da Silva GA, Plautz HL Jr, Ariyawansa HA, Lee H, Kušan I, Song J, Sun J, Karmakar J, Hu K, Semwal KC, Thambugala KM, Voigt K, Acharya K, Rajeshkumar KC, Ryvardeen L, Jadan M, Hosen MI, Mikšić M, Samarakoon MC, Wijayawardene NN, Kim NK, Matočec N, Singh PN, Tian Q, Bhatt RP, de Oliveira RJV, Tulloss RE, Aamir S, Kaewchai S, Marathe SD, Khan S, Hongsanan S, Adhikari S, Mehmood T, Bandyopadhyay TK, Svetasheva TY, Nguyen TTT, Antonín V, Li W-J, Wang Y, Indoliya Y, Tkalčec Z, Elgorban AM, Bahkali AH, Tang AMC, Su H-Y, Zhang H, Promputtha I, Luangsa-ard J, Xu J, Yan J, Ji-Chuan K, Stadler M, Mortimer PE, Chomnunti P, Zhao Q, Phillips AJL, Nontachaiyapoom S, Wen T-C, Karunarathna SC (2017) Fungal diversity notes 491–602: taxonomic and phylogenetic contributions to fungal taxa. *Fungal Divers* 83(1), 1-261.

Barnes EC, Jumpathong J, Lumyong S, Voigt K, Hertweck C (2016) Daldionin, an unprecedented binaphthyl derivative, and diverse polyketide congeners from a fungal orchid endophyte. *Chemistry* 22(13), 4551-4555.

Guo H, Kreuzenbeck NB, Otani S, Garcia-Altare M, Dahse HM, Weigel C, Aanen DK, Hertweck C, Poulsen M, Beemelmanns C (2016) Pseudoxylallemycins A-F, cyclic tetrapeptides with rare

allenyl modifications isolated from *Pseudoxylaria* sp. X802: A competitor of fungus-growing termite cultivars. *Org Lett* 18, 3338-3341.

Li GJIE et al. Voigt K..., Sajeewa SN (2016) Fungal diversity notes 253-366: taxonomic and phylogenetic contributions to fungal taxa. *Fungal Divers* 78, 1-237.

Lima DX, Voigt K, de Souza CAF, D Oliveira RJV, Souza-Motta CM, Santiago ALCM DE A (2016) Description of *Backusella constricta* sp. nov. (Mucorales, ex Zygomycota) from the Brazilian Atlantic Rainforest, including a key to species of *Backusella*. *Phytotaxa* 289(1), 59-68.

Paetz C, Hammerbacher A, Menezes RC, Feistel F, Weigel C, Voigt K, Schneider B (2016) Chemical composition and antimicrobial activity of *Populus nigra* shoot resin. *Nat Prod Commun* 11(7), 989-992.

Voigt K, Wolf T, Ochsenreiter K, Nagy G, Kaerger K, Shelest E, Papp T (2016) 15 Genetic and metabolic aspects of primary and secondary metabolism of the Zygomycetes In: Hoffmeister D. (eds) *Biochemistry and Molecular Biology* (ed.) *The Mycota* Vol. III: 3rd edition. III, pp. 361-385. Springer Verlag, Berlin, Heidelberg, New York. (Review)

Ariyawansa HA, Hyde KD, Jayasiri SC, Buyck B, Chethana KWT, Dai DQ, Dai YC, Daranagama DA, Jayawardena RS, Lücking R, Ghobad-Nejhad M, Niskanen T, Thambugala KM, Voigt K, Rui Lin Zhao and the fungal diversity consortium (2015) Fungal diversity notes 111-252 - taxonomic and phylogenetic contributions to fungal taxa *Fungal Diversity* 75 , 27-274.

Fliegerová K, Kaerger K, Kirk PM, Voigt K (2015) Rumen fungi In: Puniya AK, Singh R, Kamra DN (eds.) *Rumen Microbiology: From Evolution to Revolution* Chapter 7, pp. 97-112. Springer New Dehli, New Delhi, Heidelberg, New York, Dordrecht, London. ISBN: 978-81-322-2400.

Kaerger K, Schwartze VU, Dolatabadi S, Nyilasi I, Kovács SA, Binder U, Papp T, Hoog Sd, Jacobsen ID, Voigt K (2015) Adaptation to thermotolerance in *Rhizopus* coincides with virulence as revealed by avian and invertebrate infection models, phylogeny, physiological and metabolic flexibility. *Virulence* 6(4), 395-403.

Münchberg U, Wagner L, Rohrer C, Voigt K, Rösch P, Jahreis G, Popp J (2015) Quantitative assessment of the degree of lipid unsaturation in intact *Mortierella* by Raman microspectroscopy. *Anal Bioanal Chem* 407(12), 3303-3311.

Schwartze VU, Hoffmann K (2015) *Lichtheimia* (ex *Absidia*). In: Robert Russell Monteith Paterson, Nelson Lima (eds.) *Molecular Biology of Food and Water Borne Mycotoxigenic and Mycotic Fungi* pp. 355-374. CRC Press Inc..

Benny GL, Humber RA, Voigt K (2014) The zygomycetous Fungi: The phylum *Entomophthoromycota* and the subphyla *Kickxellomycotina*, *Mortierellomycotina*, *Mucoromycotina*, and *Zoopagomycotina*. In: McLaughlin DJ, Blackwell M, Spatafora JW (eds.) *The Mycota* Vol. VIIA: Systematics of fungi. 2nd edition. pp. 209-250. Springer Verlag, Berlin, Heidelberg, New York.

de A. Santiago ALCM , Hoffmann K, Lima DX, de Oliveira RJV, Vieira HEE, Malosso E, Maia LC, da Silva GA (2014) A new species of *Lichtheimia* (*Mucoromycotina*, *Mucorales*) isolated from Brazilian soil. *Mycol Progress* 13, 343-352.

de Hoog S, Ibrahim AS, Voigt K (2014) Zygomycetes: an emerging problem in the clinical

laboratory. *Mycoses* 57(Suppl. 3), 1.

El-Shabrawi MH, Kamal NM, Kaerger K, Voigt K (2014) Diagnosis of gastrointestinal basidiobolomycosis: a mini-review. *Mycoses* 57(Suppl. 3), 138-143.

Grützmann K, Szafranski K, Pohl M, Voigt K, Petzold A, Schuster S (2014) Fungal alternative splicing is associated with multicellular complexity and virulence: a genome-wide multi-species study. *DNA Res* 21(1), 27-39.

Kraibooj K\*, Park HR\*, Dahse HM, Skerka C, Voigt K\*, Figge MT\* (2014) Virulent strain of *Lichtheimia corymbifera* shows increased phagocytosis by macrophages as revealed by automated microscopy image analysis. *Mycoses* 57(Suppl. 3), 56-66, \*/\*authors contributed equally.

Linde J, Schwartze V, Binder U, Lass-Flörl C, Voigt K, Horn F (2014) *De Novo* Whole-Genome Sequence and Genome Annotation of *Lichtheimia ramosa*. *Genome Announc* 2(5), e00888-14.

Mendoza L, Vilela R, Voelz K, Ibrahim AS, Voigt K, Lee SC (2014) Human Fungal Pathogens of *Mucorales* and *Entomophthorales*. *Cold Spring Harb Perspect Med* 5(4), Chapter 27.

Park HP, Voigt K (2014) Interaction of Zygomycetes with innate immune cells reconsidered with respect to ecology, morphology, evolution and infection biology: a mini-review. *Mycoses* 57(Suppl. 3), 31-39.

Schieferdecker S, König S, Weigel C, Dahse HM, Werz O, Nett M (2014) Structure and Biosynthetic Assembly of Gulmirecins, Macrolide Antibiotics from the Predatory Bacterium *Pyxidicoccus fallax*. *Chem Eur J* 20, 15933-15940.

Schoch CL, Robbertse B, Robert V, Vu D, Cardinali G, Irinyi L, Meyer W, Nilsson RH, Hughes K, Miller AN, Kirk PM, Abarenkov K, Aime MC, Ariyawansa HA, Bidartondo M, Boekhout T, Buyck B, Cai Q, Chen J, Crespo A, Crous PW, Damm U, De Beer ZW, Dentinger BT, Divakar PK, Dueñas M, Feau N, Fliegerova K, García MA, Ge ZW, Griffith GW, Groenewald JZ, Groenewald M, Grube M, Gryzenhout M, Gueidan C, Guo L, Hambleton S, Hamelin R, Hansen K, Hofstetter V, Hong SB, Houbraken J, Hyde KD, Inderbitzin P, Johnston PR, Karunaratna SC, Kőljalg U, Kovács GM, Kraichak E, Krizsan K, Kurtzman CP, Larsson KH, Leavitt S, Letcher PM, Liimatainen K, Liu JK, Lodge DJ, Luangsa-ard JJ, Lumbsch HT, Maharachchikumbura SS, Manamgoda D, Martín MP, Minnis AM, Moncalvo JM, Mulè G, Nakasone KK, Niskanen T, Olariaga I, Papp T, Petkovits T, Pino-Bodas R, Powell MJ, Raja HA, Redecker D, Sarmiento-Ramirez JM, Seifert KA, Shrestha B, Stenroos S, Stielow B, Suh SO, Tanaka K, Tedersoo L, Telleria MT, Udayanga D, Untereiner WA, Diéguez Uribeondo J, Subbarao KV, Vágvölgyi C, Visagie C, Voigt K, Walker DM, Weir BS, Weiß M, Wijayawardene NN, Wingfield MJ, Xu JP, Yang ZL, Zhang N, Zhuang WY, Federhen S (2014) Finding needles in haystacks: linking scientific names, reference specimens and molecular data for Fungi. *Database (Oxford)*, 1-21.

Schwartze VU, de A. Santiago ALCM, Jacobsen ID, Voigt K (2014) The pathogenic potential of the *Lichtheimia* genus revisited: *Lichtheimia brasiliensis* is a novel, non-pathogenic species. *Mycoses* 57(Suppl. 3), 128-131.

Schwartze VU, Jacobsen ID (2014) Mucormycoses caused by *Lichtheimia* species. *Mycoses* 57(Suppl. 3), 73-78.

Schwartze VU, Winter S, Shelest E, Marcet-Houben M, Horn F, Wehner S, Linde J, Valiante V,

Sammeth M, Riege K, Nowrousian M, Kaerger K, Jacobsen ID, Marz M, Brakhage AA, Gabaldón T, Böcker S, Voigt K (2014) Gene expansion shapes genome architecture in the human pathogen *Lichtheimia corymbifera*: an evolutionary genomics analysis in the ancient terrestrial Mucorales (Mucoromycotina). *PLoS Genetics* 10(8), e1004496.

Shelest E, Voigt K (2014) Genomics to study basal lineage fungal biology: phylogenomics suggest a common origin In: Alistair J.B. Brown (ed.) *The Mycota XIII, Fungal Genomics* 2. edition. 13, pp. 31-60. Springer, Berlin, Heidelberg.

Voigt K, Kirk PM (2014) 136. FUNGI | Classification of the Zygomycetes In: Rob Samson (ed.) *Encyclopedia of Food Microbiology* 2nd edition. pp. 54-67. Elsevier.

Gryganskyi AP, Humber RA, Smith ME, Hodge K, Huang B, Voigt K, Vilgalys R (2013) Phylogenetic lineages in *Entomophthoromycota*. *Persoonia* 30, 94-9105.

Hoffmann K, Pawłowska J, Walther G, Wrzosek M, de Hoog GS, Benny GL, Kirk PM, Voigt K (2013) The family structure of the Mucorales: a synoptic revision based on comprehensive multigene-genealogies. *Persoonia* 30, 57-76.

Münchberg U, Wagner L, Spielberg ET, Voigt K, Rösch P, Popp J (2013) Spatially resolved investigation of the oil composition in single intact hyphae of *Mortierella* spp. with micro-Raman spectroscopy. *Biochim Biophys Acta* 1831(2), 341-349.

Sahadevan Y, Richter-Fecken M, Kaerger K, Voigt K, Boland W (2013) Early and late trisporoids differentially regulate  $\beta$ -carotene production and gene transcript levels in the mucoralean fungi *Blakeslea trispora* and *Mucor mucedo*. *Appl Environ Microbiol* 79(23), 7466-7475.

Unterberger C, Huber I, Kaditzky S, Benker A, Hoffmann K, Voigt K, Schmidt W, Busch U (2013) Evaluation of molecular methods for identification of filamentous fungi in food. *Arch Lebensmittelhyg* 64, 43-49.

Wagner L, Stielow B, Hoffmann K, Petkovits T, Papp T, Vágvölgyi C, de Hoog GS, Verkley G, Voigt K (2013) A comprehensive molecular phylogeny of the Mortierellales (*Mortierellomycotina*) based on nuclear ribosomal DNA. *Persoonia* 30, 77-93.

Walther G, Pawłowska J, Alastruey-Izquierdo A, Wrzosek M, Rodriguez-Tudela JL, Dolatabadi S, Chakrabarti A, de Hoog GS (2013) DNA barcoding in Mucorales: an inventory of biodiversity. *Persoonia* 30, 11-47.

Bibashi E, de Hoog GS, Pavlidis TE, Symeonidis N, Sakantamis A, Walther G (2012) Wound infection caused by *Lichtheimia ramosa* due to a car accident. *Med Mycol Case Rep* 2, 7-10.

Choi JS, Gräser Y, Walther G, Peano A, Symoens F, de Hoog S (2012) *Microsporum mirabile* and its teleomorph *Arthroderma mirabile*, a new dermatophyte species in the *M. cookei* clade. *Med Mycol* 50(2), 161-169.

Ebersberger I, de Matos Simoes R, Kupczok A, Gube M, Kothe E, Voigt K, von Haeseler A (2012) A consistent phylogenetic backbone for the fungi. *Mol Biol Evol* 29(5), 1319-1334.

Gryganskyi AP, Humber RA, Smith ME, Miadlikowska J, Wu S, Voigt K, Walther G, Anishchenko IM, Vilgalys R (2012) Molecular phylogeny of the *Entomophthoromycota*. *Mol Phylogenet Evol* 65(2), 682-694.



Martínez-Ramírez JA, Voigt K, Peters FT (2012) Studies on the metabolism of five model drugs by fungi colonizing cadavers using LC-ESI-MS/MS and GC-MS analysis. *Anal Bioanal Chem* 404(5), 1339-1359.

Schoch CL, Seifert KA, Huhndorf S, Robert V, Spouge JL, Levesque CA, Chen W; Fungal Barcoding Consortium; Fungal Barcoding Consortium Author List (2012) Nuclear ribosomal internal transcribed spacer (ITS) region as a universal DNA barcode marker for fungi. *Proc Natl Acad Sci U S A* 109(16), 6241-6246.

Schrödl W, Heydel T, Schwartze VU, Hoffmann K, Grosse-Herrenthey A, Walther G, Alastruey-Izquierdo A, Rodriguez-Tudela JL, Olias P, Jacobsen ID, de Hoog GS, Voigt K (2012) Direct analysis and identification of pathogenic *Lichtheimia* species by matrix-assisted laser desorption ionization-time of flight analyzer-mediated mass spectrometry. *J Clin Microbiol* 50(2), 419-427.

Schwartze VU, Hoffmann K, Nyilasi I, Papp T, Vágvölgyi C, de Hoog S, Voigt K, Jacobsen ID (2012) *Lichtheimia* species exhibit differences in virulence potential. *PLOS One* 7(7), e40908.

Vitale RG, de Hoog GS, Schwarz P, Dannaoui E, Deng S, Machouart M, Voigt K, van de Sande WW, Dolatabadi S, Meis JF, Walther G (2012) Antifungal susceptibility and phylogeny of opportunistic members of the order Mucorales. *J Clin Microbiol* 50(1), 66-75.

El-Shabrawi MH, Kamal NM, Jouini R, Al-Harbi A, Voigt K, Al-Malki T (2011) Gastrointestinal basidiobolomycosis: an emerging fungal infection causing bowel perforation in a child. *J Med Microbiol* 60(Pt 9), 1395-1402.

Nagy LG, Petkovits T, Kovács GM, Voigt K, Vágvölgyi C, Papp T (2011) Where is the unseen fungal diversity hidden? A study of *Mortierella* reveals a large contribution of reference collections to the identification of fungal environmental sequences. *New Phytol* 191(3), 789-794.

Nagy LG, Walther G, Házi J, Vágvölgyi C, Papp T (2011) Understanding the evolutionary processes of fungal fruiting bodies: correlated evolution and divergence times in the *Psathyrellaceae*. *Syst Biol* 60(3), 303-317.

Petkovits T, Nagy LG, Hoffmann K, Wagner L, Nyilasi I, Griebel T, Schnabelrauch D, Vogel H, Voigt K, Vágvölgyi C, Papp T (2011) Data partitions, Bayesian analysis and phylogeny of the zygomycetous fungal family *Mortierellaceae*, inferred from nuclear ribosomal DNA sequences. *PLOS One* 6(11), e27507.

Voigt K, Kirk PM (2011) Recent developments in the taxonomic affiliation and phylogenetic positioning of fungi: impact in applied microbiology and environmental biotechnology. *Appl Microbiol Biotechnol* 90(1), 41-57.

Alastruey-Izquierdo A, Hoffmann K, de Hoog GS, Rodriguez-Tudela JL, Voigt K, Bibashi E, Walther G (2010) Species recognition and clinical relevance of the zygomycetous genus *Lichtheimia* (syn. *Absidia* pro parte, *Mycocladius*). *J Clin Microbiol* 48(6), 2154-2170.

Fliegerová K, Mrázek J, Hoffmann K, Záborská J, Voigt K (2010) Diversity of anaerobic fungi within cow manure determined by ITS1 analysis. *Folia Microbiol (Praha)* 55(4), 319-325.

Hoffmann K, Voigt K (2009) *Absidia parricida* plays a dominant role in biotrophic fusion parasitism among mucoralean fungi (Zygomycetes): *Lentamyces*, a new genus for *A. parricida* and *A. zychae*. *Plant Biol (Stuttg)* 11(4), 537-554.

Fliegerová K, Hoffmann K, Mrázek J, Voigt K (2008) The design of oligonucleotide primers for the universal amplification of the N-acetylglucosaminidase gene (*nag1*) in Chytridiomycetes with emphasis on the anaerobic Neocallimastigales. *Folia Microbiol (Praha)* 53(3), 209-213.

Hoffmann K, Discher S, Voigt K (2007) Revision of the genus *Absidia* (Mucorales, Zygomycetes) based on physiological, phylogenetic, and morphological characters; thermotolerant *Absidia* spp. form a coherent group, Mycocladiaceae fam. nov. *Mycol Res* 111(Pt 10), 1169-1183.

\*equal contribution #corresponding author