

Publications

Jojić K*, Gherlone F*, Cseresnyés Z, Bissell AU, Hoefgen S, Hoffmann S, Huang Y, Janevska S, Figge MT, Valiante V (2024) The spatial organization of sphingofungin biosynthesis in *Aspergillus fumigatus* and its cross-interaction with sphingolipid metabolism. *mBio* 15(3), e0019524.

Bissell AU, Rautschek J, Hoefgen S, Raguž L, Mattern DJ, Saeed N, Janevska S, Jojić K, Huang Y, Kufs JE, Herboeck B, Guo H, Hillmann F, Beemelmans C, Valiante V (2022) Biosynthesis of the sphingolipid inhibitors sphingofungins in filamentous fungi requires aminomalonate as a metabolic precursor. *ACS Chem Biol* 17(2), 386-394.

Hoefgen S, Bissell AU, Huang Y, Gherlone F, Raguž L, Beemelmans C, Valiante V (2022) Desaturation of the sphingofungin polyketide tail results in increased serine palmitoyltransferase inhibition. *Microbiol Spectr* 10(5), e0133122.

Maehler D, Hoefgen S, Münchberg U, Schmitz OJ, Rautschek J, Huang Y, Freier E, Valiante V (2022) Time-resolved multiparameter analytics on a cell-free production platform for acyl-CoA precursors. *Anal Sci Adv* 3, 289-296.

Huang Y, Höfgen S, Valiante V (2021) Biosynthesis of fungal drimane-type sesquiterpene esters. *Angew Chem Int Ed* 60(44), 23763-23770.

Furukawa T, Scheven MT, Misslinger M, Zhao C, Hoefgen S, Gsaller F, Lau J, Jöchl C, Donaldson I, Valiante V, Brakhage AA, Bromley MJ, Haas H, Hortschansky P (2020) The fungal CCAAT-binding complex and HapX display highly variable but evolutionary conserved synergetic promoter-specific DNA recognition. *Nucleic Acids Res* 48(7), 3567-3590.

Janevska S, Ferling I, Jojić K, Rautschek J, Hoefgen S, Proctor RH, Hillmann F, Valiante V (2020) Self-protection against the sphingolipid biosynthesis inhibitor fumonisin B1 is conferred by a *FUM* cluster-encoded ceramide synthase. *mBio* 11(3), e00455-20.

Köhler T, Heida T, Hoefgen S, Weigel N, Valiante V, Thiele J (2020) Cell-free protein synthesis and *in situ* immobilization of deGFP-MatB in polymer microgels for malonate-to-malonyl CoA conversion. *RSC Adv* 10, 40588-40596.

Krishnan BP, Prieto-Lopez LO, Hoefgen S, Xue L, Wang S, Valiante V, Cui J (2020) A thermo-magneto-responsive smart biocatalyst for malonyl Coenzyme A synthesis. *ACS Appl Mater Interfaces* 12(18), 20982-20990.

Kufs JE, Hoefgen S, Rautschek J, Bissell AU, Graf C, Fiedler J, Braga D, Regestein L, Rosenbaum MA, Thiele J, Valiante V (2020) Rational design of flavonoid production routes using combinatorial and precursor-directed biosynthesis. *ACS Synth Biol* 9(7), 1823-1832.

Manfiolli AO, Siqueira FS, Dos Reis TF, Van Dijck P, Schrevens S, Hoefgen S, Föge M, Straßburger M, de Assis LJ, Heinekamp T, Rocha MC, Janevska S, Brakhage AA, Malavazi I, Goldman GH, Valiante V (2019) Mitogen-activated protein kinase cross-talk interaction modulates the production of melanins in *Aspergillus fumigatus*. *mBio* 10(2), e00215-19.

Hoefgen S, Lin J, Fricke J, Stroe MC, Mattern DJ, Kufs JE, Hortschansky P, Brakhage AA, Hoffmeister D, Valiante V (2018) Facile assembly and fluorescence-based screening method for heterologous expression of biosynthetic pathways in fungi. *Metab Eng* 48, 44-51.

Hoefgen S, Dahms SO, Oertwig K, Than ME (2015) The amyloid precursor protein shows a pH-dependent conformational switch in its E1 domain. *J Mol Biol* 427(2), 433-442.

Coburger I, Hoefgen S, Than ME (2014) The structural biology of the amyloid precursor protein APP - a complex puzzle reveals its multi-domain architecture. *Biol Chem* 395(5), 485-498.

Hoefgen S, Coburger I, Roeser D, Schaub Y, Dahms SO, Than ME (2014) Heparin induced dimerization of APP is primarily mediated by E1 and regulated by its acidic domain. *J Struct Biol* 187(1), 30-37.

Honarmand Ebrahimi K, Dienemann C, Hoefgen S, Than ME, Hagedoorn PL, Hagen WR (2013) The amyloid precursor protein (APP) does not have a ferroxidase site in its E2 domain. *PLOS One* 8(8), e72177.

Dahms SO, Hoefgen S, Roeser D, Schlott B, Gührs KH, Than ME (2010) Structure and biochemical analysis of the heparin-induced E1 dimer of the amyloid precursor protein. *Proc Natl Acad Sci U S A* 107(12), 5381-5386.

*equal contribution #corresponding author