

Dr. Daniel H. Scharf

Alumni

Publications

Scharf DH, Chankhamjon P, Scherlach K, Dworschak J, Heinekamp T, Roth M, Brakhage AA, Hertweck C (2021) N-heterocyclization in gliotoxin biosynthesis is catalyzed by a distinct cytochrome P450 monooxygenase. *Chembiochem* 22(2), 336-339.

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Scherlach K, Kutenlochner W, Scharf DH, Brakhage AA, Hertweck C, Groll M, Huber EM (2021) Structural and mechanistic insights into C-S bond formation in gliotoxin. *Angew Chem Int Ed* 60(25), 14188-14194.

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Scharf DH, Dworschak JD, Chankhamjon P, Scherlach K, Heinekamp T, Brakhage AA, Hertweck C (2018) Reconstitution of enzymatic carbon-sulfur bond formation reveals detoxification-like strategy in fungal toxin biosynthesis. *ACS Chem Biol* 13(9), 2508-2512.

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Dunbar KL, Scharf DH, Litomska A, Hertweck C (2017) Enzymatic Carbon-Sulfur Bond Formation in Natural Product Biosynthesis. *Chem Rev* 117(8), 5521-5577. (Review)

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Johns A†, Scharf DH†, Gsaller F, Schmidt H, Heinekamp T, Straßburger M, Oliver JD, Birch M, Beckmann N, Dobb KS, Gilsenan J, Rash B, Bignell E, Brakhage AA*, Bromley MJ* †shared first authors, *corresponding authors (2017) A nonredundant phosphopantetheinyl transferase, PptA, is a novel antifungal target that directs secondary metabolite, siderophore, and lysine biosynthesis in *Aspergillus fumigatus* and is critical for pathogenicity. *MBio* 8(4), e01504-e01516.

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Bacher P, Kniemeyer O, Teutschbein T, Thoen M, Vödisch M, Wartenberg D, Scharf DH, Koester-Eiserfunke N, Schütte M, Dübel S, Assenmacher M, Brakhage AA, Scheffold A (2014) Identification of immunogenic antigens from *Aspergillus fumigatus* by direct multi-parameter characterization of specific conventional and regulatory CD4+ T cells. *Journal of Immunology* 197(7), 3332-3343.

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