

# Publications

Fiedler J, Trottmann F, Ishida K, Mie II, Hertweck C (2024) Direct  $\alpha$ -hydroxy acid loading onto a bacterial thiotemplate assembly line via a multienzyme gateway. *Angew Chem Int Ed Engl* [Epub ahead of print]

Little RF, Trottmann F, Hashizume H, Preissler M, Unger S, Sawa R, Kries H, Pidot S, Igarashi M, Hertweck C (2024) Analysis of the valgamycin biosynthetic pathway reveals a general mechanism for cyclopropanol formation across diverse natural product scaffolds. *ACS Chem Biol* 19(3), 660-668.

Kries H, Trottmann F, Hertweck C (2023) Novel biocatalysts from specialized metabolism. *Angew Chem Int Ed Engl* 63(4), e202309284. (Review)

Schäfer E, Seibold PS, Bartram S, Trottmann F, Hänsch V, Gressler M, Chadeayne A, Hertweck C, O'Connor S, Hoffmeister D (2023) A "Magic Mushroom" multi-product sesquiterpene synthase. *ChemBioChem* 24(21), e202300511.

Trottmann F, Fiedler J, Ishida K, Ishida-Ito M, Little RF, Hertweck C (2023) Bacterial pathogen channels medium-sized fatty acids into malleicyprol biosynthesis. *ACS Chem Biol* 18(7), 1557-1563.

Lenz C, Dörner S, Trottmann F, Hertweck C, Sherwood A, Hoffmeister D (2022) Assessment of bioactivity-modulating pseudo-ring formation in psilocin and related tryptamines. *ChemBioChem* 23(13), e202200183.

Little R, Trottmann F, Preissler M, Hertweck C (2022) An intramodular thioesterase domain catalyses chain release in the biosynthesis of a cytotoxic virulence factor. *RSC Chem Biol* 3(9), 1121-1128.

Pourmasoumi F, De S, Peng H, Trottmann F, Hertweck C, Kries H (2022) Proof-reading thioesterase boosts activity of engineered nonribosomal peptide synthetase. *ACS Chem Biol* 17(9), 2382-2388.

Trottmann F, Ishida K, Ishida-Ito M, Kries H, Groll M, Hertweck C (2022) Pathogenic bacteria remodel central metabolic enzyme to build a cyclopropanol warhead. *Nat Chem* 14(8), 884-890.

Blei F, Dörner S, Fricke J, Baldeweg F, Trottmann F, Komor AJ, Meyer F, Hertweck C, Hoffmeister D (2020) Simultaneous production of psilocybin and a cocktail of  $\beta$ -carboline monoamine oxidase inhibitors in 'magic' mushrooms. *Chem Eur J* 26(3), 729-734.

Trottmann F, Ishida K, Franke J, Stanišić A, Ishida-Ito M, Kries H, Pohnert G, Hertweck C (2020) Sulfonium acids loaded onto an unusual thiotemplate assembly line construct the cyclopropanol warhead of a *Burkholderia* virulence factor. *Angew Chem Int Ed* 59(32), 13511-13515.

Trottmann F, Franke J, Ishida K, Garcia-Altare M, Hertweck C (2019) A pair of bacterial siderophores releases and traps an intercellular signal molecule: An unusual case of natural nitron bioconjugation. *Angew Chem Int Ed* 58(1), 200-204.

Trottmann F, Franke J, Richter I, Ishida K, Cyrules M, Dahse HM, Regestein L, Hertweck C (2019) Cyclopropanol warhead in malleicyprol confers virulence of human- and animal-pathogenic

*Burkholderia* species. *Angew Chem Int Ed* 58(40), 14129-14133.

\*equal contribution #corresponding author