

Publications

Dumjahn L, Wein P, Molloy EM, Scherlach K, Trottmann F, Meisinger P, Judd LM, Pidot SJ, Stinear TP, Richter I, Hertweck C (2025) Dual-use virulence factors of the opportunistic pathogen *Chromobacterium haemolyticum* mediate haemolysis and colonization. *bioRxiv* [Preprint]

Dumjahn L, Wein P, Molloy EM, Scherlach K, Trottmann F, Meisinger PR, Judd LM, Pidot SJ, Stinear TP, Richter I, Hertweck C (2025) Dual-use virulence factors of the opportunistic pathogen *Chromobacterium haemolyticum* mediate hemolysis and colonization. *mBio*, e0360524.

Richter I, Uzum Z, Wein P, Molloy EM, Moebius N, Stinear TP, Pidot SJ, Hertweck C (2023) Transcription activator-like effectors from endosymbiotic bacteria control the reproduction of their fungal host. *mBio* 14(6), e0182423.

Richter I, Wein P, Uzum Z, Stanley CE, Krabbe J, Molloy EM, Moebius N, Ferling I, Hillmann F, Hertweck C (2023) Transcription activator-like effector protects bacterial endosymbionts from entrapment within fungal hyphae. *Curr Biol* 33(13), 2646-2656.e4..

Wein P, Dornblut K, Herkersdorf S, Krüger T, Molloy EM, Brakhage AA, Hoffmeister D, Hertweck C (2023) Bacterial secretion systems contribute to rapid tissue decay in button mushroom soft rot disease. *mBio* 14(4), e0078723.

Gude F, Molloy EM, Horch T, Dell M, Dunbar KL, Krabbe J, Groll M, Hertweck C (2022) A specialized polythioamide-binding protein confers antibiotic self-resistance in anaerobic bacteria. *Angew Chem Int Ed* 61(37), e202206168.

Horch T, Molloy EM, Bredy F, Haensch VG, Scherlach K, Dunbar KL, Franke J, Hertweck C (2022) Alternative benzoxazole assembly discovered in anaerobic bacteria provides access to privileged heterocyclic scaffold. *Angew Chem Int Ed* 61(32), e202205409.

Molloy, E. M., Feldmann R., Hertweck C. (2022) Peptide splicing is a prevalent biosynthetic strategy for installing β -amino acid pharmacophores. *CellPress* 8(11), 2894-2897. (Review)

Sharma G, Islam ST, Rahi P, Silby MW, Giovannelli D, Welander PV, Ehling-Schulz M, Chaudhry V, Molloy E, Hertweck C, Mundra S, Kalia VC, Lal R, Singh Y, Ruby E, Weigel C, Kolter R (2022) Reply to Oren *et al.*, "New phylum names harmonize prokaryotic nomenclature". *mBio* 13(5), e0232322. (Review)

Molloy EM, Dell M, Haensch VG, Dunbar KL, Feldmann R, Oberheide A, Seyfarth L, Kumpfmüller J, Horch T, Arndt HD, Hertweck C (2021) Enzyme-primed native chemical ligation produces autoinducing cyclopeptides in clostridia. *Angew Chem Int Ed* 60(19), 10670-10679.

Dunbar KL, Dell M, Molloy EM, Büttner H, Kumpfmüller J, Hertweck C (2020) An unexpected split-merge pathway to the symmetric nonribosomal peptide antibiotic closthoamide. *Angew Chem Int Ed* 60(8), 4104-4109.

Dunbar KL, Dell M, Molloy EM, Kloss F, Hertweck C (2019) Reconstitution of iterative thioamidation in closthoamide biosynthesis reveals a novel nonribosomal peptide backbone-tailoring strategy. *Angew Chem Int Ed* 58(37), 13014-13018.

Molloy EM, Dell M, Hertweck C (2019) Discovery of amidotemplated natural product assembly.

Biochemistry 58(46), 4583-4584. (Review)

Dunbar KL, Büttner H, Molloy EM, Dell M, Kumpfmüller J, Hertweck C (2018) Genome editing reveals novel thiotemplated assembly of polythioamide antibiotics in anaerobic bacteria. *Angew Chem Int Ed* 57(43), 14080-14084.

Molloy EM, Hertweck C (2017) Antimicrobial discovery inspired by ecological interactions. *Curr Opin Microbiol* 39, 121-127.

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