Prof. Dr. Pierre Stallforth

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Curriculum vitae

Main Research Areas

- Natural products from prehistoric samples
- Natural products from microbial interactions (microbial predator-prey associations, amoebae-bacteria interactions)
- Structure elucidation and biosynthetic studies

Professional Career

2021	Professor for Bioorganic Chemistry and Paleobiotechnology, Friedrich Schiller University Jena
2020	Head of the Department Paleobiotechnology, Leibniz Institute for Natural Product Research and Infection Biology, (Hans-Knöll-Institute, Jena)
2019 - 2020	Interim Professorship Organic Chemistry University of Hamburg
2013 - 2019	Junior research group leader, Leibniz Institute for Natural Product Research and Infection Biology, (Hans-Knöll-Institute, Jena)
2011-2013	Postdoc, Harvard Medical School, Dept. of Biological Chemistry and Molecular Pharmacology, Boston, Supervisor: Prof. Jon Clardy
2006-2010	Graduate studies (Dr. sc. ETH Zurich), ETH Zurich and Max Planck Institute, colloids and interfaces, biomolecular systems, Berlin supervisors: Prof. Peter H. Seeberger *"synthesis of bacterial carbohydrates and glycolipids for application in novel vaccine srategies"*
2002-2006	MSc studies chemistry, St Edmund Hall, University of Oxford (1^{st} class, being placed 2^{nd} out of 150 students) Master thesis, University of Oxford *"dynamics of a quantum dot in a magnetic field"* (1^{st} class)
2002	Abitur (A-levels) at the Paul-Klee-Gymnasium Gersthofen, Germany

Awards · Appointments · Scientific Activities

2020	Academy of Sciences Göttingen, Academy Prize for Chemistry
2019	DECHEMA Research Award Natural Product Research
2018	Medac Research Award
2018	Best Talk Prize, Bioorganic Symposium, Bochum 2018
2018	Max Buchner Stipend, DECHEMA
2017	Prize for the Best Talk (2017 Dicty Meeting)
2016	Medac Research Award
2014	Fellowship of the Daimler and Benz Foundation
2012	Feodor Lynen-postdoc fellowship (Humboldt Foundation)
2011	Swiss National Fund Postdoc fellowship
2007	PhD fellowship, Studienstiftung des deutschen Volkes (German Academic Merit Foundation)

2005	Gibbs prize for excellence in the final examination
2005-2007	Fellowship of the Studienstiftung des deutschen Volkes
2003 and 2004	Turbutt prize for excellence in practical organic chemistry
2003-2006	University of Oxford, open scholarship
2002	Prize for the best Abitur (A-levels) at the Paul-Klee-Gymnaisum

Topics

Paleobiotechnology

Polymicrobial communities

Amoebae-bacteria interactions

Polyketides in *Dictyostelium discoideum*

Publications

Götze S, Vij R, Burow K, Thome N, Urbat L, Schlosser N, Pflanze S, Müller R, Hänsch VG,

Schlabach K, Fazlikhani L, Walther G, Dahse HM, Regestein L, Brunke S, Hube B, Hertweck C, Franken P, Stallforth P (2023) Ecological niche-inspired genome mining leads to the discovery of crop-protecting nonribosomal lipopeptides featuring a transient amino acid building block. *J Am Chem Soc* 145(4), 2342-2353.

Details

Klapper M*, Hübner A*, Ibrahim A*, Wasmuth I, Borry M, Haensch VG, Zhang S, Al-Jammal WK, Suma H, Fellows Yates JA, Frangenberg J, Velsko IM, Chowdhury S, Herbst R, Bratovanov EV, Dahse HM, Horch T, Hertweck C, González Morales MR, Straus LG, Vilotijevic I, Warinner C, Stallforth P (2023) Natural products from reconstructed bacterial genomes of the Middle and Upper paleolithic. *Science* 380(6645), 619-624.

Details

Pflanze S, Mukherji R, Ibrahim A, Günther M, Götze S, Chowdhury S, Reimer L, Regestein L, Stallforth P (2023) Nonribosomal peptides protect *Pseudomonas nunensis* 4A2e from amoebal and nematodal predation. *Chem Sci* 14(41), 11573-11581.

Details

SUPPL

Seibold PS, Lawrinowitz S, Raztsou I, Gressler M, Arndt HD, Stallforth P, Hoffmeister D (2023) Bifurcate evolution of quinone synthetases in basidiomycetes. *Fungal Biol Biotechnol* 10(1), 14.

Details

PubMed
OPEN ACCESS
PAPER

Stallforth P*, Mittag M, Brakhage AA, Hertweck C, Hellmich UA* (2023) Functional modulation of chemical mediators in microbial communities. *Trends Biochem Sci* 48(1), 71-81. (Review)

Details

PubMed
OPEN ACCESS

Bando Y, Hou Y, Seyfarth L, Probst J, Götze S, Bogacz M, Hellmich UA, Stallforth P, Mittag M, Arndt HD* (2022) Total synthesis and structure correction of the cyclic lipodepsipeptide orfamide A. *Chemistry* 28(20), e202104417.

Details

PubMed
OPEN ACCESS

PAPER

Declas N, Maynard JRJ, Menin L, Gasilova N, Götze S, Sprague JL, Stallforth P, Matile S, Waser J* (2022) Tyrosine bioconjugation with hypervalent iodine. *Chem Sci* 13(43), 12808-12817.

Details

PAPER

Günther M*, Reimer C*, Herbst R*, Kufs JE, Rautschek J, Ueberschaar N, Zhang S, Peschel G, Reimer L, Regestein L, Valiante V, Hillmann F#, Stallforth P# (2022) Yellow polyketide pigment suppresses premature hatching in social amoeba. *Proc Natl Acad Sci U S A* 119(43), e2116122119.

Details

PAPER

Kufs JE, Reimer C, Stallforth P, Hillmann F, Regestein L* (2022) The potential of amoeba-based processes for natural product syntheses. *Curr Opin Biotechnol* 77, 102766. (Review)

Details

Baunach M, Chowdhury S, Stallforth P, Dittmann E (2021) The landscape of recombination events that create nonribosomal peptide diversity. *Mol Biol Evol* 38(5), 2116-2130.

Details

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News

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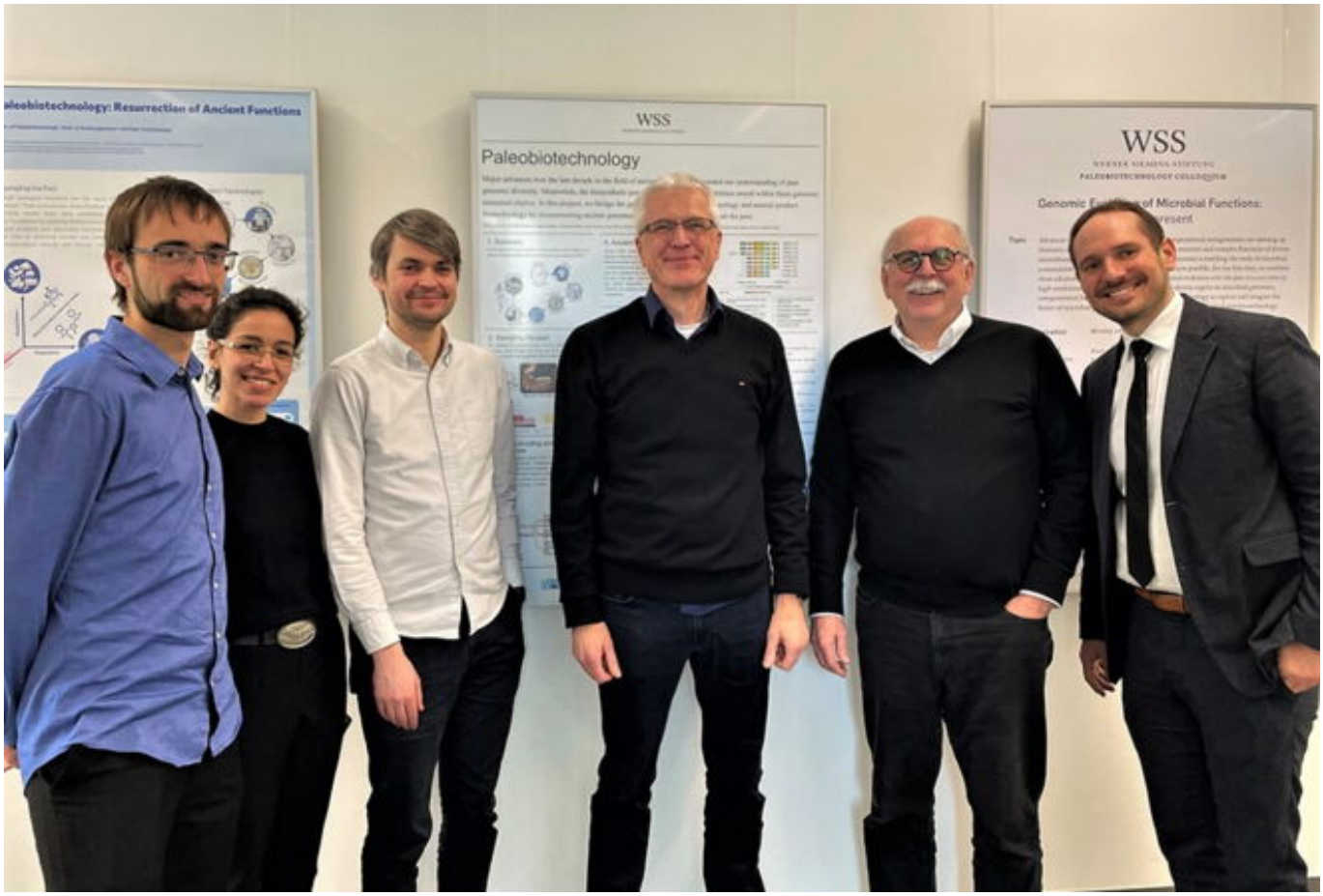

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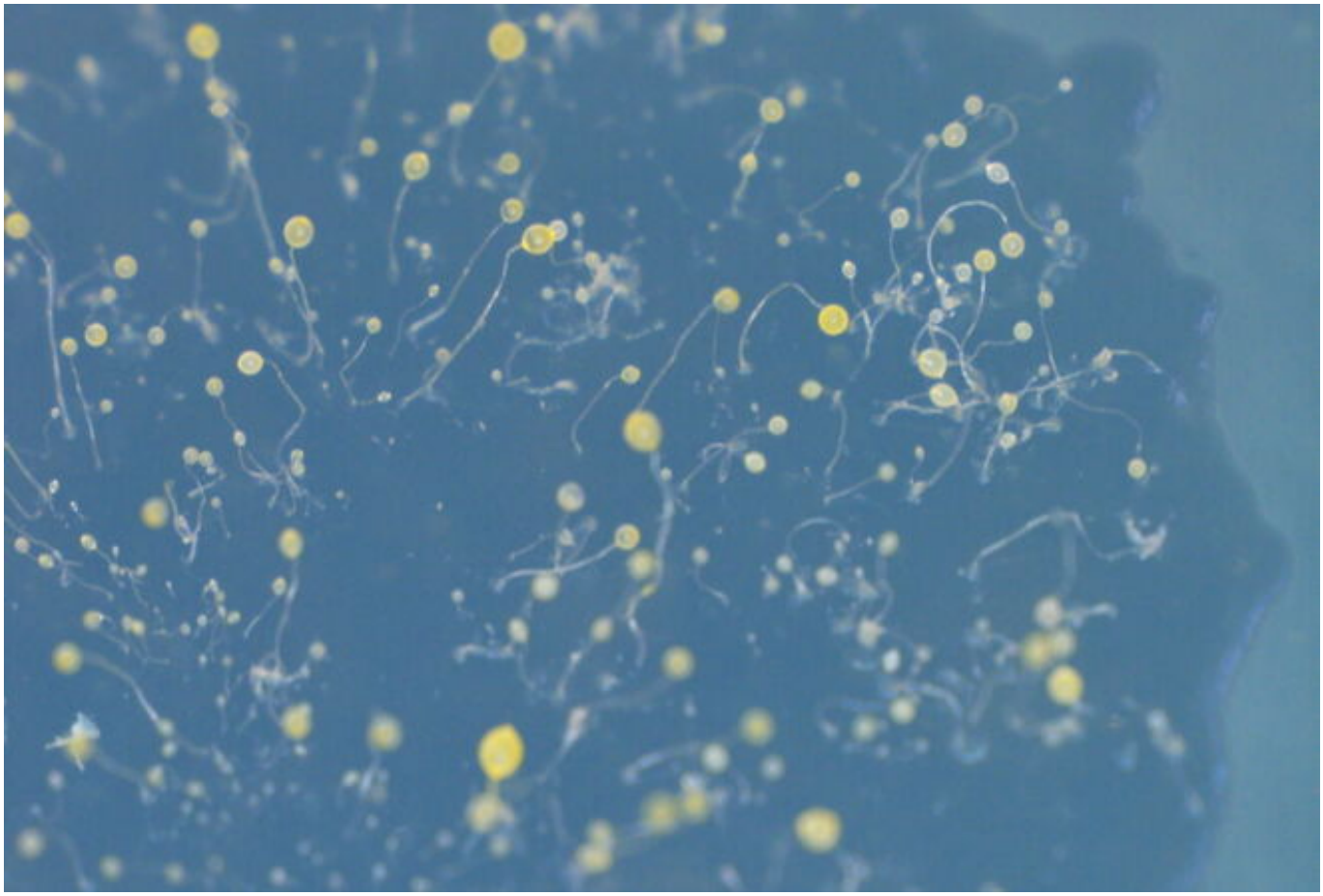

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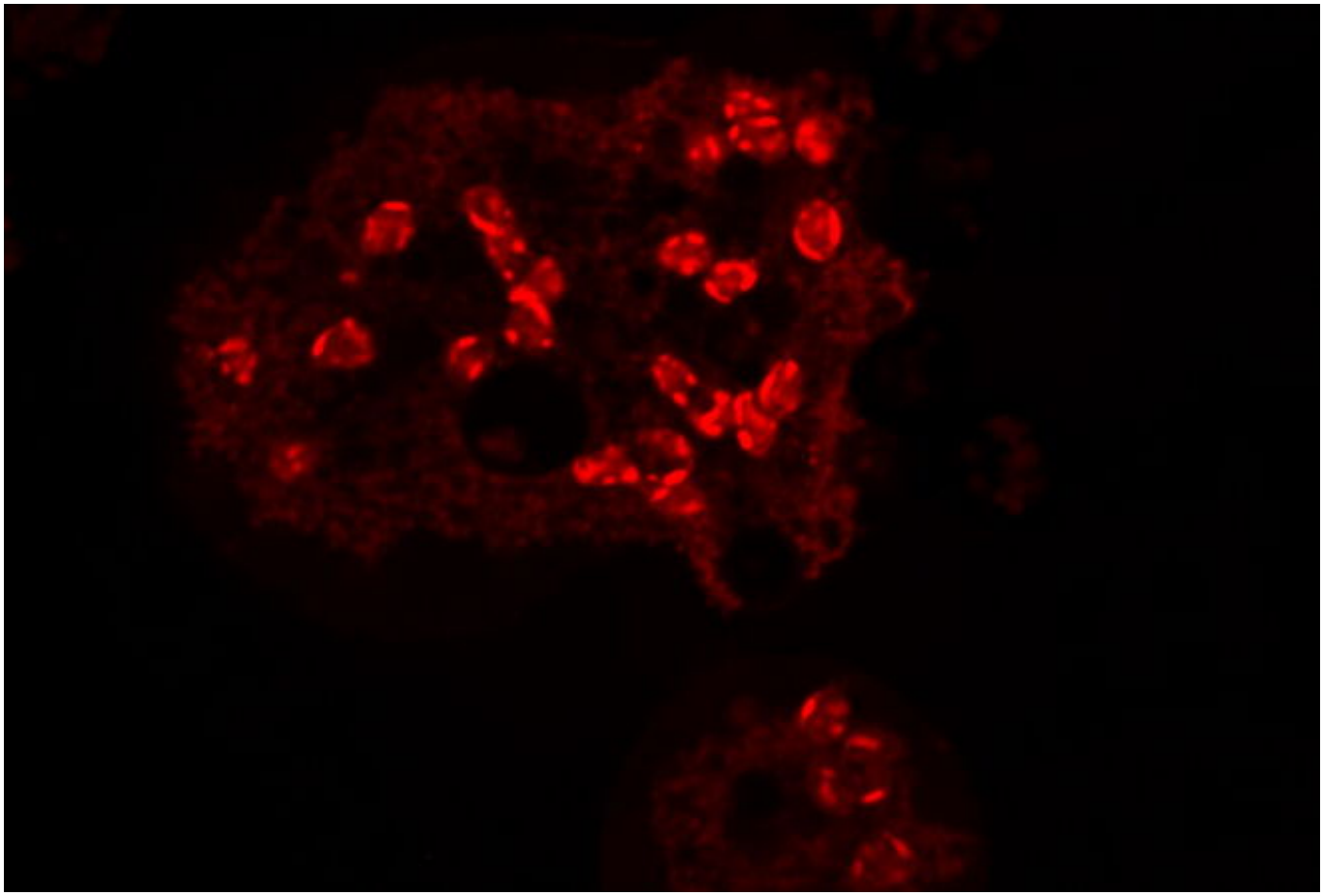

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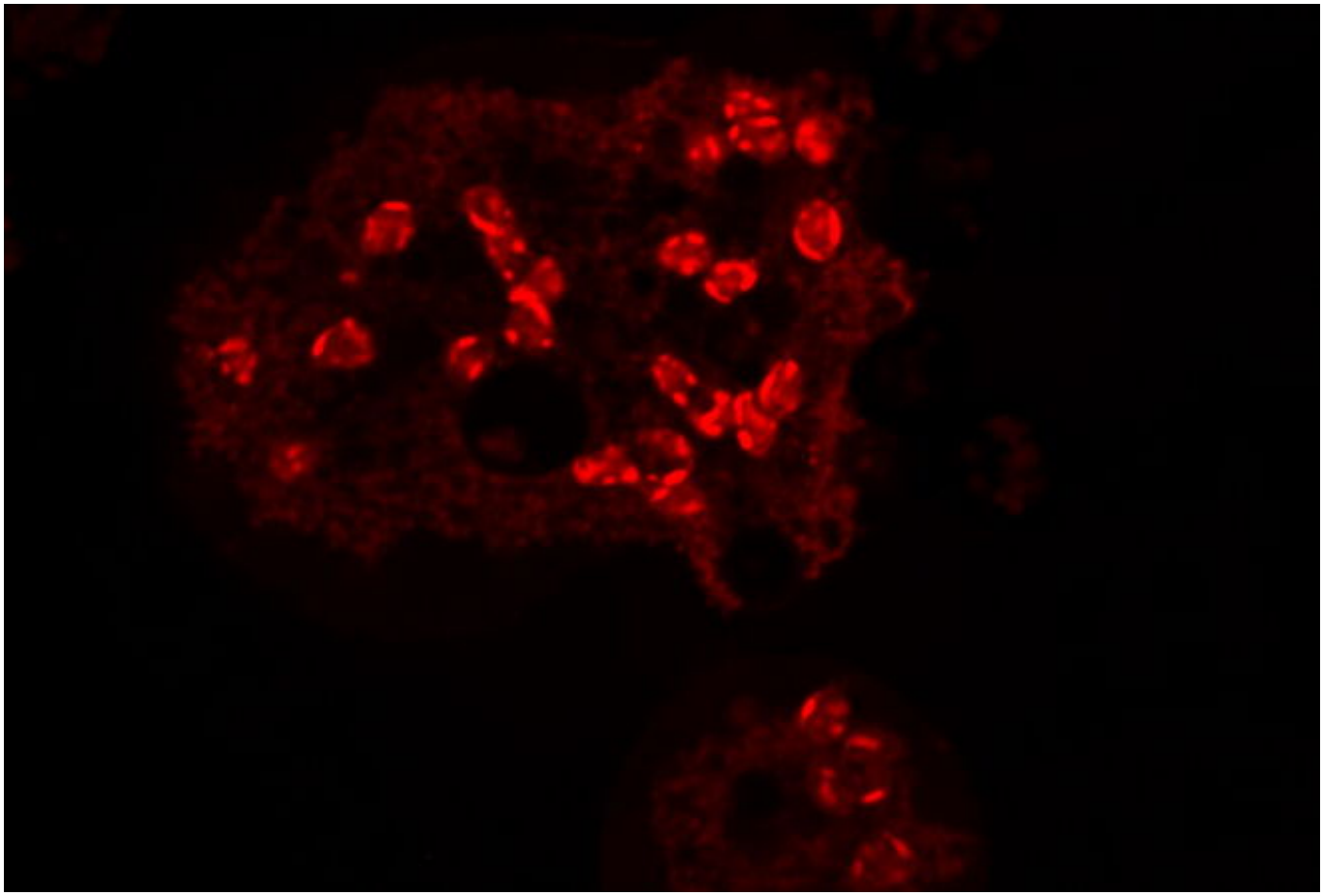

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