



Dear Members, We hope that you are spending a wonderful summer term 2024 and are enjoying the latest conferences! We have again a couple of news to share with you!

First and foremost, we want to extend our gratitude to all our members for voting! We received an overwhelming number of positive votes for our section, and assuming the VAAM board approves the extension, the "Fachgruppe Biologie bakterieller Naturstoffproduzenten" will continue for the coming years. We also appreciate your trust in re-electing us as representatives of the section. At the same time, we would like to encourage you to get involved and help shape the future of the section. You can do this, e.g. by advertising the VAAM section to your group members or students by distributing our VAAM flyers (e.g. student members are e.g. eligible for travel grants to conferences, PhD prizes and other promotions).

Our **annual symposium** of the "Fachgruppe Biologie bakterieller Naturstoffproduzenten" will take place on the **21th of October 2024 in Würzburg** as a satellite meeting to the *5th European Conference on Natural Products*. **Registration will open soon! Participation is likely free of charge!**

Location: Helmholtz Institute for RNA-based Infection Research (HIRI)

<https://vaam.hips-wordpress.helmholtz-hzi.de/>

We will have slots **for short talks by PhD and Postdocs** to present their research on the different *research topics* (microbial physiology and ecology, microbial genomics and metabolomics, natural product discovery and drug discovery, and VAAM section business) and provide the stage to discuss and advertise e.g. their latest publications and e.g. poster presentations at the ECNP. At the end of the symposium, the award ceremony for the **Hendrik Wolff Prize** will take place during the section meeting to honour outstanding achievements at the interface of mass-spectrometry, microbiology and natural product chemistry. Group leaders are encouraged to forward the application call to their graduates.

Application Deadline: 31.07.2024 to Prof. Dr. Helge Bode (helge.bode@mpi-marburg.mpg.de)!

Update on the VAAM Annual Conference: Overall, the annual conference was well attended with 1,466 registrations. Our section was represented with a slot titled "Discovery and Biosynthesis of Bioactive Natural Products," hosted by Prof. Y. Mast (DSMZ), and received high attendance. Congratulations to the three presenter: Robin Teufel, Alina Zimmermann (Group of Y. Mast), and Denis Iliasov (Group of T. Mascher) for presenting fascinating research aspects of the section.

Congratulations to Yvonne Mast and team to have received the [Leibniz Drug of the Year 2024 Award](#) for their work on the *Biotransformation-coupled mutasynthesis for the generation of novel pristinamycin derivatives* –

Streptogramins are last-resort antimicrobials, with pristinamycin being a key example used to treat highly resistant pathogenic bacteria. The authors discuss a mutasynthesis approach focused on modifying the phenylglycine (Phg) residue, a crucial component of streptogramin antibiotics, for substance derivatization.

Original publication: Hennrich O, Weinmann L, Kulik A, Harms K, Klahn P, Youn J-W, Surup F, Mast Y (2023) **Biotransformation-coupled mutasynthesis for the generation of novel pristinamycin derivatives by engineering the phenylglycine residue.** *RSC Chem Biol*. DOI: 10.1039/d3cb00143a.

Amongst the many publications of section members, we found these publications worth noting as they might be applicable to many research projects.

- Rill, A.; Zhao, L.; Bode, H. B.: **Genetic toolbox for *Photobacterium* and *Xenorhabdus*: pSEVA based heterologous expression systems and CRISPR/Cpf1 based genome editing for rapid natural product profiling.** *Microbial Cell Factories* 23, 98 (2024)
- Alvarez-Arevalo M, Sterndorff EB, Faurdal D, Jørgensen TS, Mourched AS, Vuksanovic O, Saha S, Weber T. **Extraction and Oxford Nanopore sequencing of genomic DNA from filamentous Actinobacteria.** *STAR Protoc.* 4, 101955 (2024).
- Getzke F, Wang L, Chesneau G, Böhringer N, Mesny F, Denissen N, Wesseler H, Tijesuni Adisa P, Marner M, Schulze-Lefert P, Schäberle TF, Hacquard S: **Physicochemical interaction between osmotic stress and a bacterial secondary metabolite promotes plant disease,** *Nature Comm* 15, 4438 (2024)



Best Wishes!

Christine Beemelmans and Nadine Ziemert