List of publications | Dr. Nicolai Kallscheuer

A) Original research articles

(44) Kallscheuer, N., Rast, P., Jogler, M., Wiegand, S., Kohn, T., Boedeker, C., Jeske, O., Heuer, A., Quast, C., Glöckner, F.O., Rohde, M. Jogler, C. (2021), Analysis of bacterial communities in a municipal duck pond during a phytoplankton bloom and isolation of *Anatilimnocola aggregata* gen. nov., sp. nov., *Lacipirellula limnantheis* sp. nov. and *Urbifossiella limnaea* gen. nov., sp. nov. belonging to the phylum *Planctomycetes*. *Environ Microbiol.* Accepted Author Manuscript ahead of print. https://doi.org/10.1111/1462-2920.15341

(43) Kallscheuer N., Wiegand S., Kohn T., Boedeker C., Jeske O., Rast P., Müller R-W., Brümmer F., Heuer A., Jetten M.S.M., Rohde M., Jogler M., Jogler C. (2020). Cultivation-Independent Analysis of the Bacterial Community Associated With the Calcareous Sponge *Clathrina clathrus* and Isolation of *Poriferisphaera corsica* Gen. Nov., Sp. Nov., Belonging to the Barely Studied Class *Phycisphaerae* in the Phylum *Planctomycetes*, *Front Microbiol* 11: 3283.

(42) Wiegand S., Jogler M., Boedeker, C., Heuer A., Rast P., Peeters S.H., Jetten M.S.M., Kaster A-K., Rohde M., Kallscheuer N., Jogler C., (2020). Additions to the genus *Gimesia*: Description of *Gimesia alba* sp. nov., *Gimesia algae* sp. nov., *Gimesia aquarii* sp. nov., *Gimesia aquatilis* sp. nov., *Gimesia fumaroli* sp. nov. and *Gimesia panareensis* sp. nov., isolated from aquatic habitats of the Northern Hemisphere. *Antonie van Leeuwenhoek* 113: 1999-2018.

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(40) Kallscheuer N., Jeske O., Sandargo B., Boedeker C., Wiegand S., Bartling P., Kallscheuer N., Jogler M., Rohde M., Petersen J., Medema M.H., Surup F., Jogler C. (2020). Author Correction: The planctomycete *Stieleria maiorica* Mal15^T employs stieleriacines to alter the species composition in marine biofilms. *Commun Biol* 3: 531.

(39) Kallscheuer N., Jeske O., Sandargo B., Boedeker C., Wiegand S., Bartling P., Kallscheuer N., Jogler M., Rohde M., Petersen J., Medema M.H., Surup F., Jogler C. (2020). Author Correction: The planctomycete *Stieleria maiorica* Mal15^T employs stieleriacines to alter the species composition in marine biofilms. *Commun Biol* 3: 487.

(38) Salbreiter M., Waqqas M., Jogler M., Kallscheuer N., Wiegand S., Peeters S.H., Heuer A., Jetten M.S.M., Boedeker C., Rast P., Rohde M., Jogler C. (2020). Three Planctomycetes isolated from biotic surfaces in the Mediterranean Sea and the Pacific Ocean constitute the

novel species *Symmachiella dynata* gen. nov., sp. nov. and *Symmachiella macrocystis* sp. nov. *Antonie van Leeuwenhoek* 113: 1965-1977.

(37) Kohn T., Rast P., Kallscheuer N., Wiegand S., Boedeker C., Jetten M.S.M., Jeske O, Vollmers J., Kaster A-K., Rohde M., Jogler M., Jogler C. (2020). The microbiome of *Posidonia oceanica* seagrass leaves can be dominated by Planctomycetes. *Front Microbiol* 11: 1458.

(36) Sandargo B., Jeske O., Boedeker C., Wiegand S., Wennrich J. P., Kallscheuer N., Jogler M., Rohde M., Jogler C., Surup F. (2020). Stieleriacines, *N*-Acyl Dehydrotyrosines From the Marine Planctomycete *Stieleria neptunia* sp. nov. *Front Microbiol* 11: 1408.

(35) Waqqas M., Salbreiter M., Kallscheuer N., Jogler M., Wiegand S., Heuer A., Rast P., Peeters S.H., Boedeker C., Jetten M.S.M., Rohde M., Jogler C. (2020). *Rosistilla oblonga* gen. nov., sp. nov. and *Rosistilla carotiformis* sp. nov., isolated from biotic or abiotic surfaces in Northern Germany, Mallorca, Spain and California, USA. *Antonie van Leeuwenhoek* 113: 1939-1952.

(34) Rivas-Marin E., Wiegand S., Kallscheuer N., Jogler M., Peeters S.H., Heuer A., Jetten M.S.M., Boedeker C., Rohde M., Devos D.P., Jogler, C. (2020). *Maioricimonas rarisocia* gen. nov., sp. nov., a novel planctomycete isolated from marine sediments close to Mallorca Island. *Antonie van Leeuwenhoek* 113: 1901-1913.

(33) Rivas-Marin E., Wiegand S., Kallscheuer N., Jogler M., Peeters S.H., Heuer A., Jetten M.S.M., Boedeker C., Rohde M., Devos D.P., Jogler, C. (2020). *Thalassoglobus polymorphus* sp. nov., a novel Planctomycete isolated close to a public beach of Mallorca Island. *Antonie van Leeuwenhoek* 113: 1915-1926.

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(31) Surup F., Wiegand S., Boedeker C., Heuer A., Peeters S.H., Jogler M., Jetten M.S.M., Rohde M., Jogler C., Kallscheuer N. (2020). *Stieleria varia* sp. nov., isolated from wood particles in the Baltic Sea, constitutes a novel species in the family *Pirellulaceae* within the phylum *Planctomycetes*. *Antonie van Leeuwenhoek* 113: 1953-1963.

(30) Jogler C., Wiegand S., Boedeker, C. Heuer, A., Peeters, S.H. Jogler M., Jetten M.S.M., Rohde M., Kallscheuer N. (2020). *Tautonia plasticadhaerens* sp. nov., a novel species in the family *Isosphaeraceae* isolated from an alga in a hydrothermal area of the Eolian Archipelago. *Antonie van Leeuwenhoek* 113: 1889-1900.

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(24) Kallscheuer N., Wiegand S., Boedeker C., Peeters S.H., Jogler M., Rast P., Heuer A., Jetten M.S.M., Rohde M., Jogler, C. (2020). *Aureliella helgolandensis* gen. nov., sp. nov., a novel Planctomycete isolated from a jellyfish at the shore of the island Helgoland. *Antonie van Leeuwenhoek* 113: 1839-1849.

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(20) Peeters S. H., Wiegand S., Kallscheuer N., Jogler M., Heuer A., Jetten M.S.M., Rast P., Boedeker C., Rohde M., Jogler, C. (2020). Three marine strains constitute the novel genus and species *Crateriforma conspicua* in the phylum *Planctomycetes*. *Antonie van Leeuwenhoek* 113: 1797-1809.

(19) Kallscheuer N., Wiegand S., Peeters S.H., Jogler M., Boedeker C., Heuer A., Rast P., Jetten M.S.M., Rohde M., Jogler C. (2019). Description of three bacterial strains belonging to the new genus *Novipirellula* gen. nov., reclassificiation of *Rhodopirellula rosea* and *Rhodopirellula caenicola* and readjustment of the genus threshold of the phylogenetic marker *rpoB* for *Planctomycetaceae*. *Antonie van Leeuwenhoek* 113: 1779-1795.

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(15) Kallscheuer N., Jogler M., Wiegand S., Peeters S.H., Heuer A., Boedeker C., Jetten M.S.M., Rohde M., Jogler, C. (2019). *Rubinisphaera italica* sp. nov. isolated from a hydrothermal area in the Tyrrhenian Sea close to the volcanic island Panarea. *Antonie van Leeuwenhoek* 113: 1727-1736.

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(6) Kallscheuer N., Gätgens J., Lübcke M., Pietruszka J., Bott M., Polen T. (2017). Improved production of adipate with *Escherichia coli* by reversal of β-oxidation. *Appl Microbiol Biotechnol* 101: 2371-2382.

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(4) Kallscheuer N., Vogt M., Marienhagen J. (2017). A novel synthetic pathway enables microbial production of polyphenols independent from the endogenous aromatic amino acid metabolism. *ACS Synth Biol* 6: 410-415.

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(5) Kallscheuer N., Classen T., Drepper T, Marienhagen J. (2019). Production of plant metabolites with applications in the food industry using engineered microorganisms. *Curr Opin Biotechnol* 56: 7-17.

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(3) Milke L., Aschenbrenner J., Marienhagen J., Kallscheuer N. (2018). Production of plant-derived polyphenols in microorganisms: current state and perspectives. *Appl Microbiol Biotechnol* 102: 1575-1585.

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