

## https://doi.org/10.1038/s41467-022-31423-z

OPEN



## Author Correction: MiDAS 4: A global catalogue of full-length 16S rRNA gene sequences and taxonomy for studies of bacterial communities in wastewater treatment plants

Morten Kam Dahl Dueholm<sup>®</sup>, Marta Nierychlo, Kasper Skytte Andersen<sup>®</sup>, Vibeke Rudkjøbing, Simon Knutsson, MiDAS Global Consortium<sup>\*</sup>, Mads Albertsen<sup>®</sup> & Per Halkjær Nielsen<sup>®</sup>

Correction to: Nature Communications https://doi.org/10.1038/s41467-022-29438-7, published online 07 April 2022.

The original version of this Article included the following errors in reference citations:

It incorrectly cited 'Thompson, L. R. et al. A communal catalogue reveals Earth's multiscale microbial diversity. *Nature* **551**, 457–463 (2017)' and 'Peterson, J. et al. The NIH Human Microbiome Project. *Genome Res.* **19**, 2317–2323 (2009)' as Refs 18 and 19 in the Introduction, at 'In the MiDAS project, we have thoroughly evaluated different wet-lab protocols, e.g., DNA extraction methods, and choice of amplicon primers and amplicon library preparation<sup>17-19</sup>.' The two references have been removed from the correct version.

It incorrectly cited 'Zheng, M. et al. Active ammonia-oxidizing bacteria and archaea in wastewater treatment systems. *J. Environ. Sci.* **102**, 273–282 (2021)' and 'Thompson, L. R. et al. A communal catalogue reveals Earth's multiscale microbial diversity. *Nature* **551**, 457–463 (2017)' as Refs 42 and 18 in the last paragraph of Results and Discussion, at 'In the Danish WWTPs, we have successfully done this for groups in the Acidobacteriota<sup>42</sup> based on the MiDAS 3 database<sup>18</sup>.' The correct version replaces the first reference with 'Kristensen, J. M., Singleton, C., Clegg, L.-A., Petriglieri, F. & Nielsen, P. H. High diversity and functional potential of undescribed "Acidobacteriota" in Danish wastewater treatment plants. *Front. Microbiol.* **12**, 906 (2021)' and the second reference with Ref. 16.

It incorrectly cited 'Rosselló-Mora, R. A., Wagner, M., Amann, R. & Schleifer, K. H. The abundance of *Zoogloea ramigera* in sewage treatment plants. *Appl. Environ. Microbiol.* **61**, 702–707 (1995)' as Ref. 43 in the last paragraph of Results and Discussion, at 'Our recent retrieval of more than 1000 high-quality MAGs from Danish WWTPs with advanced process design is also an important step to link identity to function<sup>43</sup>.' The correct version replaces this reference with 'Singleton, C. M. et al. Connecting structure to function with the recovery of over 1000 high-quality metagenome-assembled genomes from activated sludge using long-read sequencing. *Nature Communications* **12**, 2009 (2021)'.

It incorrectly cited 'Nierychlo, M. et al. *Candidatus* Amarolinea and *Candidatus* Microthrix are mainly responsible for filamentous bulking in Danish municipal wastewater treatment plants. *Front. Microbiol.* 11, 1214 (2020)', 'Klindworth, A. et al. Evaluation of general 16S ribosomal RNA gene PCR primers for classical and next-generation sequencing-based diversity studies. *Nucleic Acids Res.* **41**, 1–11 (2013)' and 'Lane, D. J. 16S/23S rRNA sequencing In *Nucleic Acid Techniques in Bacterial Systematics* (eds Stackebrandt, E. & Goodfellow, M.) (Wiley, 1991)' as Refs 44–46 in the last paragraph of Results and Discussion, at 'These MAGs may also form the basis for further studies to link identity and function, e.g., by applying metatranscriptomics<sup>44</sup> and other in situ techniques such as FISH combined with Raman<sup>45,46</sup>.' The correct version replaces these references with 'Herold, M. et al. Integration of time-series meta-omics data reveals how microbial ecosystems respond to disturbance. *Nature Communications* **11**, 5281 (2020)', 'Fernando, E. Y. et al. Resolving the individual contribution of key microbial populations to enhanced biological phosphorus removal with Raman–FISH. *ISME J.* **13**, 1933–1946 (2019)' and 'Petriglieri, F. et al. Quantification of Biologically and Chemically Bound Phosphorus in Activated Sludge from Full-Scale Plants with Biological P-Removal. *Environ. Sci. Technol.* **56**, 5132–5140 (2022)'.

The errors have been corrected in the PDF and HTML versions of the Article.

<sup>\*</sup>A list of authors and their affiliations appears online.

## Published online: 11 July 2022

**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this license, visit http://creativecommons.org/licenses/by/4.0/.

© The Author(s) 2022