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## Addendum: Comparative Genomic Analysis of the Class *Epsilonproteobacteria* and Proposed Reclassification to Epsilonbacteraeota (phyl. nov.)

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# Addendum: Comparative Genomic Analysis of the Class *Epsilonproteobacteria* and Proposed Reclassification to *Epsilonbacteraeota* (phyl. nov.)

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## An addendum on

### Comparative Genomic Analysis of the Class *Epsilonproteobacteria* and Proposed Reclassification to *Epsilonbacteraeota* (phyl. nov.)

by Waite, D. W., Vanwonterghem, I., Rinke, C., Parks, D. H., Zhang, Y., Takai, K., et al. (2017). *Front. Microbiol.* 8:682. doi: 10.3389/fmicb.2017.00682

In our original publication, we proposed the phylum name *Epsilonbacteraeota* according to a proposal to modify Rule 8 of the International Code of Nomenclature of Prokaryotes, under which the suffix *-aeota* would be used to denote prokaryotic phyla (Oren et al., 2015). An addendum to this proposal was recently made whereby the shorter suffix *-ota*, instead of *-aeota*, be added to the stem of the name of one of the contained classes (Whitman et al., 2018). In accordance with this amendment, and the requirement that a class name is derived from a type genus (Oren et al., 2015), we propose to replace the name *Epsilonbacteraeota* with *Campylobacterota*. This change does not affect subordinate ranks of the phylum.

**Campylobacterota** (Cam.py.lo.bac.ter.o'ta. N.L. neut. n. *Campylobacter* type genus of the type order of the type class of the phylum; suff. *-ota*, proposed ending to denote a phylum; N.L. neut. pl. n. *Campylobacterota* the phylum of the class *Campylobacteria*).

## REFERENCES

- Oren, A., Da Costa, M. S., Garrity, G. M., Rainey, F. A., Rosselló-Móra, R., Schink, B., et al. (2015). Proposal to include the rank of phylum in the international code of nomenclature of prokaryotes. *Int. J. Syst. Evol. Microbiol.* 65, 4284–4287. doi: 10.1099/ijsem.0.000664
- Whitman, W. B., Oren, A., Chuvochina, M., Da Costa, M. S., Garrity, G. M., Rainey, F. A., et al. (2018). Proposal of the suffix –ota to denote phyla. Addendum to ‘Proposal to include the rank of phylum in the International Code of Nomenclature of Prokaryotes’ *Int. J. Syst. Evol. Microbiol.* 65, 4284–4287. doi: 10.1099/ijsem.0.02593

**Conflict of Interest Statement:** The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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