1 **Figure legend**

2 **Supplementary Fig. 1** Bacteria community structure of the inoculated phytoplankton (coccolithophore: *E. huxleyi*, diatom *P. tricornutum* and *T. weissflogii*) culture at phylum (a), class (b), order (c), family (d), genus (d), species (d) level.

3 **Supplementary Fig. 2** The phylogenetic tree of OTUs from all samples.

4 **Supplementary Fig. 3** Composition of the top 10 taxa at the (a) class, (b) order, (c) family or (d) genus level for all samples.

5 **Supplementary Fig. 4** Rarefaction curves of samples from HC-2, HC-4, HC-7, LC-1, LC-6 and LC-8 collected at various time points using different estimator methods including Observed species (a), Shannon index (b), Chao index (c), Simpson index (d).

6 **Supplementary Fig. 5** Bacterioplankton community diversity variation of HC-2, HC-4, HC-7, LC-1, LC-6 and LC-8 over time using different estimator methods including Observed species (a), Shannon index (b), Chao index (c), Simpson index (d).

7 **Supplementary Fig. 6** Principle component analysis (PCA) of bacterioplankton community of all samples collected at different time points.
Supplementary Figure. 1
Phylogenetic Tree

Supplementary Figure. 2
Supplementary Figure. 3
Supplementary Figure. 4
Supplementary Figure. 5