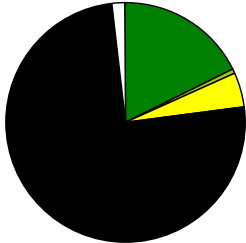
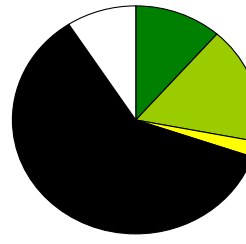
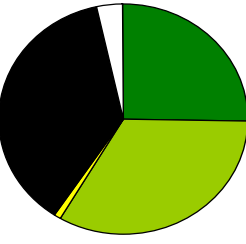
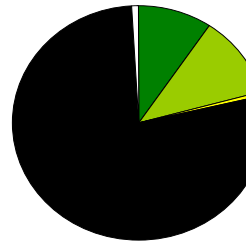
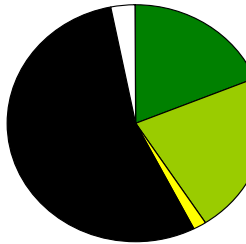
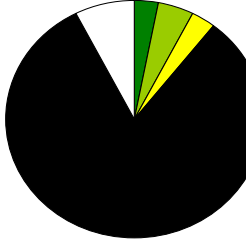


Top ten similarities to microbial organisms

Species	No. sequence similarities	% of total SEED similarities	Trophic lifestyle	Trophic lifestyle (total bacteria + protists)
Millennium 19 (Black reef)				
<i>Candidatus Pelagibacter ubique</i>	2950	19.4	chemoheterotrophic bacteria	
<i>Prochlorococcus marinus</i> subsp.	1092	7.2	photoautotrophic bacteria	
<i>Prochlorococcus marinus</i>	1011	6.7	photoautotrophic bacteria	
<i>Flavobacteria</i> sp.	550	3.6	chemoheterotrophic bacteria	
Flavobacteriales bacterium	366	2.4	chemoheterotrophic bacteria	
<i>Croceibacter atlanticus</i>	364	2.4	chemoheterotrophic bacteria	
<i>Gramella forsetii</i>	358	2.4	chemoheterotrophic bacteria	
<i>Flavobacterium</i> sp.	307	2.0	chemoheterotrophic bacteria	
<i>Cellulophaga</i> sp.	287	1.9	chemoheterotrophic bacteria	
<i>Acinetobacter baumannii</i>	277	1.8	chemoheterotrophic bacteria	
Millennium 9				
<i>Pseudomonas putida</i>	207	14.3	chemoheterotrophic bacteria	
<i>Odontella sinensis</i>	129	8.9	photoautotrophic protist	
<i>Methylophaga thalassica</i>	93	6.4	chemoheterotrophic bacteria	
<i>Nitrosomonas</i> sp.	91	6.3	chemolithoautotrophic bacteria	
<i>Candidatus Pelagibacter ubique</i>	71	4.9	chemoheterotrophic bacteria	
<i>Acinetobacter baumannii</i>	56	3.9	chemoheterotrophic bacteria	
<i>Nostoc punctiforme</i>	36	2.5	photoautotrophic bacteria	
<i>Euglena gracilis</i>	27	1.9	photoautotrophic protist	
<i>Trichodesmium erythraeum</i>	24	1.7	photoautotrophic bacteria	
<i>Thermosynechococcus elongatus</i>	20	1.4	photoautotrophic bacteria	
Flint 2				
<i>Odontella sinensis</i>	411	10.7	photoautotrophic protist	
<i>Guillardia theta</i>	185	4.8	photoautotrophic protist	
<i>Euglena gracilis</i>	129	3.4	photoautotrophic protist	
<i>Thermosynechococcus elongatus</i>	118	3.1	photoautotrophic bacteria	
<i>Trichodesmium erythraeum</i>	101	2.6	photoautotrophic bacteria	
<i>Gloeobacter violaceus</i>	88	2.3	photoautotrophic bacteria	
<i>Candidatus Pelagibacter ubique</i>	85	2.2	chemoheterotrophic bacteria	
<i>Nostoc punctiforme</i>	80	2.1	photoautotrophic bacteria	
<i>Pseudomonas putida</i>	79	2.1	chemoheterotrophic bacteria	
<i>Cyanophora paradoxa</i>	66	1.7	photoautotrophic protist	
Flint 5				
<i>Micrococcus luteus</i>	477	21.5	chemoheterotrophic bacteria	
<i>Zymomonas mobilis</i>	193	8.7	chemoheterotrophic bacteria	
<i>Acidiphilium cryptum</i>	191	8.6	chemoheterotrophic bacteria	
<i>Odontella sinensis</i>	162	7.3	photoautotrophic protist	
<i>Bacillus subtilis</i>	146	6.6	chemoheterotrophic bacteria	
<i>Shigella sonnei</i>	83	3.7	chemoheterotrophic bacteria	
<i>Microcystis aeruginosa</i>	63	2.8	photoautotrophic bacteria	
<i>Nostoc punctiforme</i>	59	2.7	photoautotrophic bacteria	
<i>Acinetobacter baumannii</i>	53	2.4	chemoheterotrophic bacteria	
<i>Guillardia theta</i>	35	1.6	photoautotrophic protist	
Starbuck 7				
<i>Odontella sinensis</i>	803	9.4	photoautotrophic protist	
<i>Acinetobacter baumannii</i>	506	5.9	chemoheterotrophic bacteria	
<i>Candidatus Pelagibacter ubique</i>	366	4.3	chemoheterotrophic bacteria	
<i>Guillardia theta</i>	296	3.5	photoautotrophic protist	
<i>Thermosynechococcus elongatus</i>	244	2.8	photoautotrophic bacteria	
<i>Xanthomonas campestris</i>	224	2.6	chemoheterotrophic bacteria	
<i>Nostoc punctiforme</i>	221	2.6	photoautotrophic bacteria	
<i>Pseudomonas putida</i>	207	2.4	chemoheterotrophic bacteria	
<i>Euglena gracilis</i>	153	1.8	photoautotrophic protist	
<i>Cyanophora paradoxa</i>	150	1.7	photoautotrophic protist	
Vostok 10				
<i>Acinetobacter baumannii</i>	2599	15.7	chemoheterotrophic bacteria	
<i>Pseudomonas putida</i>	2155	13.0	chemoheterotrophic bacteria	
<i>Methylophaga thalassica</i>	1114	6.7	chemoheterotrophic bacteria	
<i>Acinetobacter</i> sp.	1095	6.6	chemoheterotrophic bacteria	
<i>Nitrosomonas</i> sp.	799	4.8	chemolithoautotrophic bacteria	
<i>Idiomarina loihiensis</i>	674	4.1	chemoheterotrophic bacteria	
<i>Citrobacter freundii</i>	634	3.8	chemoheterotrophic bacteria	
<i>Odontella sinensis</i>	435	2.6	photoautotrophic protist	
<i>Vibrio splendidus</i>	387	2.3	chemoheterotrophic bacteria	
<i>Campylobacter hominis</i>	358	2.2	chemoheterotrophic bacteria	

No., number. The pie charts include all sequence similarities designated by the SEED database, E-value < 0.00001.

