

Table 1. Status of microbial census by habitat classifications and domain. The isolation_source field from the SILVA reference database was manually curated to assign bacterial and archaeal sequences coarse and fine scale habitat classifications. We calculated the number of sequences and OTUs observed and the percent coverage on a sequence or OTU basis for each classification and domain. Descriptions of each category are provided in Table S1.

Coarse	Fine	Bacteria				Archaea			
		Sequences (N)	OTUs (N)	% Seq. Coverage	% OTU Coverage	Sequences (N)	OTUs (N)	% Seq. Coverage	% OTU Coverage
Aerosol		3,472	1,068	79.5	33.2	2	1	100.0	100.0
Aquatic	Brackish	1,094	646	54.6	23.1	1,368	314	87.4	44.9
	Brackish sediment	390	243	54.4	26.7	525	208	76.8	41.3
	Freshwater	21,647	6,689	80.8	37.7	1,540	439	84.7	46.5
	Freshwater sediment	6,733	3,549	63.0	29.8	1,324	488	79.3	43.9
	Marine	134,727	14,287	94.3	46.7	10,983	830	95.8	44.5
	Marine sediment	27,801	9,567	79.6	40.8	14,049	1,507	95.0	53.7
	Hydrothermal vent	10,860	4,216	75.4	36.5	3,797	734	90.4	50.3
	Ice	2,073	936	71.2	36.1	42	5	95.2	60.0
	Other	8,760	3,802	71.7	34.8	772	313	80.7	52.4
Built	Digesters	33,152	8,949	82.9	36.8	4,764	483	93.6	36.4
	Food-associated	11,813	1,632	92.0	41.9	117	40	80.3	42.5
	Industrial/mining	16,582	6,099	76.6	36.3	1,245	336	84.4	42.3
	Pollution associated	38,696	10,602	84.1	41.9	716	249	79.2	40.2
	Other	8,556	2,730	79.1	34.7	444	111	90.8	63.1
Plant associated	Root	19,695	5,052	84.3	38.7	200	61	85.5	52.5
	Surface	4,892	1,385	82.7	38.8	0	0	NA	NA
	Other	9,753	3,217	78.8	35.8	22	7	90.9	71.4
Soil	Agriculture	10,051	4,017	73.6	34.0	146	56	80.8	50.0
	Desert	3,042	1,280	73.7	37.5	245	79	77.6	30.4
	Permafrost	1,922	870	73.0	40.3	39	20	64.1	30.0
	Other	59,855	17,166	82.9	40.4	2,087	516	89.1	55.8
Host-associated	Vertebrate	773,045	42,497	96.1	29.5	5,389	454	95.1	41.6
	Arthropod	13,209	3,688	81.8	34.7	87	52	58.6	30.8
	Other invertebrate	7,476	2,626	78.0	37.3	67	30	73.1	40.0
	Other	10,855	1,754	89.2	33.4	54	17	87.0	58.8
Other		19,414	5,930	81.6	39.9	882	249	84.2	44.2
No source data		151,669	14,144	94.9	45.6	2,565	559	88.6	47.6
Total		1,411,234	108,950	94.5	29.2	53,546	4,252	95.1	38.5