

**Table S2: Detail of the 169 metagenomes used for the meta-analysis and their average genome size estimated by GAAS. Accession numbers: CA, CAMERA Accession; GB, NCBI GenBank; GP, NCBI Genome Project; GSS, NCBI Genome Survey Sequence; MG: MG-RAST Accession; SRA, NCBI Short Read Archive.**

Metagenome name	Type	Biome	Sub-biome	Microbial-viral pairing	Accession number	Reference	Est. avg. genome length (kb)
AlaskanSoilFungalEuk	eukaryal	Terrestrial	-	-	GP 28853	Allen et al., ISME J., 2009 [1]	-
AlicanteSalternMic	microbial	Aquatic	Hypersaline	-	GSS DU824018-DU826964	Legault et al., BMC Genomics 2006 [2]	3,190.26
AlvinellaWormMic	microbial	Host-associated	-	-	GP 17241	Grzymiski et al., Proc. Nat. Acad. Sci. USA 2008 [3]	2,351.67
AntarcticaLakeMic	microbial	Aquatic	Hypersaline	-	GP 33179	-	1,657.26
ArcticMic	microbial	Aquatic	Ocean	Arctic Ocean	GP 29035	-	1,606.13
ArcticVir2002	viral	Aquatic	Ocean	Arctic Ocean	GP 17769	Angly et al., PLoS Biology 2006 [4]	66.67
BabyFecesSDVirus	viral	Host-associated	-	-	GB ED651217-ED651693	Breitbart et al., Res. Microbiol. 2008 [5]	-
BBCVir1996to2004	viral	Aquatic	Ocean	-	GP 17767	Angly et al., PLoS Biology 2006 [4]	42.75
BearpawHotSpringVir	viral	Aquatic	Hot spring	-	GP 18929	Pride et al., BMC Genomics 2008 [6]	-
ChesapeakeBayVir	viral	Aquatic	Ocean	Chesapeake Bay	GP 16522	Bench et al., Appl. Environ. Microbiol. 2007 [7]	112.38
ChickenCecumCJejuniMic2007	microbial	Host-associated	-	Chicken Cecum	GP 28599	Qu A et al., PLoS One, 2008 [8]	3,695.38
ChickenCecumUninfectedMic2007	microbial	Host-associated	-	Chicken cecum	GP 28597	Qu A et al., PLoS One, 2008 [8]	-
ChickenRuntingStuntingMDnaVir2008	viral	Host-associated	-	Chicken cecum	GP 40783	-	39.77
ChickenRuntingStuntingMRnaVir2008	viral	Host-associated	-	Chicken cecum	GP 40785	-	41.99

ChickenRunting StuntingPDnaV ir2008	viral	Host- associated	-	Chicken cecum	GP 40787	-	31.10
ChickenRunting StuntingPRnaVi r2008	viral	Host- associated	-	Chicken cecum	GP 40789	-	6.93
ConPorCompH awMic200602	microbial	Manipulated / Perturbed	-	Control Pcomp	GP 28429	Vega Thurber et al., Env. Mic. 2009 [9]	2,077.79
ConPorCompH awVir200602	viral	Manipulated / Perturbed	-	Control Pcomp	GP 28417	Vega Thurber et al., Proc. Nat. Acad. Sci. USA 2008 [10]	19.90
DesertSoilJoshu aTreeVir	viral	Terrestrial	-	-	GSS ER781257- ER785833	Fierer et al., Appl. Environ. Microb. 2007 [11]	-
DOCPorComp HawMic200602	microbial	Manipulated / Perturbed	-	DOC Pcomp	GP 28433	Vega Thurber et al., Env. Mic. 2009 [9]	2,630.08
DOCPorComp VirHaw200602	viral	Manipulated / Perturbed	-	DOC Pcomp	GP 28421	Vega Thurber et al., Proc. Nat. Acad. Sci. USA 2008 [11]	28.61
FannLIMic2005 0811	microbial	Aquatic	Ocean	Fanning island	GP 28367	Dinsdale et al., PLoS One 2008 [12]	2,638.17
FannLIVir2005 0811	viral	Aquatic	Ocean	Fanning island	GP 28369	Dinsdale et al., PLoS One 2008 [12]	152.09
FishHealGutKe ntSTMic200605 04	microbial	Host- associated	-	Fish gut	GP 28389	Dinsdale et al., Nature 2008 [13]	5,234.77
FishHealGutKe ntSTVir200605 04	viral	Host- associated	-	Fish gut	GP 28397	-	-
FishHealSlimK entSTMic20060 504	microbial	Host- associated	-	Fish slime	GP 28393	Dinsdale et al., Nature 2008 [13]	5,229.78
FishHealSlimK entSTVir20060 504	viral	Host- associated	-	Fish slime	GP 28401	Dinsdale et al., Nature 2008 [13]	13.23
FishMorGutKe ntSTMic200605 04	microbial	Manipulated / Perturbed	-	Fish Morbid Gut	GP 28391	Dinsdale et al., Nature 2008 [13]	5,260.79
FishMorGutKe ntSTVir200605 04	viral	Manipulated / Perturbed	-	Fish Morbid Gut	GP 28399	-	-
FishMorSlimKe ntSTMic200605 04	microbial	Manipulated / Perturbed	-	Fish Morbid Slime	GP 28395	Dinsdale et al., Nature 2008 [13]	5,126.12

FishMorSlimKe ntSTVir200605 04	viral	Manipulated / Perturbed	-	Fish Morbid Slime	GP 28403	Dinsdale et al., Nature 2008 [13]	31.57
GOMVir1994to 2001	viral	Aquatic	Ocean	Gulf of Mexico	GP 17765	Angly et al., PLoS Biology 2006 [4]	61.04
GS000a11Mic	microbial	Aquatic	Ocean	Sargasso Sea	GP 13694	Venter et al., Science 2004 [14]	5,465.57
GS000a13Mic	microbial	Aquatic	Ocean	Sargasso Sea	GP 13694	Venter et al., Science 2004 [14]	5,465.57
GS000b11Mic	microbial	Aquatic	Ocean	Sargasso Sea	GP 13694	Venter et al., Science 2004 [14]	1,948.84
GS000b13Mic	microbial	Aquatic	Ocean	Sargasso Sea	GP 13694	Venter et al., Science 2004 [14]	1,948.84
GS000cMic	microbial	Aquatic	Ocean	Sargasso Sea	GP 13694	Venter et al., Science 2004 [14]	2,292.36
GS000dMic	microbial	Aquatic	Ocean	Sargasso Sea	GP 13694	Venter et al., Science 2004 [14]	1,599.07
GS001aEuk	eukaryal	Aquatic	Ocean	-	GP 13694	Venter et al., [14] Science 2004	24,690.91
GS001bEuk	eukaryal	Aquatic	Ocean	-	GP 13694	Venter et al., Science 2004 [14]	6,921.47
GS011Mic	microbial	Aquatic	Ocean	-	GP 13694	Rush et al., PLoS Biol. 2007 [15]	1,543.51
GS012Mic	microbial	Aquatic	Ocean	Chesapeake Bay	GP 13694	Rush et al., PLoS Biol. 2007 [15]	1,658.76
GS016Mic	microbial	Aquatic	Ocean	Gulf of Mexico	GP 13694	Rush et al., PLoS Biol. 2007 [15]	1,564.53
GS020Mic	microbial	Aquatic	Ocean	-	GP 13694	Rush et al., PLoS Biol. 2007 [15]	2,896.19
GS023Mic	microbial	Aquatic	Ocean	-	GP 13694	Rush et al., PLoS Biol. 2007 [15]	1,671.19
GS025Euk	eukaryal	Aquatic	Ocean	-	GP 19735	Rush et al., PLoS Biol. 2007 [15]	895.31
GS034Mic	microbial	Aquatic	Ocean	-	GP 13694	Rush et al., PLoS Biol. 2007 [15]	2,002.14
GS048aMic	microbial	Aquatic	Ocean	-	GP 13694	Rush et al., PLoS Biol. 2007 [15]	1,718.17
GS048bEuk	eukaryal	Aquatic	Ocean	-	GP 13694	Rush et al., PLoS Biol. 2007 [15]	691.96
GS108bEuk	eukaryal	Aquatic	Ocean	-	GP 13694	-	686.97
GS110bEuk	eukaryal	Aquatic	Ocean	-	GP 13694	-	935.95
GS112bEuk	eukaryal	Aquatic	Ocean	-	GP 13694	-	782.20
GS117bEuk	eukaryal	Aquatic	Ocean	-	GP 13694	-	765.82

GS122bEuk	eukaryal	Aquatic	Ocean	-	GP 13694	-	719.78
GutlessWormMic	microbial	Host-associated	-	-	GB AASZ01000000	Woyke et al., Nature 2006 [16]	522.88
HBCStromBahamasMic20050111	microbial	Aquatic	Microbialites	Bahamas	GP 28383	Dinsdale et al., Nature 2008 [13]	4,125.02
HBCStromBahamasVir20050111	viral	Aquatic	Microbialites	Bahamas	GP 28381	Desnues et al., Nature 2008 [17]	4.63
HealSputRep3SDVir20060707	viral	Host-associated	-	-	GP 28439	Dinsdale et al., Nature 2008 [13]	-
HighSalternSDbayMic20051128	microbial	Aquatic	Hypersaline	High saltern SD 200511	GP 28453	Dinsdale et al., Nature 2008 [13]	3,407.29
HighSalternSDbayMicD200407	microbial	Aquatic	Hypersaline	High saltern SD	GP 40795	-	3,275.39
HighSalternSDbayVir20051116	viral	Aquatic	Hypersaline	High saltern SD	GP 28457	Dinsdale et al., Nature 2008 [13]	51.73
HighSalternSDbayVir20051128	viral	Aquatic	Hypersaline	High saltern SD 200511	GP 28451	Dinsdale et al., Nature 2008 [13]	267.95
HighSalternSDbayVir20051207	viral	Aquatic	Hypersaline	High saltern SD	GP 28447	Dinsdale et al., Nature 2008 [13]	-
Hot10Mic20021007	microbial	Aquatic	Ocean	-	GSS DU731018-DU796676, DU800850-DU800864	DeLong et al., Science 2006 [18]	1,838.16
Hot130Mic20021006	microbial	Aquatic	Ocean	-	GSS DU731018-DU796676, DU800850-DU800864	DeLong et al., Science 2006 [18]	3,849.65
Hot200Mic20021006	microbial	Aquatic	Ocean	-	GSS DU731018-DU796676, DU800850-DU800864	DeLong et al., Science 2006 [18]	1,868.80
Hot4000Mic20031221	microbial	Aquatic	Ocean	-	GSS DU731018-DU796676, DU800850-DU800864	DeLong et al., Science 2006 [18]	3,664.53
Hot500Mic10021006	microbial	Aquatic	Ocean	-	GSS DU731018-	DeLong et al., Science 2006 [18]	3,981.13

						DU796676, DU800850- DU800864		
Hot70Mic20021007	microbial	Aquatic	Ocean	-		GSS DU731018- DU796676, DU800850- DU800864	DeLong et al., Science 2006 [18]	2,157.18
Hot770Mic20031221	microbial	Aquatic	Ocean	-		GSS DU731018- DU796676, DU800850- DU800864	DeLong et al., Science 2006 [18]	2,597.30
HumanFecesSDVir	viral	Host-associated	-	-		GSS CC820769- CC821300	Breitbart et al., J. Bacteriol. 2003 [19]	-
KingLIMic20050821	microbial	Aquatic	Ocean	Kingman island		GP 28343	Dinsdale et al., PLoS One 2008 [12]	2,911.81
KingLIVir20050821	viral	Aquatic	Ocean	Kingman island		GP 28345	Dinsdale et al., PLoS One 2008 [12]	154.43
LeanMouseCecumMic2005	microbial	Host-associated	-	-		GP 17401	Turnbaugh et al., Nature 2006 [20]	3,144.82
LowSalternSDbayMic200407	microbial	Aquatic	Hypersaline	Low saltern 200407		GP 28359	Dinsdale et al., Nature 2008 [13]	4,564.80
LowSalternSDbayMic20051128	microbial	Aquatic	Hypersaline	Low saltern 200511		GP 28461	Dinsdale et al., Nature 2008 [13]	1,664.29
LowSalternSDbayVir200407	viral	Aquatic	Hypersaline	Low saltern 200407		GP 28353	Dinsdale et al., Nature 2008 [13]	67.90
LowSalternSDbayVir20051110	viral	Aquatic	Hypersaline	-		GP 28373	Dinsdale et al., Nature 2008 [13]	92.07
LowSalternSDbayVir20051128	viral	Aquatic	Hypersaline	Low saltern 200511		GP 28455	Dinsdale et al., Nature 2008 [13]	64.41
MarineBacterioplanktonS35131Euk	eukaryal	Aquatic	Ocean	-		CA BACTERIOPL ANKTON_SM PL_S_35131	Hewson et al., Limnol Oceanogr 2009 [21]	804.70
MarineBacterioplanktonS35139Euk	eukaryal	Aquatic	Ocean	-		CA BACTERIOPL ANKTON_SM PL_S_35139	Hewson et al., Limnol Oceanogr 2009 [21]	741.86
MarineBacterioplanktonS35147Euk	eukaryal	Aquatic	Ocean	-		CA BACTERIOPL ANKTON_SM PL_S_35147	Hewson et al., Limnol Oceanogr 2009 [21]	809.65

MarineBacterio planktonS35155 Euk	eukaryal	Aquatic	Ocean	-	CA BACTERIOPL ANKTON_SM PL_S_35155	Hewson et al., Limnol Oceanogr 2009 [21]	971.31
MarineBacterio planktonS35163 Euk	eukaryal	Aquatic	Ocean	-	CA BACTERIOPL ANKTON_SM PL_S_35163	Hewson et al., Limnol Oceanogr 2009 [21]	1,055.38
MarineBacterio planktonS35171 Euk	eukaryal	Aquatic	Ocean	-	CA BACTERIOPL ANKTON_SM PL_S_35171	Hewson et al., Limnol Oceanogr 2009 [21]	779.40
MarineBacterio planktonS35179 Euk	eukaryal	Aquatic	Ocean	-	CA BACTERIOPL ANKTON_SM PL_S_35179	Hewson et al., Limnol Oceanogr 2009 [21]	864.10
MediterraneanB athypelagicEuk	eukaryal	Aquatic	Ocean	-	GSS EI942868-EI951915	Martin-Cuadrado et al., PLoS ONE 2007 [22]	-
MedSalternSDB ayMic20051110	microbial	Aquatic	Hypersaline	Med saltern 20051110	GP 28377	Dinsdale et al., Nature 2008 [13]	4014.17
MedSalternSDB ayMic20051111	microbial	Aquatic	Hypersaline	Med saltern	GP 28379	Dinsdale et al., Nature 2008 [13]	3,451.03
MedSalternSDB ayMic20051116	microbial	Aquatic	Hypersaline	Med saltern 20051116	GP 28459	Dinsdale et al., Nature 2008 [13]	3,627.08
MedSalternSDB ayMic20051128	microbial	Aquatic	Hypersaline	Med saltern 20051128	GP 28449	Dinsdale et al., Nature 2008 [13]	3,613.68
MedSalternSDB ayVir20051110	viral	Aquatic	Hypersaline	Med saltern 20051110	GP 28375	Dinsdale et al., Nature 2008 [13]	72.77
MedSalternSDB ayVir20051116	viral	Aquatic	Hypersaline	Med saltern 20051116	GP 28465	Dinsdale et al., Nature 2008 [13]	61.41
MedSalternSDB ayVir20051122	viral	Aquatic	Hypersaline	Med saltern	GP 28445	Dinsdale et al., Nature 2008 [13]	56.80
MedSalternSDB ayVir20051128	viral	Aquatic	Hypersaline	Med saltern 20051128	GP 28463	Dinsdale et al., Nature 2008 [13]	-
Mosq1SDVir20 060125	viral	Host-associated	-	-	GP 28413	Dinsdale et al., Nature 2008 [13]	4.39
Mosq2SDVir20 60606	viral	Host-associated	-	-	GP 28469	Dinsdale et al., Nature 2008 [13]	4.46
Move858Vir	viral	Aquatic	Ocean	Chesapeake Bay	GP 13694	Rush et al., PLoS Biol. 2007 [15]	-
MushroomHotS pringMic	microbial	Aquatic	Hot spring	-	GP 20953	Bhaya et al., ISME J., 2007 [23]	2,966.33
Norm3LungVir	viral	Host-	-	-	GP 39545	Willner et al., PLoS	61.23

20080407		associated				ONE 2009 [24]	
Norm4LungVir 20080407	viral	Host-associated	-	-	GP 39545	Willner et al., PLoS ONE 2009 [24]	20.51
Norm5LungVir 20080407	viral	Host-associated	-	-	GP 39545	Willner et al., PLoS ONE 2009 [24]	57.05
Norm6LungVir 20080407	viral	Host-associated	-	-	GP 39545	Willner et al., PLoS ONE 2009 [24]	49.29
Norm7LungVir 20080407	viral	Host-associated	-	-	GP 39545	Willner et al., PLoS ONE 2009 [24]	58.24
NutPorCompHawMic200602	microbial	Manipulated / Perturbed	-	Nutrient Pcomp	GP 28437	Vega Thurber et al., Env. Mic. 2009 [9]	2,083.43
NutPorCompHawVir200602	viral	Manipulated / Perturbed	-	Nutrient Pcomp	GP 28425	Vega Thurber et al., Proc. Nat. Acad. Sci. USA 2008 [10]	26.50
OctopusHotSpringMic	microbial	Aquatic	Hot spring	Yellowstone Octopus	GP 20953	Bhaya et al., ISME J., 2007 [17]	3,006.73
OctopusHotSpringVir	viral	Aquatic	Hot spring	Yellowstone Octopus	GP 20821	Pride et al., BMC Genomics 2008 [6]	-
OxMinZoneVir 200806-200	viral	Aquatic	Ocean	-	GP 40793	-	-
OxMinZoneVir 200806-90	viral	Aquatic	Ocean	-	GP 40791	-	93.13
PacificBeachSandEuk	eukaryal	Terrestrial	-	-	GP 13729	Naviaux et al., Mar Ecol Prog Ser 2005 [25]	-
PalmLIMic20050818	microbial	Aquatic	Ocean	Palmyra island	GP 28363	Dinsdale et al., PLoS One 2008 [12]	2,140.61
PalmLIVir20050818	viral	Aquatic	Ocean	Palmyra island	GP 28365	Dinsdale et al., PLoS One 2008 [12]	163.41
PANoVectorsBocasMic20050921	microbial	Host-associated	-	-	GP 28371	Wegley et al., Env. Mic. 2007 [26]	3,236.71
PASTromBahamasMic20050722	microbial	Aquatic	Microbialites	Pozas	GP 28385	Dinsdale et al., Nature 2008 [13]	4,504.51
PASTromCCMexVir20050722	viral	Aquatic	Microbialites	Pozas	GP 28355	Desnues et al., Nature 2008 [17]	17.26
PeruvianCoastalMarginMic	microbial	Aquatic	Ocean	-	SRA 001015	Biddle et al., Proc. Nat. Acad. Sci. USA 2008 [27]	2,521.81
pHPorCompHawMic200602	microbial	Manipulated / Perturbed	-	pH Pcomp	GP 28435	Vega Thurber et al., Env. Mic. 2009 [9]	2,178.71
pHPorCompHawVir	viral	Manipulated	-	pH Pcomp	GP 28423	Vega Thurber et al.,	39.92

wVir200602		/ Perturbed				Proc. Nat. Acad. Sci. USA 2008 [10]	
PrarieSoilKonz aVir	viral	Terrestrial	-	-	GSS ER781257- ER785833	Fierer et al., Appl. Environ. Microb. 2007 [11]	-
PrePondKentST Mic20060504	microbial	Aquatic	Fresh water	Kent SeaTech Pre 200605	GP 28407	Dinsdale et al., Nature 2008 [13]	4,049.11
PrePondKentST Vir20060504	viral	Aquatic	Fresh water	Kent SeaTech Pre 200605	GP 28411	Dinsdale et al., Nature 2008 [13]	47.00
RainforestSoilP eruVir	viral	Terrestrial	-	-	GSS ER781257- ER785833	Fierer et al., Appl. Environ. Microb. 2007 [11]	-
RicePaddySoil Vir	viral	Terrestrial	-	-	GP 20811	Kim et al., Appl. Environ. Microb. 2008 [28]	-
RMStromCCM exMic20050722	microbial	Aquatic	Microbialites	Mexico	GP 28351	Dinsdale et al., Nature 2008 [13]	5,061.41
RMStromCCM exVir20050722	viral	Aquatic	Microbialites	Mexico	GP 28357	Desnues et al., Nature 2008 [13]	50.27
Rumen640FMic 20051215	microbial	Host- associated	-	-	GP 28607	Dinsdale et al., Nature 2008 [13]	3,331.03
Rumen710FMic 20051215	microbial	Host- associated	-	-	GP 28609	Dinsdale et al., Nature 2008 [13]	2,938.60
Rumen80FMic2 0051215	microbial	Host- associated	-	-	GP 28605	Dinsdale et al., Nature 2008 [13]	1,867.34
SaltonSea1Vir2 0060823	viral	Sediments	-	Salton Sea	GP 28613	Dinsdale et al., Nature 2008 [13]	88.67
SaltonSea2Vir2 0060823	viral	Sediments	-	Salton Sea	GP 28613	Dinsdale et al., Nature 2008 [13]	82.61
SaltonSeaMic2 0060823	microbial	Sediments	-	Salton Sea	GP 28613	Dinsdale et al., Nature 2008 [13]	3,806.14
SARVir200506 30	viral	Aquatic	Ocean	Sargasso Sea	GP 17771	Angly et al., PLoS Biology 2006 [4]	19.95
SeawaterMissio nBaySDVir	viral	Aquatic	Ocean	-	GSS BH898061- BH898933	Breitbart et al., Proc. Nat. Acad. Sci. USA 2002 [29]	-
SeawaterScripp sSDVir	viral	Aquatic	Ocean	-	GSS AY079522- AY080585	Breitbart et al., Proc. Nat. Acad. Sci. USA 2002 [29]	-
SedimentsMissi onBaySDVir	viral	Sediments	-	-	GB CC821301- CC822456	Breitbart et al., Proc. R. Soc. B. 2004 [30]	-
SkanBayAlaska	viral	Aquatic	Ocean	-	GP 28619	Dinsdale et al.,	-



Vir20060927						Nature 2008 [13]	
SoilCC1Mic	microbial	Terrestrial	-	-	MG 4441690.3	-	6,063.12
SoilCP1Mic	microbial	Terrestrial	-	-	MG 4441689.3	-	5,927.76
SoilCP3Mic	microbial	Terrestrial	-	-	MG 4441691.3	-	5,776.93
SoilHF1Mic	microbial	Terrestrial	-	-	MG 4441642.3	-	5,887.77
SoilKP1Mic	microbial	Terrestrial	-	-	MG 4441994.3	-	5,952.04
SoilKP3Mic	microbial	Terrestrial	-	-	MG 4441643.3	-	5,777.56
SoilKW1Mic	microbial	Terrestrial	-	-	MG 4441664.3	-	5,741.19
SoilKW2Mic	microbial	Terrestrial	-	-	MG 4441691.4	-	5,766.49
SoilLF1Mic	microbial	Terrestrial	-	-	MG 4442455.3	-	6,181.55
SoilLF2Mic	microbial	Terrestrial	-	-	MG 4441644.3	-	6,131.82
SoilSJ1Mic	microbial	Terrestrial	-	-	MG 4441557.3	-	5,995.31
SoilSJ2Mic	microbial	Terrestrial	-	-	MG 4441645.3	-	5,974.06
SoilTF1Mic	microbial	Terrestrial	-	-	MG 4441688.3	-	6,119.44
SoilTF2Mic	microbial	Terrestrial	-	-	MG 4442452.3	-	6,312.57
SoilWF1Mic	microbial	Terrestrial	-	-	MG 4441556.3	-	5,812.88
SoilWF2Mic	microbial	Terrestrial	-	-	MG 4441665.3	-	5,632.30
SoilYN1Mic	microbial	Terrestrial	-	-	MG 4442453.3	-	5,960.67
SoilYN2Mic	microbial	Terrestrial	-	-	MG 4441687.3	-	5,899.56
SouthChinaSea SedimentsMic	microbial	Sediments	-	-	GP 33581	-	4,941.46
T0PortComHawMic20060223	microbial	Host-associated	-	Coral tissue P. compressa	GP 28427	Vega Thurber et al., Env. Mic. 2009 [9]	3,618.00
T0PortComHawVir20060223	viral	Host-associated	-	Coral tissue P. compressa	GP 28415	Vega Thurber et al., Proc. Nat. Acad. Sci. USA 2008 [10]	43.07
TempPorCompHawMic200602	microbial	Manipulated / Perturbed	-	Temperature Pcomp	GP 28431	Vega Thurber et al., Env. Mic. 2009 [9]	4,560.68
TempPorCompHawVir200602	viral	Manipulated / Perturbed	-	Temperature Pcomp	GP 28419	Vega Thurber et al., Proc. Nat. Acad. Sci. USA 2008 [10]	30.80
TilPondKentSTMic200511	microbial	Aquatic	Fresh water	Kent SeaTech Tpond 200511	GP 28387	Dinsdale et al., Nature 2008 [13]	4,204.22
TilPondKentSTMic20060504	microbial	Aquatic	Fresh water	Kent SeaTech Tpond 200605	GP 28405	Dinsdale et al., Nature 2008 [13]	4,007.80
TilPondKentST	microbial	Aquatic	Fresh water	Kent	GP 28603	Dinsdale et al.,	4,689.22

Mic200608				SeaTech Tpond 200608		Nature 2008 [13]	
TilPondKentST Vir20060504	viral	Aquatic	Fresh water	Kent SeaTech Tpond 200605	GP 28409	Dinsdale et al., Nature 2008 [13]	34.45
TilPondKentST Vir200608	viral	Aquatic	Fresh water	Kent SeaTech Tpond 200608	GP 28601	Dinsdale et al., Nature 2008 [13]	51.03
TpondKentSTV ir200511	viral	Aquatic	Fresh water	Kent SeaTech Tpond 200511	GP 28361	Dinsdale et al., Nature 2008 [13]	35.71
WasecaFarmSoi IMic	microbial	Terrestrial	-	-	GP 13699	Tringe SG et al., Science, 2005 [31]	5,350.40
XmasLIMic200 50805	microbial	Aquatic	Ocean	Christmas island	GP 28347	Dinsdale et al., PLoS One 2008 [12]	3,483.52
XmasLIVir200 50805	viral	Aquatic	Ocean	Christmas island	GP 28349	Dinsdale et al., PLoS One 2008 [12]	158.48

#### References:

1. Allen HK, Moe LA, Rodbumrer J, Gaarder A, Handelsman J (2008) Functional metagenomics reveals diverse beta-lactamases in a remote Alaskan soil. *ISME J* 3: 243-251.
2. Legault B, Lopez-Lopez A, Alba-Casado J, Doolittle WF, Bolhuis H, et al. (2006) Environmental genomics of "Haloquadratum walsbyi" in a saltern crystallizer indicates a large pool of accessory genes in an otherwise coherent species. *BMC Genomics* 7: 171.
3. Grzymiski JJ, Murray AE, Campbell BJ, Kaplarevic M, Gao GR, et al. (2008) Metagenome analysis of an extreme microbial symbiosis reveals eurythermal adaptation and metabolic flexibility. *Proceedings of the National Academy of Sciences* 105: 17516-17521.
4. Angly FE, Felts B, Breitbart M, Salamon P, Edwards RA, et al. (2006) The marine viromes of four oceanic regions. *PLoS Biology* 4: e368.
5. Breitbart M, Haynes M, Kelley S, Angly F, Edwards RA, et al. (2008) Viral diversity and dynamics in an infant gut. *Res Microbiol* 159: 367-373.
6. Pride D, Schoenfeld T (2008) Genome signature analysis of thermal virus metagenomes reveals Archaea and thermophilic signatures. *BMC Genomics* 9: 420.

7. Bench SR, Hanson TE, Williamson KE, Ghosh D, Radosovich M, et al. (2007) Metagenomic characterization of Chesapeake Bay viroplankton. *Appl Environ Microbiol* 73: 7629-7641.
8. Qu A, Brule JM, Wilson MK, Law BF, Theoret JR, et al. (2008) Comparative metagenomics reveals host specific metavirulomes and horizontal gene transfer elements in the chicken cecum microbiome. *PLoS ONE* 3: e2945.
9. Thurber RV, Willner-Hall D, Rodriguez-Mueller B, Desnues C, Edwards RA, et al. (2009) Metagenomic analysis of stressed coral holobionts. *Environ Microbiol* 11: 2148-2163.
10. Vega Thurber RL, Barott KL, Hall D, Liu H, Rodriguez-Mueller B, et al. (2008) Metagenomic analysis indicates that stressors induce production of herpes-like viruses in the coral *Porites compressa*. *Proc Nat Acad Sci USA* 105: 18413-18418.
11. Fierer N, Breitbart M, Nulton J, Salamon P, Lozupone C, et al. (2007) Metagenomic and small-subunit rRNA analyses reveal the genetic diversity of Bacteria, Archaea, Fungi, and viruses in soil. *Appl Environ Microbiol* 73: 7059-7066.
12. Dinsdale EA, Pantos O, Smriga S, Edwards RA, Angly F, et al. (2008) Microbial ecology of four coral atolls in the northern Line Islands. *PLoS ONE* 3: e1584.
13. Dinsdale EA, Edwards RA, Hall D, Angly F, Breitbart M, et al. (2008) Functional metagenomic profiling of nine biomes. *Nature* 452: 629-632.
14. Venter JC, Remington K, Heidelberg JF, Halpern AL, Rusch D, et al. (2004) Environmental genome shotgun sequencing of the Sargasso Sea. *Science* 304: 66-74.
15. Rusch DB, Halpern AL, Sutton G, Heidelberg KB, Williamson S, et al. (2007) The Sorcerer II global ocean sampling expedition: northwest Atlantic through eastern tropical Pacific. *PLoS Biol* 5: e77.
16. Woyke T, Teeling H, Ivanova NN, Huntemann M, Richter M, et al. (2006) Symbiosis insights through metagenomic analysis of a microbial consortium. *Nature* 443: 950-955.
17. Desnues C, Rodriguez-Brito B, Rayhawk S, Kelley S, Tran T, et al. (2008) Biodiversity and biogeography of phages in modern stromatolites and thrombolites. *Nature* 452: 340-343.
18. DeLong EF, Preston CM, Mincer T, Rich V, Hallam SJ, et al. (2006) Community genomics among stratified microbial assemblages in the ocean's interior. *Science* 311: 496-503.
19. Breitbart M, Hewson I, Felts B, Mahaffy JM, Nulton J, et al. (2003) Metagenomic analyses of an uncultured viral community from human feces. *J Bacteriol* 185: 6220-6223.

20. Turnbaugh PJ, Ley RE, Mahowald MA, Magrini V, Mardis ER, et al. (2006) An obesity-associated gut microbiome with increased capacity for energy harvest. *Nature* 444: 1027-131.
21. Hewson I, Paerl RW, Tripp HJ, Zehr JP, Karl DM (2009) Metagenomic potential of microbial assemblages in the surface waters of the central Pacific Ocean tracks variability in oceanic habitat. *Limnol Oceanogr* 54: 1981-1994.
22. Martín-Cuadrado A, López-García P, Alba J, Moreira D, Monticelli L, et al. (2007) Metagenomics of the deep mediterranean, a warm bathypelagic habitat. *PLoS ONE* 2: e914.
23. Bhaya D, Grossman AR, Steunou A, Khuri N, Cohan FM, et al. (2007) Population level functional diversity in a microbial community revealed by comparative genomic and metagenomic analyses. *ISME J* 1: 703-713.
24. Willner D, Furlan M, Haynes M, Schmieder R, Angly FE, et al. (2009) Metagenomic analysis of respiratory tract DNA viral communities in cystic fibrosis and non-cystic fibrosis Individuals. *PLoS ONE* 4: e7370.
25. Naviaux RK, Good B, McPherson JD, Steffen DL, Markusic D, et al. (2005) Sand DNA - a genetic library of life at the water's edge. *Mar Ecol Prog Ser* 301: 9-22.
26. Wegley L, Edwards R, Rodriguez-Brito B, Liu H, Rohwer F (2007) Metagenomic analysis of the microbial community associated with the coral *Porites astreoides*. *Environmental Microbiology* 9: 2707-2719.
27. Biddle JF, Fitz-Gibbon S, Schuster SC, Brenchley JE, House CH (2008) Metagenomic signatures of the Peru Margin seafloor biosphere show a genetically distinct environment. *Proc Nat Acad Sci USA* 105: 10583-10588.
28. Kim K, Chang H, Nam Y, Roh SW, Kim M, et al. (2008) Amplification of uncultured single-stranded DNA viruses from rice paddy soil. *Appl Environ Microbiol* 74: 5975-5985.
29. Breitbart M, Salamon P, Andresen B, Mahaffy J, Segall A, et al. (2002) Genomic analysis of uncultured marine viral communities. *Proc Nat Acad Sci USA* 99: 14250-14255.
30. Breitbart M, Felts B, Kelley S, Mahaffy JM, Nulton J, et al. (2004) Diversity and population structure of a near-shore marine-sediment viral community. *Proc R Soc B* 271: 565-574.
31. Tringe SG, von Mering C, Kobayashi A, Salamov AA, Chen K, et al. (2005) Comparative metagenomics of microbial communities. *Science* 308: 554-557.