

Table S1. Summary of genomes used in this analysis						Assembly statistics for newly sequenced draft genomes						Assembly statistics for newly sequenced finished genomes			
Name	Alternate names	Body site	Disease status of host tissue	NCBI accession	Ref	Assembly size	Total Contig Length	# Scaffolds	Scaffold N50	# Contigs	Contig N50	gene count	length		gene count
<i>F. nucleatum animalis</i> 21_1A	EAVG_006, BEI HM-43; F. sp. 21_1A	GIT	Healthy biopsy tissue	ADEE000000000	Broad Institute	2.13 Mb	2.13 Mb	4	1.56 Mb	49	207.57 Kb	2039	2153907	chromosome	2015
<i>F. nucleatum animalis</i> D11	BEI HM-75; F. sp. D11	intestine	Healthy biopsy tissue (Crohn's patient)	ACDS000000000	Broad Institute	2.45 Mb	2.34 Mb	76	109.5 Kb	355	11.48 Kb	2481			
<i>F. nucleatum animalis</i> 4_8	EAVG_001, BEI HM-70; F. sp. 4_8	GIT	Healthy biopsy tissue	AEIB000000000	Broad Institute	2.27 Mb	2.27 Mb	13	1.28 Mb	29	230.56 Kb	2159	2261267	chromosome	2114
													14194	plasmid	17
<i>F. nucleatum animalis</i> 3_1_33	EAVG_016, BEI HM-62; F. sp. 3_1_33	GIT	Inflamed biopsy tissue (Crohn's patient)	ACQE000000000	Broad Institute	2.3 Mb	2.29 Mb	5	1.31 Mb	18	266.62 Kb	2219			
<i>F. nucleatum animalis</i> 11_3_2	EAVG_003, BEI HM-56; F. sp. 11_3_2	GIT	Healthy biopsy tissue	ACUO000000000	Broad Institute	2.72 Mb	2.7 Mb	37	336.96 Kb	81	101.81 Kb	2690			
<i>F. nucleatum animalis</i> 7_1	EAVG_002, BEI HM-73; F. sp. 7_1	intestine	Inflamed biopsy tissue (Crohn's patient)	ACDF000000000	Broad Institute	2.51 Mb	2.47 Mb	18	1.45 Mb	95	45.44 Kb	2435	2507720	chromosome	2417
													6309	plasmid	8
<i>F. nucleatum vincentii</i> 3_1_36A2	EAVG_018, BEI HM-187; F. sp. 3_1_36A2	terminal ileum	Inflamed biopsy tissue (Crohn's patient)	ACPU000000000	Broad Institute	2.26 Mb	2.24 Mb	12	1.46 Mb	51	120.19 Kb	2157	2268272		2153
<i>F. nucleatum vincentii</i> 3_1_27	EAVG_014, BEI HM-61; F. sp. 3_1_27	rectum	Healthy biopsy tissue	ADGF000000000	Broad Institute	2.21 M	2.2 Mb	46	1.44 Mb	77	111.96 Kb	2092	1801686	chromosome I	1671
													372621	chromosome II	334
													15921	plasmid	12
<i>F. nucleatum vincentii</i> ATCC 49256		oral		AABF000000000	Kapatral, 2003										
<i>F. nucleatum vincentii</i> 4_1_13	EAVG_012, BEI HM-68; F. sp. 4_1_13	intestine	Healthy biopsy tissue	ACDE000000000	Broad Institute	2.27 Mb	2.27 Mb	7	733.89 Kb	24	556.29 Kb	2168			
<i>F. nucleatum nucleatum</i> ATCC 25586		oral		AE009951	Kapatral, 2002										
<i>F. nucleatum nucleatum</i> ATCC 23726		urogenital	Normal	ADVK000000000	Baylor College of Medicine										
<i>F. nucleatum polymorphum</i> F0401	BEI HM-260	trachea	transtracheal biofilm	ADDB000000000	Broad Institute	2.51 Mb	2.51 Mb	2	2.51 Mb	2	2.51 Mb	2443			
<i>F. nucleatum polymorphum</i> ATCC10953		oral		AARG010000000	Karpathy, 2007										
<i>F. periodonticum</i> 1_1_41FAA	EAVG_022, BEI HM-54; F. sp. 1_1_41FAA	stomach	Healthy stomach biopsy tissue	ADGG000000000	Broad Institute	2.48 Mb	2.45 Mb	31	852.33 Kb	80	96.41 Kb	2436			
<i>F. periodonticum</i> 2_1_31	EAVG_015, BEI HM-42; F. sp. 2_1_31	colon	Inflamed biopsy tissue (Crohn's patient)	ACDC000000000	Broad Institute	2.48 Mb	2.47 Mb	6	808.66 Kb	61	73.1 Kb	2349			
<i>F. periodonticum</i> D10	EAVO_011, BEI HM-41	oral	Oral swab from Crohn's patient	ACIF000000000	Broad Institute	2.57 Mb	2.43 Mb	150	59.75 Kb	429	10.24 Kb	2624			
<i>F. periodonticum</i> ATCC 33693		Oral	Periodontitis	ACJY000000000	Washington University										
<i>F. necrophorum</i> 1_1_36S		terminal ileum	Inflamed biopsy tissue (Crohn's patient)	ADLZ000000000	Broad Institute	2.31 Mb	2.3 Mb	15	743.67 Kb	40	130.13 Kb	3197			
<i>F. necrophorum</i> D12	EAVG_0026, BEI HM-76; F. sp. D12	cecum	Inflamed biopsy tissue (Ulcerative Colitis patient)	ACDG000000000	Broad Institute	1.96 Mb	1.95 Mb	17	174.98 Kb	118	48.57 Kb	1995			
<i>F. gonidiaformans</i> ATCC 25563		tonsil	Actinomycosis-like tonsillar granule	ACET000000000	Broad Institute	1.7 Mb	1.7 Mb	6	376.92 Kb	24	101.5 Kb	1674			
<i>F. gonidiaformans</i> 3_1_5R	EAVG_010, BEI HM-65; F. sp. 3_1_5R	intestine	Inflamed biopsy tissue (Ulcerative Colitis patient)	ACDD000000000	Broad Institute	1.93 Mb	1.85 Mb	28	965.54 Kb	99	44.07 Kb	1930			
<i>F. ulcerans</i> ATCC49185	NCTC 12111	skin	Tropical skin ulcer	ACDH000000000	Broad Institute	3.49 Mb	3.48 Mb	8	1.05 Mb	49	157.31 Kb	3274			
<i>F. ulcerans</i> 12_1B	EAVG_004, BEI HM-57; F. sp. 12_1B	colon	Inflamed biopsy tissue (Crohn's patient)	AGWJ000000000	Broad Institute	3.73 Mb	3.68 Mb	8	660 Kb	38	173.43 Kb	3755			
<i>F. varium</i> ATCC 27725		feces	Human feces	ACIE000000000	Broad Institute	3.3 Mb	3.3 Mb	11	496.14 Kb	39	150.31 Kb	3099			
<i>F. mortiferum</i> ATCC 9817		peri-renal	Peri-renal abscess	ACDB000000000	Broad Institute	2.67 Mb	2.67 Mb	8	754.93 Kb	44	128.6 Kb	2642			
<i>Leptotrichia buccalis</i>		GIT		CP001685	Baylor College of Medicine										

Table Header Definitions

Assembly Size: length of complete genome sequence, calculated by adding lengths of all scaffolds together

Total Contig Length: total length of all the contigs added together

Scaffolds: number of scaffolds/supercontigs contained in a genome assembly

Scaffold N50: length of the scaffold containing the middle base of the genome

Contigs: number of contigs contained in a genome assembly

Contig N50: length of the contig containing the middle base of the genome

References

- Kapatral et al. Genome analysis of *F. nucleatum* sub spp *vincentii* and its comparison with the genome of *F. nucleatum* ATCC 25586. *Genome Res.* 13 (6A): 1180-9, 2003.
 Kapatral et al. Genome analysis of *F. nucleatum* sub spp *vincentii* and its comparison with the genome of *F. nucleatum* ATCC 25586. *Genome Res.* 13 (6A): 1180-9, 2003.
 Karpathy et al. Genome sequence of *Fusobacterium nucleatum* subspecies *polymorphum* - a genetically tractable fusobacterium. *PLoS One.* 7: 3659, 2007.