

**Taxonomic Outline of the Bacteria and Archaea, Release 7.7 March 6, 2007.  
Part 11 – The Bacteria: Phyla “Planctomycetes”, “Chlamydiae”,  
“Spirochaetes”, “Fibrobacteres”, “Acidobacteria”, “Bacteroidetes”,  
“Fusobacteria”, “Verrucomicrobia”, “Dictyoglomi”, “Gemmatomonadetes”,  
and “Lentisphaerae”**

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Phylum “Planctomycetes” N4Lid DOI: 10.1601/nm.7744

Class “Planctomycetacia” N4Lid DOI: 10.1601/nm.7745

Order Planctomycetales<sup>VP</sup> Schlesner and Stackebrandt 1987. N4Lid DOI: 10.1601/nm.7746

Family Planctomycetaceae<sup>VP</sup> Schlesner and Stackebrandt 1987. N4Lid DOI: 10.1601/nm.7747

Genus Planctomyces<sup>AL</sup> Gimesi 1924. N4Lid DOI: 10.1601/nm.7748

*Planctomyces bekefi*<sup>AL</sup> Gimesi 1924. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7749

*Planctomyces brasiliensis*<sup>VP</sup> Schlesner 1990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49424. High-quality 16S rRNA sequence S000005131 (RDP), AJ231190 (Genbank). N4Lid DOI: 10.1601/nm.7750

*Planctomyces guttaeformis*<sup>VP</sup> (ex Hortobágyi 1965) Starr and Schmidt 1984. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7751

*Planctomyces limnophilus*<sup>VP</sup> Hirsch and Müller 1986. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43296. High-quality 16S rRNA sequence S000013732 (RDP), X62911 (Genbank). N4Lid DOI: 10.1601/nm.7752

*Planctomyces maris*<sup>VP</sup> (ex Bauld and Staley 1976) Bauld and Staley 1980. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29201. High-quality 16S rRNA sequence S000008536 (RDP), AJ231184 (Genbank). GOLD ID: Gi01149. GCAT ID: 001363\_GCAT. Entrez genome id: 15662. Sequenced strain: DSM 8797 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7753

*Planctomyces stranskae*<sup>VP</sup> (ex Wawrik 1952) Starr and Schmidt 1984. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7754

Genus Blastopirellula<sup>VP</sup> Schlesner et al. 2004. N4Lid DOI: 10.1601/nm.8514

*Blastopirellula marina*<sup>VP</sup> (Schlesner 1987) Schlesner et al. 2004. <== *Pirella marina* (basonym). Synonym links through N4Lid: 10.1601/ex.7761. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49069. High-quality 16S rRNA sequence S000016660 (RDP), X62912 (Genbank). GOLD ID: Gi00835. GCAT ID: 000780\_GCAT. Entrez genome id: 13488. Sequenced strain: ATCC 49069 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8515

† *Pirellula marina*<sup>VP</sup> (Schlesner 1987) Schlesner and Hirsch 1987. <== *Pirella marina* (basonym). *Blastopirellula marina* (new combination). Synonym links through N4Lid: 10.1601/ex.7761. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49069. High-quality 16S rRNA sequence S000016660 (RDP), X62912 (Genbank). GOLD ID: Gi00835. GCAT ID: 000780\_GCAT. Entrez genome id: 13488. Sequenced strain: ATCC 49069 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7761

† *Pirella marina*<sup>VP</sup> Schlesner 1987. ==> *Pirellula marina* (new combination). Synonym links through N4Lid: 10.1601/ex.7761. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49069. High-quality 16S rRNA sequence S000016660 (RDP), X62912 (Genbank). GOLD ID: Gi00835. GCAT ID: 000780\_GCAT. Entrez genome id: 13488. Sequenced strain: ATCC 49069 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid 10.1601/nm.9144

**Genus *Gemmata*** <sup>VP</sup> Franzmann and Skerman 1985. GOLD ID: Gi00271. GCAT ID: 001098\_GCAT. Entrez genome id: 0. Sequenced strain: Wa1-1 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.7755

*Gemmata obscuriglobus* <sup>VP</sup> Franzmann and Skerman 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 5831. High-quality 16S rRNA sequence S000014262 (RDP), AJ231191 (Genbank). GOLD ID: Gi00270. GCAT ID: 001099\_GCAT. Entrez genome id: 338. Sequenced strain: UQM 2246 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7756

**Genus *Isosphaera*** <sup>VP</sup> Giovannoni et al. 1995. N4Lid DOI: 10.1601/nm.7757

*Isosphaera pallida* <sup>VP</sup> (ex Woronichin 1927) Giovannoni et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43644. High-quality 16S rRNA sequence S000011962 (RDP), AJ231195 (Genbank). N4Lid DOI: 10.1601/nm.7758

**Genus *Pirellula*** <sup>VP</sup> Schlesner and Hirsch 1987. N4Lid DOI: 10.1601/nm.7759

*Pirellula staleyi* <sup>VP</sup> (Schlesner and Hirsch 1984) Schlesner and Hirsch 1987. <== *Pirella staleyi* (basonym). Synonym links through N4Lid: 10.1601/ex.7760. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27377. High-quality 16S rRNA sequence S000436220 (RDP), M34126 (Genbank). N4Lid DOI: 10.1601/nm.7760

† *Pirella staleyi* <sup>VP</sup> Schlesner and Hirsch 1984. ==> *Pirellula staleyi* (new combination). Synonym links through N4Lid: 10.1601/ex.7760. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27377. High-quality 16S rRNA sequence S000436220 (RDP), M34126 (Genbank). N4Lid 10.1601/nm.9123

**Genus † *Pirella*** <sup>VP</sup> Schlesner and Hirsch 1984. Illegitimate name. DOI: 10.1601/nm.9122

**Genus *Rhodopirellula*** <sup>VP</sup> Schlesner et al. 2004. N4Lid 10.1601/nm.8812

*Rhodopirellula baltica* <sup>VP</sup> Schlesner et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 10527. GOLD ID: Gc00141. GCAT ID: 000022\_GCAT. Entrez genome id: 413. Sequenced strain: SH 1 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid 10.1601/nm.8813

**Phylum "*Chlamydiae*"** N4Lid DOI: 10.1601/nm.7762

**Class "*Chlamydiae*"** N4Lid DOI: 10.1601/nm.7763

**Order *Chlamydiales*** <sup>AL</sup> Storz and Page 1971. N4Lid DOI: 10.1601/nm.7764

**Family *Chlamydiaceae*** <sup>AL</sup> Rake 1957. N4Lid DOI: 10.1601/nm.7765

**Genus *Chlamydia*** <sup>AL</sup> Jones et al. 1945. N4Lid DOI: 10.1601/nm.7766

*Chlamydia trachomatis* <sup>AL</sup> (Busacca 1935) Rake 1957. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-571B. High-quality 16S rRNA sequence S000414224 (RDP), D89067 (Genbank). GOLD ID: Gc00017. GCAT ID: 000593\_GCAT. Entrez genome id: 45. Sequenced strain: D/UW-3/CX (serovar D) is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 11 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.7767

*Chlamydia muridarum* <sup>VP</sup> Everett et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-123. High-quality 16S rRNA sequence S000435880 (RDP), D85718 (Genbank). GOLD ID: Gc00028. GCAT ID: 000582\_GCAT. Entrez genome id: 229. Sequenced strain: MoPn / Nigg is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7768

*Chlamydia suis* <sup>VP</sup> Everett et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-1474. High-quality 16S rRNA sequence S000438404 (RDP), U73110 (Genbank). N4Lid DOI: 10.1601/nm.7772

**Genus *Chlamydophila*** <sup>VP</sup> Everett et al. 1999. N4Lid DOI: 10.1601/nm.7773

*Chlamydophila psittaci* <sup>VP</sup> (Lillie 1930) Everett et al. 1999. <== *Chlamydia psittaci* (basonym). Synonym links through N4Lid: 10.1601/ex.7771. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-125. High-quality 16S rRNA sequence S000090246 (RDP), AB001778 (Genbank). GOLD ID: Gi00143. GCAT ID: 000946\_GCAT.

Entrez genome id: 12519. Sequenced strain: 6BC is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7774

† *Chlamydia psittaci*<sup>AL</sup> (Lillie 1930) Page 1968. ==> *Chlamydophila psittaci* (new combination). Synonym links through N4Lid: 10.1601/ex.7771. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-125. High-quality 16S rRNA sequence S000090246 (RDP), AB001778 (Genbank). GOLD ID: Gi00143. GCAT ID: 000946\_GCAT. Entrez genome id: 12519. Sequenced strain: 6BC is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7771

*Chlamydophila abortus*<sup>VP</sup> Everett et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-656. High-quality 16S rRNA sequence S000414096 (RDP), D85709 (Genbank). GOLD ID: Gc00262. GCAT ID: 000347\_GCAT. Entrez genome id: 355. Sequenced strain: S26/3 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7775

*Chlamydophila caviae*<sup>VP</sup> Everett et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-813. High-quality 16S rRNA sequence S000435878 (RDP), D85708 (Genbank). GOLD ID: Gc00129. GCAT ID: 000481\_GCAT. Entrez genome id: 228. Sequenced strain: GPIC is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7776

*Chlamydophila felis*<sup>VP</sup> Everett et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-120. High-quality 16S rRNA sequence S000435877 (RDP), D85701 (Genbank). GOLD ID: Gc00357. GCAT ID: 000253\_GCAT. Entrez genome id: 370. Sequenced strain: Fe/C-56 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7777

*Chlamydophila pecorum*<sup>VP</sup> (Fukushi and Hirai 1992) Everett et al. 1999. <== *Chlamydia pecorum* (basonym). Synonym links through N4Lid: 10.1601/ex.7769. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-628. High-quality 16S rRNA sequence S000414201 (RDP), D88317 (Genbank). GOLD ID: Gi01010. GCAT ID: 000949\_GCAT. Sequenced strain: E58 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 0 (NCBI). N4Lid DOI: 10.1601/nm.7778

† *Chlamydia pecorum*<sup>VP</sup> Fukushi and Hirai 1992. ==> *Chlamydophila pecorum* (new combination). Synonym links through N4Lid: 10.1601/ex.7769. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-628. High-quality 16S rRNA sequence S000414201 (RDP), D88317 (Genbank). GOLD ID: Gi01010. GCAT ID: 000949\_GCAT. Sequenced strain: E58 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 0 (NCBI). N4Lid DOI: 10.1601/nm.7769

*Chlamydophila pneumoniae*<sup>VP</sup> (Grayston et al. 1989) Everett et al. 1999. <== *Chlamydia pneumoniae* (basonym). Synonym links through N4Lid: 10.1601/ex.7770. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-2282. High-quality 16S rRNA sequence S000017485 (RDP), Z49873 (Genbank). GOLD ID: Gc00021. GCAT ID: 000589\_GCAT. Entrez genome id: 248. Sequenced strain: TW-183 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 4 (GOLD) 5 (NCBI). N4Lid DOI: 10.1601/nm.7779

† *Chlamydia pneumoniae*<sup>VP</sup> Grayston et al. 1989. ==> *Chlamydophila pneumoniae* (new combination). Synonym links through N4Lid: 10.1601/ex.7770. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-2282. High-quality 16S rRNA sequence S000017485 (RDP), Z49873 (Genbank). GOLD ID: Gc00027. GCAT ID: 000583\_GCAT. Entrez genome id: 247. Sequenced strain: TW-183 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 3 (GOLD) 3 (NCBI). N4Lid DOI: 10.1601/nm.7770

**Family Parachlamydiaceae**<sup>VP</sup> Everett et al 1999. N4Lid DOI: 10.1601/nm.7780

**Genus Parachlamydia**<sup>VP</sup> Everett et al. 1999. GOLD ID: Gc00185. GCAT ID: 000425\_GCAT. Entrez genome id: 10700. Sequenced strain: UWE25 is from a non-type strain. Genome

sequencing is completed. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.7781

*Parachlamydia acanthamoebae*<sup>VP</sup> Everett et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-1476. High-quality 16S rRNA sequence S000017487 (RDP), Y07556 (Genbank). N4Lid DOI: 10.1601/nm.7782

**Genus *Neochlamydia***<sup>VP</sup> Horn et al. 2001. N4Lid DOI: 10.1601/nm.7783

*Neochlamydia hartmannellae*<sup>VP</sup> Horn et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 50802. High-quality 16S rRNA sequence S000388671 (RDP), AF177275 (Genbank). N4Lid DOI: 10.1601/nm.7784

**Family *Simkaniaceae***<sup>VP</sup> Everett et al 1999. N4Lid DOI: 10.1601/nm.7785

**Genus *Simkania***<sup>VP</sup> Everett et al. 1999. N4Lid DOI: 10.1601/nm.7786

*Simkania negevensis*<sup>VP</sup> Everett et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-1471. High-quality 16S rRNA sequence S000438346 (RDP), U68460 (Genbank). GOLD ID: Gi00771. GCAT ID: 001503\_GCAT. Entrez genome id: 12528. Sequenced strain: Z is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7787

**Genus *Rhabdochlamydia***<sup>C</sup> N4Lid DOI: 10.1601/nm.7788

*Rhabdochlamydia porcellionis*<sup>C</sup> Kostanjsek et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. High-quality 16S rRNA sequence S000403035 (RDP), AY223862 (Genbank). N4Lid DOI: 10.1601/nm.7789

**Family *Waddliaceae***<sup>VP</sup> Rurangirwa et al 1999. N4Lid DOI: 10.1601/nm.7790

**Genus *Waddlia***<sup>VP</sup> Rurangirwa et al. 1999. N4Lid DOI: 10.1601/nm.7791

*Waddlia chondrophila*<sup>VP</sup> Rurangirwa et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-1470. High-quality 16S rRNA sequence S000428010 (RDP), AF042496 (Genbank). N4Lid DOI: 10.1601/nm.7792

**Phylum "*Spirochaetes*"** N4Lid DOI: 10.1601/nm.7793

**Class "*Spirochaetes*"** N4Lid DOI: 10.1601/nm.7794

**Order *Spirochaetales***<sup>AL</sup> Buchanan 1917. N4Lid DOI: 10.1601/nm.7795

**Family *Spirochaetaceae***<sup>AL</sup> Swellengrebel 1907. N4Lid DOI: 10.1601/nm.7796

**Genus *Spirochaeta***<sup>AL</sup> Ehrenberg 1835. N4Lid DOI: 10.1601/nm.7797

*Spirochaeta stenostrepta*<sup>AL</sup> Zuelzer 1912. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25083. High-quality 16S rRNA sequence S000436875 (RDP), M88724 (Genbank). N4Lid DOI: 10.1601/nm.7798

*Spirochaeta africana*<sup>VP</sup> Zhilina et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700263. High-quality 16S rRNA sequence S000003565 (RDP), X93928 (Genbank). N4Lid DOI: 10.1601/nm.7799

*Spirochaeta alkalica*<sup>VP</sup> Zhilina et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700262. High-quality 16S rRNA sequence S000015026 (RDP), X93927 (Genbank). N4Lid DOI: 10.1601/nm.7800

*Spirochaeta americana*<sup>VP</sup> Hoover et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-392. High-quality 16S rRNA sequence S000392573 (RDP), AF373921 (Genbank). N4Lid DOI: 10.1601/nm.7801

*Spirochaeta asiatica*<sup>VP</sup> Zhilina et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700261. High-quality 16S rRNA sequence S000012012 (RDP), X93926 (Genbank). N4Lid DOI: 10.1601/nm.7802

*Spirochaeta aurantia subsp. aurantia*<sup>VP</sup> (ex Vinzent 1926) Canale-Parola 1980. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25082. High-quality 16S rRNA sequence S000436332 (RDP), M57740 (Genbank). N4Lid DOI: 10.1601/nm.7803

*Spirochaeta aurantia subsp. stricta*<sup>VP</sup> Canale-Parola 1984. Source of type material recommended for DOE sponsored genome sequencing by the JGI: J4T. N4Lid DOI: 10.1601/nm.7804

- Spirochaeta bajacaliforniensis*<sup>VP</sup> Fracek and Stolz 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35968. High-quality 16S rRNA sequence S000324036 (RDP), AJ698859 (Genbank). N4Lid 10.1601/nm.8854
- Spirochaeta caldaria*<sup>VP</sup> Pohlschroeder et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51460. N4Lid DOI: 10.1601/nm.7805
- Spirochaeta coccoides*<sup>VP</sup> Dröge et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1237. High-quality 16S rRNA sequence S000352703 (RDP), AJ698092 (Genbank). N4Lid DOI: 10.1601/nm.10201
- Spirochaeta halophila*<sup>AL</sup> Greenberg and Canale-Parola 1977. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29478. High-quality 16S rRNA sequence S000436873 (RDP), M88722 (Genbank). N4Lid DOI: 10.1601/nm.7806
- Spirochaeta isovalerica*<sup>VP</sup> Harwood and Canale-Parola 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33939. High-quality 16S rRNA sequence S000436871 (RDP), M88720 (Genbank). N4Lid DOI: 10.1601/nm.7807
- Spirochaeta litoralis*<sup>VP</sup> (ex Hespell and Canale-Parola 1970) Canale-Parola 1980. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27000. High-quality 16S rRNA sequence S000436874 (RDP), M88723 (Genbank). N4Lid DOI: 10.1601/nm.7808
- Spirochaeta plicatilis*<sup>AL</sup> Ehrenberg 1835. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7809
- Spirochaeta smaragdinae*<sup>VP</sup> Magot et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11293. High-quality 16S rRNA sequence S000438494 (RDP), U80597 (Genbank). N4Lid DOI: 10.1601/nm.7810
- Spirochaeta thermophila*<sup>VP</sup> Aksenova et al. 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700085. N4Lid DOI: 10.1601/nm.7811
- Spirochaeta zuelzeriae*<sup>VP</sup> (ex Veldkamp 1960) Canale-Parola 1980. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19044. High-quality 16S rRNA sequence S000436876 (RDP), M88725 (Genbank). N4Lid DOI: 10.1601/nm.7812
- Genus *Borrelia***<sup>AL</sup> Swellengrebel 1907. N4Lid DOI: 10.1601/nm.7813
- Borrelia anserina*<sup>AL</sup> (Sakharoff 1891) Bergey et al. 1925. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7814
- Borrelia afzelii*<sup>VP</sup> Canica et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51567. High-quality 16S rRNA sequence U000287131 (RDP). GOLD ID: Gc00408. GCAT ID: 000202\_GCAT. Entrez genome id: 17057. Sequenced strain: PKo is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 2 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.7815
- Borrelia baltazardii*<sup>VP</sup> corrig. (ex Karimi et al. 1979) Karimi et al. 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: Bx. N4Lid DOI: 10.1601/nm.7816
- Borrelia brasiliensis*<sup>AL</sup> Davis 1952. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7817
- Borrelia burgdorferi*<sup>VP</sup> Johnson et al. 1984. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35210. High-quality 16S rRNA sequence S000436531 (RDP), M59293 (Genbank). GOLD ID: Gc00012. GCAT ID: 000598\_GCAT. Entrez genome id: 3. Sequenced strain: ATCC 35210 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 3 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7818
- Borrelia caucasica*<sup>AL</sup> (Kandelaki 1945) Davis 1957. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7819
- Borrelia coriaceae*<sup>VP</sup> Johnson et al. 1987. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43381. High-quality 16S rRNA sequence S000437611 (RDP), U42286 (Genbank). N4Lid DOI: 10.1601/nm.7820

- Borrelia crociduræ*<sup>AL</sup> (Leger 1917) Davis 1957. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7821
- Borrelia dugesii*<sup>AL</sup> (Mazzotti 1949) Davis 1957. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7822
- Borrelia duttonii*<sup>AL</sup> (Novy and Knapp 1906) Bergey et al. 1925. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. GOLD ID: Gi01736. GCAT ID: 000682\_GCAT. Entrez genome id: 18231. Sequenced strain: Ly is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7823
- Borrelia garinii*<sup>VP</sup> Baranton et al. 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51383. High-quality 16S rRNA sequence S000528736 (RDP). GOLD ID: Gc00211. GCAT ID: 000399\_GCAT. Entrez genome id: 12554. Sequenced strain: PBi, OspA is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7824
- Borrelia graingeri*<sup>AL</sup> (Heisch 1953) Davis 1957. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7825
- Borrelia harveyi*<sup>AL</sup> (Garnham 1947) Davis 1948. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7826
- Borrelia hermsii*<sup>AL</sup> (Davis 1942) Steinhaus 1946. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. GOLD ID: Gi00085. GCAT ID: 000785\_GCAT. Genome sequence is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.7827
- Borrelia hispanica*<sup>AL</sup> (de Buen 1926) Steinhaus 1946. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7828
- Borrelia japonica*<sup>VP</sup> Kawabata et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51557. High-quality 16S rRNA sequence S000435936 (RDP), L40597 (Genbank). N4Lid DOI: 10.1601/nm.7829
- Borrelia latyschewii*<sup>AL</sup> (Sofiev 1941) Davis 1948. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7830
- Borrelia lusitaniae*<sup>VP</sup> Le Fleche et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 105366. N4Lid DOI: 10.1601/nm.7831
- Borrelia mazzottii*<sup>AL</sup> Davis 1956. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7832
- Borrelia miyamotoi*<sup>VP</sup> Fukunaga et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 9579. High-quality 16S rRNA sequence S000413817 (RDP), D45192 (Genbank). N4Lid DOI: 10.1601/nm.7833
- Borrelia parkeri*<sup>AL</sup> (Davis 1942) Steinhaus 1946. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7834
- Borrelia persica*<sup>AL</sup> (Dschunkowsky 1913) Steinhaus 1946. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7835
- Borrelia recurrentis*<sup>AL</sup> (Lebert 1874) Bergey et al. 1925. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. GOLD ID: Gi01737. GCAT ID: 000683\_GCAT. Entrez genome id: 18233. Sequenced strain: A1 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7836

- Borrelia sinica*<sup>VP</sup> Masuzawa et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 10505. High-quality 16S rRNA sequence S000382581 (RDP), AB022101 (Genbank). N4Lid DOI: 10.1601/nm.7837
- Borrelia spielmanii*<sup>VP</sup> Richter et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16813. High-quality 16S rRNA sequence S000645415 (RDP), DQ133523 (Genbank). N4Lid DOI: 10.1601/nm.10012
- Borrelia tanukii*<sup>VP</sup> Fukunaga et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-127. High-quality 16S rRNA sequence S000413905 (RDP), D67023 (Genbank). N4Lid DOI: 10.1601/nm.7838
- Borrelia theileri*<sup>AL</sup> (Laveran 1903) Bergey et al. 1925. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7839
- Borrelia tillae*<sup>AL</sup> Zumpt and Organ 1961. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7840
- Borrelia turdi*<sup>VP</sup> corrig. Fukunaga et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-126. High-quality 16S rRNA sequence S000435824 (RDP), D67022 (Genbank). N4Lid DOI: 10.1601/nm.7841
- Borrelia turcica*<sup>VP</sup> Güner et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16138. High-quality 16S rRNA sequence S000415046 (RDP), AB111849 (Genbank). N4Lid DOI: 10.1601/nm.8516
- Borrelia turicatae*<sup>AL</sup> (Brumpt 1933) Steinhaus 1946. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. High-quality 16S rRNA sequence S000610971 (RDP). GOLD ID: Gi01738. GCAT ID: 000684\_GCAT. Entrez genome id: 13597. Genome sequence is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7842
- Borrelia valaisiana*<sup>VP</sup> Wang et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 105367. N4Lid DOI: 10.1601/nm.7843
- Borrelia venezuelensis*<sup>AL</sup> (Brumpt 1921) Brumpt 1922. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7844
- Genus *Brevinema***<sup>VP</sup> Defosse et al. 1995. N4Lid DOI: 10.1601/nm.7845
- Brevinema andersonii*<sup>VP</sup> Defosse et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43811. N4Lid DOI: 10.1601/nm.7846
- Genus *Clevelandina***<sup>VP</sup> Bermudes et al. 1988. N4Lid DOI: 10.1601/nm.7847
- Clevelandina reticulitermitidis*<sup>VP</sup> Bermudes et al. 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7848
- Genus *Cristispira***<sup>AL</sup> Gross 1910. N4Lid DOI: 10.1601/nm.7849
- Cristispira pectinis*<sup>AL</sup> Gross 1910. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7850
- Genus *Diplocalyx***<sup>VP</sup> (ex Gharagozlou 1968) Bermudes et al. 1988. N4Lid DOI: 10.1601/nm.7851
- Diplocalyx calotermioidis*<sup>VP</sup> (ex Gharagozlou 1968) Bermudes et al. 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7852
- Genus *Hollandina***<sup>VP</sup> (ex To et al. 1978) Bermudes et al. 1988. N4Lid DOI: 10.1601/nm.7853
- Hollandina pterotermioidis*<sup>VP</sup> (ex To et al. 1978) Bermudes et al. 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7854
- Genus *Pillotina***<sup>VP</sup> (ex Hollande and Gharagozlou 1967) Bermudes et al. 1988. N4Lid DOI: 10.1601/nm.7855
- Pillotina calotermioidis*<sup>VP</sup> (ex Hollande and Gharagozlou 1967) Bermudes et al. 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.7856



**Genus *Treponema***<sup>AL</sup> Schaudinn 1905. N4Lid DOI: 10.1601/nm.7857

***Treponema pallidum***<sup>AL</sup> (Schaudinn and Hoffmann 1905) Schaudinn 1905. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. High-quality 16S rRNA sequence S000569972 (RDP). GOLD ID: Gc00016. GCAT ID: 000594\_GCAT. Entrez genome id: 5. Sequenced strain: Nichols is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 3 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7858

***Treponema amylovorum***<sup>VP</sup> Wyss et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700288. High-quality 16S rRNA sequence S000001187 (RDP), Y09959 (Genbank). N4Lid DOI: 10.1601/nm.7859

***Treponema azotonutricium***<sup>VP</sup> Graber et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-888. High-quality 16S rRNA sequence S000391468 (RDP), AF320287 (Genbank). GOLD ID: Gi01249. GCAT ID: 001617\_GCAT. Genome sequence is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid 10.1601/nm.8893

***Treponema berlinense***<sup>VP</sup> Nordhoff et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-909. High-quality 16S rRNA sequence S000571802 (RDP), AY230217 (Genbank). N4Lid 10.1601/nm.9563

***Treponema brennaborensis***<sup>VP</sup> Schrank et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 12168. High-quality 16S rRNA sequence S000018045 (RDP), Y16568 (Genbank). N4Lid DOI: 10.1601/nm.7860

***Treponema bryantii***<sup>VP</sup> Stanton and Canale-Parola 1980. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33254. High-quality 16S rRNA sequence S000436329 (RDP), M57737 (Genbank). N4Lid DOI: 10.1601/nm.7861

***Treponema denticola***<sup>VP</sup> (ex Flügge 1886) Chan et al. 1993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35405. High-quality 16S rRNA sequence S000387944 (RDP), AF139204 (Genbank). GOLD ID: Gc00174. GCAT ID: 000436\_GCAT. Entrez genome id: 4. Sequenced strain: DSM 14222 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7862

***Treponema lecithinolyticum***<sup>VP</sup> Wyss et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700332. High-quality 16S rRNA sequence S000084627 (RDP), X87139 (Genbank). N4Lid DOI: 10.1601/nm.7865

***Treponema maltophilum***<sup>VP</sup> Wyss et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51939. High-quality 16S rRNA sequence S000010883 (RDP), X87140 (Genbank). N4Lid DOI: 10.1601/nm.7866

***Treponema medium***<sup>VP</sup> Umemoto et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700293. High-quality 16S rRNA sequence S000435847 (RDP), D85437 (Genbank). N4Lid DOI: 10.1601/nm.7867

***Treponema minutum***<sup>AL</sup> Dobell 1912. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIPP 5162. N4Lid DOI: 10.1601/nm.7868

***Treponema paraluisancuniculi***<sup>AL</sup> corrig. (Jacobsthal 1920) Smibert 1974. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. GOLD ID: Gi01874. GCAT ID: 001082\_GCAT. Genome sequence is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.7869

***Treponema parvum***<sup>VP</sup> Wyss et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700770. High-quality 16S rRNA sequence S000390992 (RDP), AF302937 (Genbank). N4Lid DOI: 10.1601/nm.7870

***Treponema pectinovorum***<sup>VP</sup> Smibert and Burmeister 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33768. High-quality 16S rRNA sequence S000436644 (RDP), M71237 (Genbank). N4Lid DOI: 10.1601/nm.7871

***Treponema pertenuis***<sup>AL</sup> (Castellani 1905) Castellani and Chalmers 1910. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. GOLD ID: Gi01871. GCAT ID: 001079\_GCAT. Sequenced strain: CDC2 is from a non-type



strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 3 (GOLD). N4Lid DOI: 10.1601/nm.7872

*Treponema porcinum*<sup>VP</sup> Nordhoff et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-908. High-quality 16S rRNA sequence S000572913 (RDP), AY518274 (Genbank). N4Lid 10.1601/nm.9564

*Treponema primitia*<sup>VP</sup> Graber et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-887. High-quality 16S rRNA sequence S000428743 (RDP), AF093251 (Genbank). GOLD ID: Gi01248. GCAT ID: 001616\_GCAT. Genome sequence is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid 10.1601/nm.8894

*Treponema putidum*<sup>VP</sup> Wyss et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700334. High-quality 16S rRNA sequence S000366454 (RDP), AJ543428 (Genbank). N4Lid 10.1601/nm.8895

*Treponema saccharophilum*<sup>VP</sup> Paster and Canale-Parola 1986. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43261. High-quality 16S rRNA sequence S000436645 (RDP), M71238 (Genbank). N4Lid DOI: 10.1601/nm.7873

*Treponema socranskii subsp. buccale*<sup>VP</sup> Smibert et al. 1984. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35534. High-quality 16S rRNA sequence S000427888 (RDP), AF033305 (Genbank). N4Lid DOI: 10.1601/nm.7875

*Treponema socranskii subsp. paredis*<sup>VP</sup> Smibert et al. 1984. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35535. High-quality 16S rRNA sequence S000427890 (RDP), AF033307 (Genbank). N4Lid DOI: 10.1601/nm.7876

*Treponema socranskii subsp. socranskii*<sup>VP</sup> Smibert et al. 1984. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35534. High-quality 16S rRNA sequence S000427889 (RDP), AF033306 (Genbank). N4Lid DOI: 10.1601/nm.7874

*Treponema succinifaciens*<sup>VP</sup> Cwyk and Canale-Parola 1981. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33096. High-quality 16S rRNA sequence S000436330 (RDP), M57738 (Genbank). N4Lid DOI: 10.1601/nm.7877

**Family "Brachyspiraceae"** N4Lid DOI: 10.1601/nm.7878

**Genus *Brachyspira***<sup>VP</sup> Hovind-Hougen et al. 1983. ≈ *Brachyspira* (later heterotypic synonym), links through 10.1601/nm.7886. N4Lid DOI: 10.1601/nm.7886

*Brachyspira aalborgi*<sup>VP</sup> Hovind-Hougen et al. 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43994. High-quality 16S rRNA sequence S000128282 (RDP), Z22781 (Genbank). N4Lid DOI: 10.1601/nm.7887

*Brachyspira alvinipulli*<sup>VP</sup> Stanton et al. 1998. <==Synonym links through N4Lid: 10.1601/ex.7881. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51933. N4Lid DOI: 10.1601/nm.7888

† *Serpulina alvinipulli*<sup>VP</sup> Stanton et al. 1998. ==> *Brachyspira alvinipulli* (new combination). Synonym links through N4Lid: 10.1601/ex.7881. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51933. N4Lid DOI: 10.1601/nm.7881

*Brachyspira hyodysenteriae*<sup>VP</sup> (Harris et al. 1972) Ochiai et al. 1998. <== *Treponema hyodysenteriae* (basonym). Synonym links through N4Lid: 10.1601/ex.7889. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27164. High-quality 16S rRNA sequence S000436335 (RDP), M57743 (Genbank). N4Lid DOI: 10.1601/nm.7889

† *Serpulina hyodysenteriae*<sup>VP</sup> (Harris et al. 1972) Stanton et al. 1991. <== *Treponema hyodysenteriae* (basonym). *Serpulina hyodysenteriae* (new combination). Synonym links through N4Lid: 10.1601/ex.7889. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27164. High-quality 16S rRNA sequence S000436335 (RDP), M57743 (Genbank). N4Lid 10.1601/nm.9167

† *Serpulina hyodysenteriae*<sup>VP</sup> (Harris et al. 1972) Stanton 1992. <== *Treponema hyodysenteriae* (basonym). *Brachyspira hyodysenteriae* (new combination). Synonym links through N4Lid: 10.1601/ex.7889. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27164. High-quality 16S rRNA sequence S000436335 (RDP), M57743 (Genbank). N4Lid DOI: 10.1601/nm.7880

† *Treponema hyodysenteriae*<sup>AL</sup> Harris et al. 1972. ==> *Serpula hyodysenteriae* (new combination). Synonym links through N4Lid: 10.1601/ex.7889. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27164. N4Lid DOI: 10.1601/nm.7863

*Brachyspira innocens*<sup>VP</sup> (Kinyon and Harris 1979) Ochiai et al. 1998. <== *Treponema innocens* (basonym). Synonym links through N4Lid: 10.1601/ex.7890. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29796. High-quality 16S rRNA sequence S000436336 (RDP), M57744 (Genbank). N4Lid DOI: 10.1601/nm.7890

† *Serpula innocens*<sup>VP</sup> (Kinyon and Harris 1979) Stanton et al. 1991. <== *Treponema innocens* (basonym). *Serpulina innocens* (new combination). Synonym links through N4Lid: 10.1601/ex.7890. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29796. High-quality 16S rRNA sequence S000436336 (RDP), M57744 (Genbank). N4Lid 10.1601/nm.9168

† *Serpulina innocens*<sup>VP</sup> (Kinyon and Harris 1979) Stanton 1992. <== *Treponema innocens* (basonym). *Brachyspira innocens* (new combination). Synonym links through N4Lid: 10.1601/ex.7890. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29796. High-quality 16S rRNA sequence S000436336 (RDP), M57744 (Genbank). N4Lid DOI: 10.1601/nm.7882

† *Treponema innocens*<sup>AL</sup> Kinyon and Harris 1979. ==> *Serpula innocens* (new combination). Synonym links through N4Lid: 10.1601/ex.7890. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29796. High-quality 16S rRNA sequence S000436336 (RDP), M57744 (Genbank). N4Lid DOI: 10.1601/nm.7864

*Brachyspira intermedia*<sup>VP</sup> (Stanton et al. 1997) Hampson and La 2006. <== *Serpulina intermedia* (basonym). Synonym links through N4Lid: 10.1601/ex.7883. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51140. High-quality 16S rRNA sequence S000437290 (RDP), U23033 (Genbank). N4Lid 10.1601/nm.9796

† *Serpulina intermedia*<sup>VP</sup> Stanton et al. 1997. ==> *Brachyspira intermedia* (new combination). Synonym links through N4Lid: 10.1601/ex.7883. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51140. High-quality 16S rRNA sequence S000437290 (RDP), U23033 (Genbank). N4Lid DOI: 10.1601/nm.7883

*Brachyspira murdochii*<sup>VP</sup> (Stanton et al. 1997) Hampson and La 2006. <== *Serpulina murdochii* (basonym). Synonym links through N4Lid: 10.1601/ex.7884. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51284. High-quality 16S rRNA sequence S000406837 (RDP), AY312492 (Genbank). N4Lid 10.1601/nm.9797

† *Serpulina murdochii*<sup>VP</sup> Stanton et al. 1997. ==> *Brachyspira murdochii* (new combination). Synonym links through N4Lid: 10.1601/ex.7884. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51284. High-quality 16S rRNA sequence S000406837 (RDP), AY312492 (Genbank). N4Lid DOI: 10.1601/nm.7884

† *Brachyspira pilosicoli*<sup>VP</sup> (Trott et al. 1996) Ochiai et al. 1998. <== *Serpulina pilosicoli* (basonym). Synonym links through N4Lid: 10.1601/ex.7885. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51139. High-quality 16S rRNA sequence S000398525 (RDP), AY155458 (Genbank). N4Lid DOI: 10.1601/nm.7891

† *Serpulina pilosicoli*<sup>VP</sup> Trott et al. 1996. ==> *Brachyspira pilosicoli* (new combination). Synonym links through N4Lid: 10.1601/ex.7885. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51139. High-quality 16S rRNA sequence S000398525 (RDP), AY155458 (Genbank). N4Lid DOI: 10.1601/nm.7885

**Genus** † *Serpula*<sup>VP</sup> Stanton et al. 1991. Illegitimate name. DOI: 10.1601/nm.9166

**Genus** † *Serpulina*<sup>VP</sup> Stanton 1992. ≈ *Brachyspira* (earlier heterotypic synonym), links through 10.1601/nm.7886. N4Lid DOI: 10.1601/nm.7879

**Family** *Leptospiraceae*<sup>AL</sup> Hovind-Hougen 1979. N4Lid DOI: 10.1601/nm.7892

**Genus** *Leptospira*<sup>AL</sup> Noguchi 1917. N4Lid DOI: 10.1601/nm.7893

*Leptospira interrogans*<sup>AL</sup> (Stimson 1907) Wenyon 1926. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23581. High-quality 16S rRNA sequence S000126674 (RDP), Z12817 (Genbank). GOLD ID: Gc00132. GCAT ID: 000478\_GCAT. Entrez genome id: 52. Sequenced strain: 56601 is from a non-type strain. Genome

sequencing is completed. Number of genomes of this species sequenced 3 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.7894

*Leptospira alexanderi*<sup>VP</sup> Brenner et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700520. N4Lid DOI: 10.1601/nm.7895

*Leptospira biflexa*<sup>AL</sup> (Wolbach and Binger 1914) Noguchi 1918. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23582. High-quality 16S rRNA sequence S000127934 (RDP), Z12821 (Genbank). GOLD ID: Gi01016. GCAT ID: 001165\_GCAT. Genome sequence is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.7896

*Leptospira borgpetersenii*<sup>VP</sup> Yasuda et al. 1987. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43292. High-quality 16S rRNA sequence S000006243 (RDP), Z21630 (Genbank). GOLD ID: Gc00433. GCAT ID: 000177\_GCAT. Entrez genome id: 16146. Sequenced strain: L550 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 2 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.7897

*Leptospira broomii*<sup>VP</sup> Levett et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1107. High-quality 16S rRNA sequence S000444954 (RDP), AY796065 (Genbank). N4Lid 10.1601/nm.9958

*Leptospira fainei*<sup>VP</sup> Perolat et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1109. N4Lid DOI: 10.1601/nm.7898

*Leptospira inadai*<sup>VP</sup> Yasuda et al. 1987. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43289. N4Lid DOI: 10.1601/nm.7899

*Leptospira kirschneri*<sup>VP</sup> Ramadass et al. 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49945. High-quality 16S rRNA sequence S000010399 (RDP), Z21628 (Genbank). N4Lid DOI: 10.1601/nm.7900

*Leptospira meyeri*<sup>VP</sup> Yasuda et al. 1987. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43287. High-quality 16S rRNA sequence S000014982 (RDP), Z21648 (Genbank). N4Lid DOI: 10.1601/nm.7901

*Leptospira noguchii*<sup>VP</sup> Yasuda et al. 1987. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43288. High-quality 16S rRNA sequence S000009649 (RDP), Z21635 (Genbank). N4Lid DOI: 10.1601/nm.7902

*Leptospira santarosai*<sup>VP</sup> Yasuda et al. 1987. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43286. N4Lid DOI: 10.1601/nm.7904

*Leptospira weilii*<sup>VP</sup> Yasuda et al. 1987. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43285. High-quality 16S rRNA sequence S000437130 (RDP), U12676 (Genbank). N4Lid DOI: 10.1601/nm.7905

*Leptospira wolbachii*<sup>VP</sup> Yasuda et al. 1987. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43284. High-quality 16S rRNA sequence S000009653 (RDP), Z21638 (Genbank). N4Lid DOI: 10.1601/nm.7906

**Genus *Turneriella***<sup>VP</sup> Levett et al. 2005. N4Lid 10.1601/nm.9556

*Turneriella parva*<sup>VP</sup> (Hovind-Hougen et al. 1982) Levett et al. 2005. <== *Leptospira parva* (basonym). Synonym links through N4Lid: 10.1601/ex.7903. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1111. High-quality 16S rRNA sequence S000022195 (RDP), Z21636 (Genbank). N4Lid 10.1601/nm.9259

† *Leptospira parva*<sup>VP</sup> Hovind-Hougen et al. 1982. ==> *Turneriella parva* (new combination). Synonym links through N4Lid: 10.1601/ex.7903. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1111. High-quality 16S rRNA sequence S000022195 (RDP), Z21636 (Genbank). N4Lid DOI: 10.1601/nm.7903

**Genus *Leptonema***<sup>VP</sup> Hovind-Hougen 1983. N4Lid DOI: 10.1601/nm.7907

*Leptonema illini*<sup>VP</sup> Hovind-Hougen 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NCTC 11301. High-quality 16S rRNA sequence S000005504 (RDP), Z21632 (Genbank). N4Lid DOI: 10.1601/nm.7908

**Phylum "*Fibrobacteres*"** N4Lid DOI: 10.1601/nm.7909

**Class "*Fibrobacteres*"** N4Lid DOI: 10.1601/nm.7910

**Order "Fibrobacterales"** N4Lid DOI: 10.1601/nm.7911

**Family "Fibrobacteraceae"** N4Lid DOI: 10.1601/nm.7912

**Genus *Fibrobacter***<sup>VP</sup> Montgomery et al. 1988. N4Lid DOI: 10.1601/nm.7913

*Fibrobacter succinogenes subsp. succinogenes*<sup>VP</sup> (Hungate 1950) Montgomery et al. 1988. <==  
*Bacteroides succinogenes* (basonym). Synonym links through N4Lid: 10.1601/ex.7986. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19169. High-quality 16S rRNA sequence S000436597 (RDP), M62689 (Genbank). GOLD ID: Gi00251. GCAT ID: 001055\_GCAT. Entrez genome id: 47. Sequenced strain: S85 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7914

† *Bacteroides succinogenes*<sup>AL</sup> Hungate 1950. ==> *Fibrobacter succinogenes subsp. succinogenes* (new combination). Synonym links through N4Lid: 10.1601/ex.7986. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19169. High-quality 16S rRNA sequence S000436597 (RDP), M62689 (Genbank). GOLD ID: Gi00251. GCAT ID: 001055\_GCAT. Entrez genome id: 47. Sequenced strain: S85 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7986

*Fibrobacter succinogenes subsp. elongatus*<sup>VP</sup> corrig. Montgomery et al. 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43856. N4Lid DOI: 10.1601/nm.7915

*Fibrobacter intestinalis*<sup>VP</sup> Montgomery et al. 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43854. High-quality 16S rRNA sequence S000436603 (RDP), M62695 (Genbank). N4Lid DOI: 10.1601/nm.7916

**Phylum "Acidobacteria"** GOLD ID: Gi01673. GCAT ID: 000612\_GCAT. Sequenced strain: F11 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 2 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7917

**Class "Acidobacteria"** N4Lid DOI: 10.1601/nm.7918

**Order Acidobacteriales**<sup>VP</sup> Cavalier-Smith 2002. N4Lid DOI: 10.1601/nm.7919

**Family "Acidobacteriaceae"** N4Lid DOI: 10.1601/nm.7920

**Genus *Acidobacterium***<sup>VP</sup> Kishimoto et al. 1991. GOLD ID: Gc00380. GCAT ID: 000230\_GCAT. Entrez genome id: 15771. Sequenced strain: Ellin345 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 2 (GOLD). N4Lid DOI: 10.1601/nm.7921

*Acidobacterium capsulatum*<sup>VP</sup> Kishimoto et al. 1991. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51196. High-quality 16S rRNA sequence S000413609 (RDP), D26171 (Genbank). GOLD ID: Gi00004. GCAT ID: 000616\_GCAT. Entrez genome id: 1. Sequenced strain: ATCC 51196 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7922

**Genus *Geothrix***<sup>VP</sup> Coates et al. 1999. N4Lid DOI: 10.1601/nm.7923

*Geothrix fermentans*<sup>VP</sup> Coates et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700665. High-quality 16S rRNA sequence S000437601 (RDP), U41563 (Genbank). GOLD ID: Gi00808. GCAT ID: 001107\_GCAT. Entrez genome id: 13380. Genome sequence is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7924

**Genus *Holophaga***<sup>VP</sup> Liesack et al. 1995. N4Lid DOI: 10.1601/nm.7925

*Holophaga foetida*<sup>VP</sup> Liesack et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 6591. High-quality 16S rRNA sequence S000021309 (RDP), X77215 (Genbank). N4Lid DOI: 10.1601/nm.7926

**Phylum "Bacteroidetes"** N4Lid DOI: 10.1601/nm.7927

**Class "Bacteroidetes"** N4Lid DOI: 10.1601/nm.7928

**Order "Bacteroidales"** N4Lid DOI: 10.1601/nm.7929

**Family *Bacteroidaceae***<sup>AL</sup> Pribram 1933. N4Lid DOI: 10.1601/nm.7930

**Genus *Bacteroides***<sup>AL</sup> Castellani and Chalmers 1919. GOLD ID: Gi01389. GCAT ID: 000768\_GCAT. Sequenced strain: WH2 is from a non-type strain. Genome sequencing is

incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.7931

*Bacteroides fragilis*<sup>AL</sup> (Veillon and Zuber 1898) Castellani and Chalmers 1919. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25285. High-quality 16S rRNA sequence S000015672 (RDP), X83935 (Genbank). GOLD ID: Gc00222. GCAT ID: 000388\_GCAT. Entrez genome id: 13067. Sequenced strain: ATCC 25285 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 4 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.7932

*Bacteroides acidifaciens*<sup>VP</sup> Miyamoto and Itoh 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 10556. High-quality 16S rRNA sequence S000008023 (RDP), AB021164 (Genbank). N4Lid DOI: 10.1601/nm.7933

*Bacteroides caccae*<sup>VP</sup> Johnson et al. 1986. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43185. High-quality 16S rRNA sequence S000014216 (RDP), X83951 (Genbank). GOLD ID: Gi01709. GCAT ID: 000652\_GCAT. Entrez genome id: 18163. Sequenced strain: ATCC 43185 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7939

*Bacteroides capillosus*<sup>AL</sup> (Tissier 1908) Kelly 1957. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29799. High-quality 16S rRNA sequence S000397238 (RDP), AY136666 (Genbank). GOLD ID: Gi01714. GCAT ID: 000657\_GCAT. Entrez genome id: 18173. Sequenced strain: ATCC 29799 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7940

*Bacteroides cellulosolvens*<sup>VP</sup> Murray et al. 1984. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35603. High-quality 16S rRNA sequence S000414642 (RDP), L35517 (Genbank). N4Lid DOI: 10.1601/nm.7942

*Bacteroides coagulans*<sup>AL</sup> Eggerth and Gagnon 1933. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29798. N4Lid DOI: 10.1601/nm.7943

*Bacteroides coprocola*<sup>VP</sup> Kitahara et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17136. High-quality 16S rRNA sequence S000530402 (RDP), AB200224 (Genbank). N4Lid 10.1601/nm.9645

*Bacteroides coprosuis*<sup>VP</sup> Whitehead et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-41113. High-quality 16S rRNA sequence S000002840 (RDP), AF319778 (Genbank). N4Lid 10.1601/nm.9759

*Bacteroides dorei*<sup>VP</sup> Bakir et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17855. High-quality 16S rRNA sequence S000650604 (RDP), AB242142 (Genbank). N4Lid DOI: 10.1601/nm.10176

*Bacteroides eggerthii*<sup>AL</sup> Holdeman and Moore 1974. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27754. High-quality 16S rRNA sequence S000414468 (RDP), L16485 (Genbank). N4Lid DOI: 10.1601/nm.7948

*Bacteroides finegoldii*<sup>VP</sup> Bakir et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17565. High-quality 16S rRNA sequence S000622829 (RDP), AB222699 (Genbank). N4Lid DOI: 10.1601/nm.10054

*Bacteroides galacturonicus*<sup>VP</sup> Jensen and Canale-Parola 1987. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43244. N4Lid DOI: 10.1601/nm.7952

*Bacteroides helcogenes*<sup>VP</sup> Benno et al. 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35417. N4Lid DOI: 10.1601/nm.7955

*Bacteroides intestinalis*<sup>VP</sup> Bakir et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17393. High-quality 16S rRNA sequence S000591184 (RDP), AB214328 (Genbank). N4Lid 10.1601/nm.9855

*Bacteroides massiliensis*<sup>VP</sup> Fenner et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 48901. High-quality 16S rRNA sequence S000546342 (RDP), AY126616 (Genbank). N4Lid 10.1601/nm.9469



*Bacteroides nordii*<sup>VP</sup> Song et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-998. High-quality 16S rRNA sequence S000451794 (RDP), AY608697 (Genbank). N4Lid 10.1601/nm.9390

*Bacteroides ovatus*<sup>AL</sup> Eggerth and Gagnon 1933. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 8483. High-quality 16S rRNA sequence S000014599 (RDP), X83952 (Genbank). GOLD ID: Gi01711. GCAT ID: 000654\_GCAT. Entrez genome id: 18191. Sequenced strain: ATCC 8483 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7973

*Bacteroides pectinophilus*<sup>VP</sup> Jensen and Canale-Parola 1987. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43243. N4Lid DOI: 10.1601/nm.7974

*Bacteroides plebeius*<sup>VP</sup> Kitahara et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17135. High-quality 16S rRNA sequence S000530395 (RDP), AB200217 (Genbank). N4Lid 10.1601/nm.9644

*Bacteroides polypragmatus*<sup>VP</sup> Patel and Breuil 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: GP4. N4Lid DOI: 10.1601/nm.7977

*Bacteroides pyogenes*<sup>VP</sup> Benno et al. 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35418. N4Lid DOI: 10.1601/nm.7980

*Bacteroides salyersiae*<sup>VP</sup> corrig. Song et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-997. High-quality 16S rRNA sequence S000451793 (RDP), AY608696 (Genbank). N4Lid 10.1601/nm.9391

*Bacteroides splanchnicus*<sup>AL</sup> Werner et al. 1975. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29572. High-quality 16S rRNA sequence S000414479 (RDP), L16496 (Genbank). N4Lid DOI: 10.1601/nm.7984

*Bacteroides stercoris*<sup>VP</sup> Johnson et al. 1986. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43183. High-quality 16S rRNA sequence S000010358 (RDP), X83953 (Genbank). N4Lid DOI: 10.1601/nm.7985

*Bacteroides suis*<sup>VP</sup> Benno et al. 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35419. N4Lid DOI: 10.1601/nm.7987

*Bacteroides tectus*<sup>VP</sup> corrig. Love et al. 1986. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43331. N4Lid DOI: 10.1601/nm.7988

*Bacteroides thetaiotaomicron*<sup>AL</sup> (Distaso 1912) Castellani and Chalmers 1919. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29148. High-quality 16S rRNA sequence S000414472 (RDP), L16489 (Genbank). GOLD ID: Gc00126. GCAT ID: 000484\_GCAT. Entrez genome id: 399. Sequenced strain: ATCC 29148 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 3 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7990

*Bacteroides uniformis*<sup>AL</sup> Eggerth and Gagnon 1933. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 8492. High-quality 16S rRNA sequence S000414469 (RDP), L16486 (Genbank). GOLD ID: Gi01712. GCAT ID: 000655\_GCAT. Entrez genome id: 18195. Sequenced strain: ATCC 8492 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7991

*Bacteroides ureolyticus*<sup>AL</sup> Jackson and Goodman 1978. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33387. High-quality 16S rRNA sequence S000414273 (RDP), L04321 (Genbank). N4Lid DOI: 10.1601/nm.7992

*Bacteroides vulgatus*<sup>AL</sup> Eggerth and Gagnon 1933. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 8482. High-quality 16S rRNA sequence S000436356 (RDP), M58762 (Genbank). GOLD ID: Gi00072. GCAT ID: 000771\_GCAT. Entrez genome id: 13378. Sequenced strain: ATCC 8482 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7994

*Bacteroides xyloxyticus*<sup>VP</sup> Scholten-Koerselman et al. 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 3808. N4Lid DOI: 10.1601/nm.7995

**Genus *Anaerophaga*** <sup>VP</sup> Denger et al. 2002. N4Lid DOI: 10.1601/nm.8004

*Anaerophaga thermohalophila* <sup>VP</sup> Denger et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 12881. High-quality 16S rRNA sequence S000022636 (RDP), AJ418048 (Genbank). N4Lid DOI: 10.1601/nm.8005

**Genus *Anaerorhabdus*** <sup>VP</sup> Shah and Collins 1986. N4Lid DOI: 10.1601/nm.8006

*Anaerorhabdus furcosa* <sup>VP</sup> corrig. (Veillon and Zuber 1898) Shah and Collins 1986. <== *Bacteroides furcosus* (basonym). Synonym links through N4Lid: 10.1601/ex.7951. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25662. N4Lid DOI: 10.1601/nm.8007

† *Bacteroides furcosus* <sup>AL</sup> (Veillon and Zuber 1898) Hauduroy et al. 1937. ==> *Anaerorhabdus furcosa* (new combination). Synonym links through N4Lid: 10.1601/ex.7951. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25662. N4Lid DOI: 10.1601/nm.7951

**Genus *Megamonas*** <sup>VP</sup> Shah and Collins 1983. N4Lid DOI: 10.1601/nm.8008

*Megamonas hypermegale* <sup>VP</sup> corrig. (Harrison and Hansen 1963) Shah and Collins 1983. <== *Bacteroides hypermegas* (basonym). Synonym links through N4Lid: 10.1601/ex.7957. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25560. High-quality 16S rRNA sequence S000020429 (RDP), AJ420107 (Genbank). N4Lid DOI: 10.1601/nm.8009

† *Bacteroides hypermegas* <sup>AL</sup> Harrison and Hansen 1963. ==> *Megamonas hypermegale* (new combination). Synonym links through N4Lid: 10.1601/ex.7957. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25560. High-quality 16S rRNA sequence S000020429 (RDP), AJ420107 (Genbank). N4Lid DOI: 10.1601/nm.7957

**Genus *Pontibacter*** <sup>VP</sup> Nedashkovskaya et al. 2005. N4Lid 10.1601/nm.9761

*Pontibacter actiniarum* <sup>VP</sup> Nedashkovskaya et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 23027. High-quality 16S rRNA sequence S000528027 (RDP), AY989908 (Genbank). N4Lid 10.1601/nm.9760

**Family "Rikenellaceae"** N4Lid DOI: 10.1601/nm.8010

**Genus *Rikenella*** <sup>VP</sup> Collins et al. 1985. N4Lid DOI: 10.1601/nm.8011

*Rikenella microfusus* <sup>VP</sup> (Kaneuchi and Mitsuoka 1978) Collins et al. 1985. <== *Bacteroides microfusus* (basonym). Synonym links through N4Lid: 10.1601/ex.7966. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29728. High-quality 16S rRNA sequence S000414481 (RDP), L16498 (Genbank). N4Lid DOI: 10.1601/nm.8012

† *Bacteroides microfusus* <sup>AL</sup> Kaneuchi and Mitsuoka 1978. ==> *Rikenella microfusus* (new combination). Synonym links through N4Lid: 10.1601/ex.7966. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29728. High-quality 16S rRNA sequence S000414481 (RDP), L16498 (Genbank). N4Lid DOI: 10.1601/nm.7966

**Genus *Alistipes*** <sup>VP</sup> Rautio et al. 2003. N4Lid DOI: 10.1601/nm.8013

*Alistipes finegoldii* <sup>VP</sup> Rautio et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 46020. High-quality 16S rRNA sequence S000459001 (RDP), AJ518874 (Genbank). N4Lid DOI: 10.1601/nm.8014

*Alistipes onderdonkii* <sup>VP</sup> Song et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1178. High-quality 16S rRNA sequence S000577392 (RDP), AY974071 (Genbank). N4Lid DOI: 10.1601/nm.10265

*Alistipes putredinis* <sup>VP</sup> (Weinberg et al. 1937) Rautio et al. 2003. <== *Bacteroides putredinis* (basonym). Synonym links through N4Lid: 10.1601/ex.7979. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29800. High-quality 16S rRNA sequence S000414480 (RDP), L16497 (Genbank). N4Lid DOI: 10.1601/nm.8015

† *Bacteroides putredinis* <sup>AL</sup> (Weinberg et al. 1937) Kelly 1957. ==> *Alistipes putredinis* (new combination). Synonym links through N4Lid: 10.1601/ex.7979. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29800. High-quality 16S rRNA sequence S000414480 (RDP), L16497 (Genbank). N4Lid DOI: 10.1601/nm.7979



*Alistipes shahii*<sup>VP</sup> Song et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1179. High-quality 16S rRNA sequence S000577393 (RDP), AY974072 (Genbank). N4Lid DOI: 10.1601/nm.10266

**Genus *Alkaliflexus***<sup>VP</sup> Zhilina et al. 2005. N4Lid 10.1601/nm.9472

*Alkaliflexus imshenetskii*<sup>VP</sup> Zhilina et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15055. High-quality 16S rRNA sequence S000440489 (RDP), AJ784993 (Genbank). N4Lid 10.1601/nm.9471

**Genus *Marinilabilia***<sup>VP</sup> Nakagawa and Yamasato 1996. N4Lid DOI: 10.1601/nm.8016

*Marinilabilia salmonicolor*<sup>VP</sup> (Veldkamp 1961) Nakagawa and Yamasato 1996. <== *Cytophaga salmonicolor* (basonym). Synonym links through N4Lid: 10.1601/ex.8290. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19041. High-quality 16S rRNA sequence S000436589 (RDP), M62422 (Genbank). N4Lid DOI: 10.1601/nm.8017

† *Cytophaga salmonicolor*<sup>AL</sup> Veldkamp 1961. ==> *Marinilabilia salmonicolor* (new combination). Synonym links through N4Lid: 10.1601/ex.8290. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19041. High-quality 16S rRNA sequence S000436589 (RDP), M62422 (Genbank). N4Lid DOI: 10.1601/nm.8290

*Marinilabilia agarovorans*<sup>VP</sup> (Reichenbach 1989) Nakagawa and Yamasato 1996. <== *Cytophaga agarovorans* (basonym). Synonym links through N4Lid: 10.1601/ex.8272. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19043. N4Lid DOI: 10.1601/nm.8018

† *Cytophaga agarovorans*<sup>VP</sup> (ex Veldkamp 1961) Reichenbach 1989. ==> *Marinilabilia agarovorans* (new combination). Synonym links through N4Lid: 10.1601/ex.8272. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19043. N4Lid DOI: 10.1601/nm.8272

**Genus *Petrimonas***<sup>VP</sup> Grabowski et al. 2005. N4Lid 10.1601/nm.9461

*Petrimonas sulfuriphila*<sup>VP</sup> Grabowski et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16547. High-quality 16S rRNA sequence S000441993 (RDP), AY570690 (Genbank). N4Lid 10.1601/nm.9460

**Family "*Porphyromonadaceae*"** N4Lid DOI: 10.1601/nm.8019

**Genus *Porphyromonas***<sup>VP</sup> Shah and Collins 1988. ≈ *Porphyromonas* (later heterotypic synonym), links through 10.1601/nm.8020. N4Lid DOI: 10.1601/nm.8020

*Porphyromonas asaccharolytica*<sup>VP</sup> (Holdeman and Moore 1970) Shah and Collins 1988. <== *Bacteroides asaccharolyticus* (basonym). Synonym links through N4Lid: 10.1601/ex.7935. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25260. High-quality 16S rRNA sequence S000414473 (RDP), L16490 (Genbank). N4Lid DOI: 10.1601/nm.8021

† *Bacteroides asaccharolyticus*<sup>AL</sup> (Holdeman and Moore 1970) Finegold and Barnes 1977. ==> *Porphyromonas asaccharolytica* (new combination). Synonym links through N4Lid: 10.1601/ex.7935. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25260. High-quality 16S rRNA sequence S000414473 (RDP), L16490 (Genbank). N4Lid DOI: 10.1601/nm.7935

*Porphyromonas cangingivalis*<sup>VP</sup> Collins et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700135. High-quality 16S rRNA sequence S000002378 (RDP), X76259 (Genbank). N4Lid DOI: 10.1601/nm.8022

*Porphyromonas canoris*<sup>VP</sup> Love et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 36550. N4Lid DOI: 10.1601/nm.8023

*Porphyromonas cansulci*<sup>VP</sup> Collins et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NCTC 12858. High-quality 16S rRNA sequence S000009680 (RDP), X76260 (Genbank). N4Lid DOI: 10.1601/nm.8024

*Porphyromonas catoniae*<sup>VP</sup> (Moore and Moore 1994) Willems and Collins 1995. <== *Oribaculum catoniae* (basonym). Synonym links through N4Lid: 10.1601/ex.8025. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51270. High-quality 16S rRNA sequence S000013923 (RDP), X82823 (Genbank). N4Lid DOI: 10.1601/nm.8025

† *Oribaculum catoniae*<sup>VP</sup> Moore and Moore 1994. ==> *Porphyromonas catoniae* (new combination). Synonym links through N4Lid: 10.1601/ex.8025. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51270. High-quality 16S rRNA sequence S000013923 (RDP), X82823 (Genbank). N4Lid 10.1601/nm.9182

*Porphyromonas circumdentaria*<sup>VP</sup> Love et al. 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51356. High-quality 16S rRNA sequence S000414545 (RDP), L26102 (Genbank). N4Lid DOI: 10.1601/nm.8026

*Porphyromonas crevioricanis*<sup>VP</sup> Hirasawa and Takada 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 55563. N4Lid DOI: 10.1601/nm.8027

*Porphyromonas endodontalis*<sup>VP</sup> (van Steenberg et al. 1984) Shah and Collins 1988. <== *Bacteroides endodontalis* (basonym). Synonym links through N4Lid: 10.1601/ex.7949. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35406. High-quality 16S rRNA sequence S000414474 (RDP), L16491 (Genbank). N4Lid DOI: 10.1601/nm.8028

† *Bacteroides endodontalis*<sup>VP</sup> van Steenberg et al. 1984. ==> *Porphyromonas endodontalis* (new combination). Synonym links through N4Lid: 10.1601/ex.7949. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35406. High-quality 16S rRNA sequence S000414474 (RDP), L16491 (Genbank). N4Lid DOI: 10.1601/nm.7949

*Porphyromonas gingivalis*<sup>VP</sup> (Coykendall et al. 1980) Shah and Collins 1988. <== *Bacteroides gingivalis* (basonym). Synonym links through N4Lid: 10.1601/ex.7953. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33277. High-quality 16S rRNA sequence S000414475 (RDP), L16492 (Genbank). GOLD ID: Gc00156. GCAT ID: 000454\_GCAT. Entrez genome id: 48. Sequenced strain: W83 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8029

† *Bacteroides gingivalis*<sup>VP</sup> Coykendall et al. 1980. ==> *Porphyromonas gingivalis* (new combination). Synonym links through N4Lid: 10.1601/ex.7953. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33277. High-quality 16S rRNA sequence S000414475 (RDP), L16492 (Genbank). GOLD ID: Gc00156. GCAT ID: 000454\_GCAT. Entrez genome id: 48. Sequenced strain: W83 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7953

*Porphyromonas gingivicanis*<sup>VP</sup> Hirasawa and Takada 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 55562. N4Lid DOI: 10.1601/nm.8030

*Porphyromonas gulae*<sup>VP</sup> Founier et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51700. High-quality 16S rRNA sequence S000389070 (RDP), AF208290 (Genbank). N4Lid DOI: 10.1601/nm.8031

*Porphyromonas levii*<sup>VP</sup> (Johnson and Holdeman 1983) Shah et al. 1995. <== *Bacteroides levii* (basonym). Synonym links through N4Lid: 10.1601/ex.7959. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29147. High-quality 16S rRNA sequence S000414476 (RDP), L16493 (Genbank). N4Lid DOI: 10.1601/nm.8032

† *Bacteroides levii*<sup>VP</sup> (ex Holdeman et al. 1977) Johnson and Holdeman 1983. ==> *Porphyromonas levii* (new combination). Synonym links through N4Lid: 10.1601/ex.7959. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29147. High-quality 16S rRNA sequence S000414476 (RDP), L16493 (Genbank). N4Lid DOI: 10.1601/nm.7959

*Porphyromonas macacae*<sup>VP</sup> (Slots and Genco 1980) Love 1995. <== *Bacteroides melaninogenicus* subsp. *macacae* (basonym). Synonym links through N4Lid: 10.1601/ex.7964. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33141. High-quality 16S rRNA sequence S000414477 (RDP), L16494 (Genbank). N4Lid DOI: 10.1601/nm.8033

† *Bacteroides macacae*<sup>VP</sup> (Slots and Genco 1980) Coykendall et al. 1980. <== *Bacteroides melaninogenicus* subsp. *macacae* (basonym). *Porphyromonas macacae* (new combination). Synonym links through N4Lid: 10.1601/ex.7964. Source of type material recommended for DOE

sponsored genome sequencing by the JGI: ATCC 33141. High-quality 16S rRNA sequence S000414477 (RDP), L16494 (Genbank). N4Lid DOI: 10.1601/nm.7961

† *Bacteroides melaninogenicus subsp. macacae*<sup>VP</sup> Slots and Genco 1980. ==> *Bacteroides macacae* (new combination). Synonym links through N4Lid: 10.1601/ex.7964. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33141. High-quality 16S rRNA sequence S000414477 (RDP), L16494 (Genbank). N4Lid DOI: 10.1601/nm.7964

*Porphyromonas salivosa*<sup>VP</sup> (Love et al. 1987) Love et al. 1992. <== *Bacteroides salivus* (basonym). Synonym links through N4Lid: 10.1601/ex.7983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49407. N4Lid DOI: 10.1601/nm.8034

† *Bacteroides salivus*<sup>VP</sup> Love et al. 1987. ==> *Porphyromonas salivosa* (new combination). Synonym links through N4Lid: 10.1601/ex.7983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49407. N4Lid DOI: 10.1601/nm.7983

*Porphyromonas somerae*<sup>VP</sup> Summanen et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1230. High-quality 16S rRNA sequence S000516011 (RDP), AY968205 (Genbank). N4Lid DOI: 10.1601/nm.10077

*Porphyromonas uenonis*<sup>VP</sup> Finegold et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-906. High-quality 16S rRNA sequence S000441859 (RDP), AY570514 (Genbank). N4Lid 10.1601/nm.9296

**Genus** † *Oribaculum*<sup>VP</sup> Moore and Moore 1994. ≈ *Porphyromonas* (earlier heterotypic synonym). links through 10.1601/nm.8020. N4Lid 10.1601/nm.9179

**Genus** *Dysgonomonas*<sup>VP</sup> Hofstad et al. 2000. N4Lid DOI: 10.1601/nm.8035

*Dysgonomonas gadei*<sup>VP</sup> Hofstad et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-286. High-quality 16S rRNA sequence S000017137 (RDP), Y18530 (Genbank). N4Lid DOI: 10.1601/nm.8036

*Dysgonomonas capnocytophagoideis*<sup>VP</sup> Hofstad et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 17996. N4Lid DOI: 10.1601/nm.8037

*Dysgonomonas mossii*<sup>VP</sup> Lawson et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 43457. High-quality 16S rRNA sequence S000140020 (RDP), AJ319867 (Genbank). N4Lid DOI: 10.1601/nm.8038

**Genus** *Paludibacter*<sup>VP</sup> Ueki et al. 2006. N4Lid 10.1601/nm.9852

*Paludibacter propionicigenes*<sup>VP</sup> Ueki et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17365. High-quality 16S rRNA sequence S000457665 (RDP), AB078842 (Genbank). N4Lid 10.1601/nm.9851

**Genus** *Parabacteroides*<sup>VP</sup> Sakamoto and Benno 2006. N4Lid DOI: 10.1601/nm.10183

*Parabacteroides distasonis*<sup>VP</sup> (Eggerth and Gagnon 1933) Sakamoto and Benno 2006. <== *Bacteroides distasonis* (basonym). Synonym links through N4Lid: 10.1601/ex.7947. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 8503. High-quality 16S rRNA sequence S000436850 (RDP), M86695 (Genbank). GOLD ID: Gi00067. GCAT ID: 000765\_GCAT. Entrez genome id: 13485. Sequenced strain: ATCC 8503 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 0 (NCBI). N4Lid 10.1601/nm.9776

† *Bacteroides distasonis*<sup>AL</sup> Eggerth and Gagnon 1933. ==> *Parabacteroides distasonis* (new combination). Synonym links through N4Lid: 10.1601/ex.7947. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 8503. High-quality 16S rRNA sequence S000436850 (RDP), M86695 (Genbank). GOLD ID: Gi00067. GCAT ID: 000765\_GCAT. Entrez genome id: 13485. Sequenced strain: ATCC 8503 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.7947

*Parabacteroides goldsteinii*<sup>VP</sup> (Song et al. 2006) Sakamoto and Benno 2006. <== *Bacteroides goldsteinii* (basonym). Synonym links through N4Lid: 10.1601/ex.9913. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1180. High-quality 16S rRNA sequence S000577391 (RDP), AY974070 (Genbank). N4Lid 10.1601/nm.9913

† *Bacteroides goldsteinii*<sup>VP</sup> Song et al. 2006. ==> *Parabacteroides goldsteinii* (new combination). Synonym links through N4Lid: 10.1601/ex.9913. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1180. High-quality 16S rRNA sequence S000577391 (RDP), AY974070 (Genbank). N4Lid DOI: 10.1601/nm.10184

*Parabacteroides merdae*<sup>VP</sup> (Johnson et al. 1986) Sakamoto and Benno 2006. <== *Bacteroides merdae* (basonym). Synonym links through N4Lid: 10.1601/ex.7965. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43184. High-quality 16S rRNA sequence S000005829 (RDP), X83954 (Genbank). GOLD ID: Gi01710. GCAT ID: 000653\_GCAT. Entrez genome id: 18193. Sequenced strain: ATCC 43184 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 0 (NCBI). N4Lid 10.1601/nm.9777

† *Bacteroides merdae*<sup>VP</sup> Johnson et al. 1986. ==> *Parabacteroides merdae* (new combination). Synonym links through N4Lid: 10.1601/ex.7965. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43184. High-quality 16S rRNA sequence S000005829 (RDP), X83954 (Genbank). GOLD ID: Gi01710. GCAT ID: 000653\_GCAT. Entrez genome id: 18193. Sequenced strain: ATCC 43184 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.7965

**Genus *Proteiniphilum***<sup>VP</sup> Chen and Dong 2005. N4Lid 10.1601/nm.9747

*Proteiniphilum acetatigenes*<sup>VP</sup> Chen and Dong 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12891. High-quality 16S rRNA sequence S000426025 (RDP), AY742226 (Genbank). N4Lid 10.1601/nm.9746

**Genus *Tannerella***<sup>VP</sup> Sakamoto et al. 2002. N4Lid DOI: 10.1601/nm.8039

*Tannerella forsythensis*<sup>VP</sup> corrig. (Tanner et al. 1986) Sakamoto et al. 2002. <== *Bacteroides forsythus* (basonym). Synonym links through N4Lid: 10.1601/ex.7950. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43037. High-quality 16S rRNA sequence S000414478 (RDP), L16495 (Genbank). GOLD ID: Gi00646. GCAT ID: 000764\_GCAT. Entrez genome id: 319. Sequenced strain: ATCC 43037 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.8040

† *Bacteroides forsythus*<sup>VP</sup> Tanner et al. 1986. ==> *Tannerella forsythensis* (new combination). Synonym links through N4Lid: 10.1601/ex.7950. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43037. High-quality 16S rRNA sequence S000414478 (RDP), L16495 (Genbank). GOLD ID: Gi00646. GCAT ID: 000764\_GCAT. Entrez genome id: 319. Sequenced strain: ATCC 43037 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.7950

**Family "*Prevotellaceae*"** N4Lid DOI: 10.1601/nm.8041

**Genus *Prevotella***<sup>VP</sup> Shah and Collins 1990. N4Lid DOI: 10.1601/nm.8042

*Prevotella melaninogenica*<sup>VP</sup> (Oliver and Wherry 1921) Shah and Collins 1990. <== *Bacteroides melaninogenicus subsp. melaninogenicus* (basonym). Synonym links through N4Lid: 10.1601/ex.7962. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25845. High-quality 16S rRNA sequence S000414452 (RDP), L16469 (Genbank). N4Lid DOI: 10.1601/nm.8043

† *Bacteroides melaninogenicus subsp. melaninogenicus*<sup>AL</sup> (Oliver and Wherry 1921) Holdeman and Moore 1970. ==> *Prevotella melaninogenica* (new combination). Synonym links through N4Lid: 10.1601/ex.7962. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25845. High-quality 16S rRNA sequence S000414452 (RDP), L16469 (Genbank). N4Lid DOI: 10.1601/nm.7962

*Prevotella albensis*<sup>VP</sup> Avgustin et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11370. High-quality 16S rRNA sequence S000007810 (RDP), AJ011683 (Genbank). N4Lid DOI: 10.1601/nm.8044

*Prevotella baroniae*<sup>VP</sup> Downes et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16972. High-quality 16S rRNA sequence S000575568 (RDP), AY840553 (Genbank). N4Lid 10.1601/nm.9558



- Prevotella bergensis*<sup>VP</sup> Downes et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17361. High-quality 16S rRNA sequence S000407967 (RDP), AY350613 (Genbank). N4Lid 10.1601/nm.9956
- Prevotella bivia*<sup>VP</sup> (Holdeman and Johnson 1977) Shah and Collins 1990. <== *Bacteroides bivius* (basonym). Synonym links through N4Lid: 10.1601/ex.7936. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29303. High-quality 16S rRNA sequence S000414458 (RDP), L16475 (Genbank). N4Lid DOI: 10.1601/nm.8045
- † *Bacteroides bivius*<sup>AL</sup> Holdeman and Johnson 1977. ==> *Prevotella bivia* (new combination). Synonym links through N4Lid: 10.1601/ex.7936. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29303. High-quality 16S rRNA sequence S000414458 (RDP), L16475 (Genbank). N4Lid DOI: 10.1601/nm.7936
- "*Prevotella ruminicola* subsp. *brevis*" <==Synonym links through N4Lid: 10.1601/ex.7982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19188. N4Lid DOI: 10.1601/nm.8064
- † *Prevotella brevis*<sup>VP</sup> (Bryant et al. 1958) Avgustin et al. 1997. <== *Bacteroides ruminicola* subsp. *brevis* (basonym). Synonym links through N4Lid: 10.1601/ex.7982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19188. N4Lid DOI: 10.1601/nm.8046
- † *Bacteroides ruminicola* subsp. *brevis*<sup>AL</sup> Bryant et al. 1958. ==> *Prevotella brevis* (new combination). Synonym links through N4Lid: 10.1601/ex.7982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19188. N4Lid DOI: 10.1601/nm.7982
- Prevotella bryantii*<sup>VP</sup> Avgustin et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11371. High-quality 16S rRNA sequence S000003149 (RDP), AJ006457 (Genbank). N4Lid DOI: 10.1601/nm.8047
- Prevotella buccae*<sup>VP</sup> (Holdeman et al. 1982) Shah and Collins 1990. <== *Bacteroides buccae* (basonym). Synonym links through N4Lid: 10.1601/ex.7937. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33574. High-quality 16S rRNA sequence S000414460 (RDP), L16477 (Genbank). N4Lid DOI: 10.1601/nm.8048
- † *Bacteroides capillus*<sup>VP</sup> Kormman and Holt 1982. ≈ *Prevotella buccae* (earlier heterotypic synonym), links through 10.1601/nm.8048. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33690. High-quality 16S rRNA sequence S000414461 (RDP), L16478 (Genbank). N4Lid DOI: 10.1601/nm.7941
- † *Bacteroides pentosaceus*<sup>VP</sup> Shah and Collins 1982. ≈ *Prevotella buccae* (earlier heterotypic synonym), links through 10.1601/nm.8048. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NCDO 2353. N4Lid DOI: 10.1601/nm.7975
- † *Bacteroides buccae*<sup>VP</sup> Holdeman et al. 1982. ==> *Prevotella buccae* (new combination). Synonym links through N4Lid: 10.1601/ex.7937. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33574. High-quality 16S rRNA sequence S000414460 (RDP), L16477 (Genbank). N4Lid DOI: 10.1601/nm.7937
- Prevotella buccalis*<sup>VP</sup> (Shah and Collins 1982) Shah and Collins 1990. <== *Bacteroides buccalis* (basonym). Synonym links through N4Lid: 10.1601/ex.7938. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35310. High-quality 16S rRNA sequence S000414459 (RDP), L16476 (Genbank). N4Lid DOI: 10.1601/nm.8049
- † *Bacteroides buccalis*<sup>VP</sup> Shah and Collins 1982. ==> *Prevotella buccalis* (new combination). Synonym links through N4Lid: 10.1601/ex.7938. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35310. High-quality 16S rRNA sequence S000414459 (RDP), L16476 (Genbank). N4Lid DOI: 10.1601/nm.7938
- Prevotella corporis*<sup>VP</sup> (Johnson and Holdeman 1983) Shah and Collins 1990. <== *Bacteroides corporis* (basonym). Synonym links through N4Lid: 10.1601/ex.7944. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33547. High-quality 16S rRNA sequence S000414448 (RDP), L16465 (Genbank). N4Lid DOI: 10.1601/nm.8050
- † *Bacteroides corporis*<sup>VP</sup> Johnson and Holdeman 1983. ==> *Prevotella corporis* (new combination). Synonym links through N4Lid: 10.1601/ex.7944. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33547. High-quality 16S rRNA sequence S000414448 (RDP), L16465 (Genbank). N4Lid DOI: 10.1601/nm.7944

*Prevotella dentalis*<sup>VP</sup> (Haapasalo et al. 1986) Willems and Collins 1995. <== *Mitsuokella dentalis* (basonym). Synonym links through N4Lid: 10.1601/ex.4404. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49559. High-quality 16S rRNA sequence S000005894 (RDP), X81876 (Genbank). N4Lid DOI: 10.1601/nm.8051

† *Mitsuokella dentalis*<sup>VP</sup> Haapasalo et al. 1986. ==> *Prevotella dentalis* (new combination). Synonym links through N4Lid: 10.1601/ex.4404. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49559. High-quality 16S rRNA sequence S000005894 (RDP), X81876 (Genbank). N4Lid DOI: 10.1601/nm.4404

*Prevotella denticola*<sup>VP</sup> (Shah and Collins 1982) Shah and Collins 1990. <== *Bacteroides denticola* (basonym). Synonym links through N4Lid: 10.1601/ex.7945. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35308. High-quality 16S rRNA sequence S000414450 (RDP), L16467 (Genbank). N4Lid DOI: 10.1601/nm.8052

† *Bacteroides denticola*<sup>VP</sup> Shah and Collins 1982. ==> *Prevotella denticola* (new combination). Synonym links through N4Lid: 10.1601/ex.7945. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35308. High-quality 16S rRNA sequence S000414450 (RDP), L16467 (Genbank). N4Lid DOI: 10.1601/nm.7945

*Prevotella disiens*<sup>VP</sup> (Holdeman and Johnson 1977) Shah and Collins 1990. <== *Bacteroides disiens* (basonym). Synonym links through N4Lid: 10.1601/ex.7946. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29426. High-quality 16S rRNA sequence S000414466 (RDP), L16483 (Genbank). N4Lid DOI: 10.1601/nm.8053

† *Bacteroides disiens*<sup>AL</sup> Holdeman and Johnson 1977. ==> *Prevotella disiens* (new combination). Synonym links through N4Lid: 10.1601/ex.7946. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29426. High-quality 16S rRNA sequence S000414466 (RDP), L16483 (Genbank). N4Lid DOI: 10.1601/nm.7946

*Prevotella enoeca*<sup>VP</sup> Moore et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51261. High-quality 16S rRNA sequence S000000063 (RDP), AJ005635 (Genbank). N4Lid DOI: 10.1601/nm.8054

*Prevotella heparinolytica*<sup>VP</sup> (Okuda et al. 1985) Shah and Collins 1990. <== *Bacteroides heparinolyticus* (basonym). Synonym links through N4Lid: 10.1601/ex.7956. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35895. High-quality 16S rRNA sequence S000414470 (RDP), L16487 (Genbank). N4Lid DOI: 10.1601/nm.8055

† *Bacteroides heparinolyticus*<sup>VP</sup> Okuda et al. 1985. ==> *Prevotella heparinolytica* (new combination). Synonym links through N4Lid: 10.1601/ex.7956. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35895. High-quality 16S rRNA sequence S000414470 (RDP), L16487 (Genbank). N4Lid DOI: 10.1601/nm.7956

*Prevotella intermedia*<sup>VP</sup> (Holdeman and Moore 1970) Shah and Collins 1990. <== *Bacteroides melaninogenicus* subsp. *intermedius* (basonym). Synonym links through N4Lid: 10.1601/ex.7963. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25611. High-quality 16S rRNA sequence S000011989 (RDP), X73965 (Genbank). GOLD ID: Gi00478. GCAT ID: 001366\_GCAT. Entrez genome id: 175. Sequenced strain: 17 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8056

† *Bacteroides intermedius*<sup>VP</sup> (Holdeman and Moore 1970) Johnson and Holdeman 1983. <== *Bacteroides melaninogenicus* subsp. *intermedius* (basonym). *Prevotella intermedia* (new combination). Synonym links through N4Lid: 10.1601/ex.7963. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25611. High-quality 16S rRNA sequence S000011989 (RDP), X73965 (Genbank). GOLD ID: Gi00478. GCAT ID: 001366\_GCAT. Entrez genome id: 175. Sequenced strain: 17 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7958

† *Bacteroides melaninogenicus* subsp. *intermedius*<sup>AL</sup> Holdeman and Moore 1970. ==> *Bacteroides intermedius* (new combination). Synonym links through N4Lid: 10.1601/ex.7963. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25611. High-quality 16S rRNA sequence S000011989 (RDP), X73965 (Genbank). GOLD ID: Gi00478. GCAT ID: 001366\_GCAT. Entrez genome id: 175. Sequenced strain: 17 is from a non-

type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.7963

*Prevotella loescheii*<sup>VP</sup> (Holdeman and Johnson 1982) Shah and Collins 1990. <== *Bacteroides loescheii* (basonym). Synonym links through N4Lid: 10.1601/ex.7960. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15930. High-quality 16S rRNA sequence S000414464 (RDP), L16481 (Genbank). N4Lid DOI: 10.1601/nm.8057

† *Bacteroides loescheii*<sup>VP</sup> Holdeman and Johnson 1982. ==> *Prevotella loescheii* (new combination). Synonym links through N4Lid: 10.1601/ex.7960. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15930. High-quality 16S rRNA sequence S000414464 (RDP), L16481 (Genbank). N4Lid DOI: 10.1601/nm.7960

*Prevotella marshii*<sup>VP</sup> Downes et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16973. High-quality 16S rRNA sequence S000570095 (RDP), AF481227 (Genbank). N4Lid 10.1601/nm.9557

*Prevotella multiformis*<sup>VP</sup> Sakamoto et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16608. High-quality 16S rRNA sequence S000496429 (RDP), AB182483 (Genbank). N4Lid 10.1601/nm.9382

*Prevotella multisaccharivorax*<sup>VP</sup> Sakamoto et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17128. High-quality 16S rRNA sequence S000497367 (RDP), AB200414 (Genbank). N4Lid 10.1601/nm.9639

*Prevotella nigrescens*<sup>VP</sup> Shah and Gharbia 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33563. High-quality 16S rRNA sequence S000414454 (RDP), L16471 (Genbank). N4Lid DOI: 10.1601/nm.8058

*Prevotella oralis*<sup>VP</sup> (Loesche et al. 1964) Shah and Collins 1990. <== *Bacteroides oralis* (basonym). Synonym links through N4Lid: 10.1601/ex.7970. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33269. High-quality 16S rRNA sequence S000414463 (RDP), L16480 (Genbank). N4Lid DOI: 10.1601/nm.8059

† *Bacteroides oralis*<sup>AL</sup> Loesche et al. 1964. ==> *Prevotella oralis* (new combination). Synonym links through N4Lid: 10.1601/ex.7970. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33269. High-quality 16S rRNA sequence S000414463 (RDP), L16480 (Genbank). N4Lid DOI: 10.1601/nm.7970

*Prevotella oris*<sup>VP</sup> (Holdeman et al. 1982) Shah and Collins 1990. <== *Bacteroides oris* (basonym). Synonym links through N4Lid: 10.1601/ex.7971. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33573. High-quality 16S rRNA sequence S000414457 (RDP), L16474 (Genbank). N4Lid DOI: 10.1601/nm.8060

† *Bacteroides oris*<sup>VP</sup> Holdeman et al. 1982. ==> *Prevotella oris* (new combination). Synonym links through N4Lid: 10.1601/ex.7971. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33573. High-quality 16S rRNA sequence S000414457 (RDP), L16474 (Genbank). N4Lid DOI: 10.1601/nm.7971

*Prevotella oulorum*<sup>VP</sup> corrig. (Shah et al. 1985) Shah and Collins 1990. <== *Bacteroides oulorum* (basonym). Synonym links through N4Lid: 10.1601/ex.7972. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43324. High-quality 16S rRNA sequence S000414455 (RDP), L16472 (Genbank). N4Lid DOI: 10.1601/nm.8061

† *Bacteroides oulorum*<sup>VP</sup> Shah et al. 1985. ==> *Prevotella oulorum* (new combination). Synonym links through N4Lid: 10.1601/ex.7972. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43324. High-quality 16S rRNA sequence S000414455 (RDP), L16472 (Genbank). N4Lid DOI: 10.1601/nm.7972

*Prevotella pallens*<sup>VP</sup> Könönen et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700821. High-quality 16S rRNA sequence S000004779 (RDP), Y13105 (Genbank). N4Lid DOI: 10.1601/nm.8062

*Prevotella ruminicola subsp. ruminicola*<sup>VP</sup> (Bryant et al. 1958) Shah and Collins 1990. <== *Bacteroides ruminicola subsp. ruminicola* (basonym). Synonym links through N4Lid: 10.1601/ex.7981. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19189. GOLD ID: Gi00479. GCAT ID: 001367\_GCAT. Entrez genome id: 10619. Sequenced strain: 23 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.8063



† *Bacteroides ruminicola* subsp. *ruminicola*<sup>AL</sup> Bryant et al. 1958. ==> *Prevotella ruminicola* subsp. *ruminicola* (new combination). Synonym links through N4Lid: 10.1601/ex.7981. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19189. GOLD ID: Gi00479. GCAT ID: 001367\_GCAT. Entrez genome id: 10619. Sequenced strain: 23 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 0 (NCBI). N4Lid DOI: 10.1601/nm.7981

*Prevotella salivae*<sup>VP</sup> Sakamoto et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15606. High-quality 16S rRNA sequence S000334739 (RDP), AB108826 (Genbank). N4Lid 10.1601/nm.8787

*Prevotella shahii*<sup>VP</sup> Sakamoto et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15611. High-quality 16S rRNA sequence S000334738 (RDP), AB108825 (Genbank). N4Lid 10.1601/nm.8788

*Prevotella tanneriae*<sup>VP</sup> Moore et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51259. High-quality 16S rRNA sequence S000001977 (RDP), AJ005634 (Genbank). N4Lid DOI: 10.1601/nm.8065

*Prevotella veroralis*<sup>VP</sup> (Watabe et al. 1983) Shah and Collins 1990. <== *Bacteroides veroralis* (basonym). Synonym links through N4Lid: 10.1601/ex.7993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33779. High-quality 16S rRNA sequence S000414456 (RDP), L16473 (Genbank). N4Lid DOI: 10.1601/nm.8066

† *Bacteroides veroralis*<sup>VP</sup> Watabe et al. 1983. ==> *Prevotella veroralis* (new combination). Synonym links through N4Lid: 10.1601/ex.7993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33779. High-quality 16S rRNA sequence S000414456 (RDP), L16473 (Genbank). N4Lid DOI: 10.1601/nm.7993

*Prevotella zoogloformans*<sup>VP</sup> (Weinberg et al. 1937) Shah and Collins 1990. <== *Capsularis zoogloformans* (basonym). Synonym links through N4Lid: 10.1601/ex.8067. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33285. High-quality 16S rRNA sequence S000414471 (RDP), L16488 (Genbank). N4Lid DOI: 10.1601/nm.8067

† *Bacteroides zoogloformans*<sup>VP</sup> corrig. (Weinberg et al. 1937) Cato et al. 1982. <== *Capsularis zoogloformans* (basonym). *Prevotella zoogloformans* (new combination). Synonym links through N4Lid: 10.1601/ex.8067. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33285. High-quality 16S rRNA sequence S000414471 (RDP), L16488 (Genbank). N4Lid DOI: 10.1601/nm.7996

† *Capsularis zoogloformans*<sup>AL</sup> corrig. (Weinberg et al. 1937) Prévot 1938. ==> *Bacteroides zoogloformans* (new combination). Synonym links through N4Lid: 10.1601/ex.8067. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33285. High-quality 16S rRNA sequence S000414471 (RDP), L16488 (Genbank). N4Lid 10.1601/nm.8994

**Genus** † *Capsularis*<sup>AL</sup> Prévot 1938. Unified with *Bacteroides*, links through 10.1601/nm.3684. N4Lid 10.1601/nm.8993

**Genus** *Hallella*<sup>VP</sup> Moore and Moore 1994. N4Lid 10.1601/nm.9180

*Hallella seregens*<sup>VP</sup> Moore and Moore 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51272. High-quality 16S rRNA sequence S000012366 (RDP), X81877 (Genbank). N4Lid 10.1601/nm.9181

**Genus** *Xylanibacter*<sup>VP</sup> Ueki et al. 2006. N4Lid DOI: 10.1601/nm.10297

*Xylanibacter oryzae*<sup>VP</sup> Ueki et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17970. High-quality 16S rRNA sequence S000642011 (RDP), AB078826 (Genbank). N4Lid DOI: 10.1601/nm.10296

**Family** *Incertae sedis 12*<sup>NVP</sup> N4Lid 10.1601/nm.8938

**Genus** *Acetofilamentum*<sup>VP</sup> Dietrich et al. 1989. N4Lid DOI: 10.1601/nm.7997

*Acetofilamentum rigidum*<sup>VP</sup> Dietrich et al. 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 20769. N4Lid DOI: 10.1601/nm.7998

**Genus** *Acetomicrobium*<sup>VP</sup> Soutschek et al. 1985. N4Lid DOI: 10.1601/nm.7999

*Acetomicrobium flavidum*<sup>VP</sup> Soutschek et al. 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43122. N4Lid DOI: 10.1601/nm.8000

*Acetomicrobium faecale*<sup>VP</sup> corrig. Winter et al. 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 20678. N4Lid DOI: 10.1601/nm.8001

**Genus *Acetothermus***<sup>VP</sup> Dietrich et al. 1988. N4Lid DOI: 10.1601/nm.8002

*Acetothermus paucivorans*<sup>VP</sup> Dietrich et al. 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 20768. N4Lid DOI: 10.1601/nm.8003

**Class "*Flavobacteria*"** GOLD ID: Gi00898. GCAT ID: 001620\_GCAT. Entrez genome id: 13604. Sequenced strain: BBFL7 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8068

**Order "*Flavobacteriales*"** GOLD ID: Gi00904. GCAT ID: 001626\_GCAT. Entrez genome id: 13595. Sequenced strain: HTCC2170 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8069

**Family *Flavobacteriaceae***<sup>VP</sup> Reichenbach et al 1992. N4Lid DOI: 10.1601/nm.8070

**Genus *Flavobacterium***<sup>AL</sup> Bergey et al. 1923. N4Lid DOI: 10.1601/nm.8071

*Flavobacterium aquatile*<sup>AL</sup> (Frankland and Frankland 1889) Bergey et al. 1923. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 11947. High-quality 16S rRNA sequence S000013676 (RDP), M62797 (Genbank). N4Lid DOI: 10.1601/nm.8072

*Flavobacterium acidificum*<sup>AL</sup> Steinhaus 1941. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 8366. N4Lid DOI: 10.1601/nm.8073

*Flavobacterium acidurans*<sup>AL</sup> Millar 1973. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27383. N4Lid DOI: 10.1601/nm.8074

*Flavobacterium antarcticum*<sup>VP</sup> Yi et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12383. High-quality 16S rRNA sequence S000503798 (RDP), AY581113 (Genbank). N4Lid 10.1601/nm.9377

*Flavobacterium branchiophilum*<sup>VP</sup> corrig. Wakabayashi et al. 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35035. High-quality 16S rRNA sequence S000413476 (RDP), D14017 (Genbank). N4Lid DOI: 10.1601/nm.8076

*Flavobacterium columnare*<sup>VP</sup> (Bernardet and Grimont 1989) Bernardet et al. 1996. <== *Flexibacter columnaris* (basonym). Synonym links through N4Lid: 10.1601/ex.8253. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23463. High-quality 16S rRNA sequence S000439299 (RDP), D12659 (Genbank). N4Lid DOI: 10.1601/nm.8079

† *Flexibacter columnaris*<sup>VP</sup> (ex Davis 1922) Bernardet and Grimont 1989. ==> *Flavobacterium columnare* (new combination). Synonym links through N4Lid: 10.1601/ex.8253. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23463. High-quality 16S rRNA sequence S000439299 (RDP), D12659 (Genbank). N4Lid DOI: 10.1601/nm.8253

*Flavobacterium daejeonense*<sup>VP</sup> Kim et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17708. High-quality 16S rRNA sequence S000614620 (RDP), DQ222427 (Genbank). N4Lid DOI: 10.1601/nm.10177

*Flavobacterium degerlachei*<sup>VP</sup> Van Trappen et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15718. High-quality 16S rRNA sequence S000263802 (RDP), AJ557886 (Genbank). N4Lid DOI: 10.1601/nm.8081

*Flavobacterium denitrificans*<sup>VP</sup> Horn et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-842. High-quality 16S rRNA sequence S000543873 (RDP), AJ318907 (Genbank). N4Lid 10.1601/nm.9449

*Flavobacterium flevense*<sup>VP</sup> (van der Meulen et al. 1974) Bernardet et al. 1996. <== *Cytophaga flevensis* (basonym). Synonym links through N4Lid: 10.1601/ex.8280. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27944. High-quality 16S rRNA sequence S000436361 (RDP), M58767 (Genbank). N4Lid DOI: 10.1601/nm.8084

† *Cytophaga flevensis*<sup>AL</sup> van der Meulen et al. 1974. ==> *Flavobacterium flevense* (new combination). Synonym links through N4Lid: 10.1601/ex.8280. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27944. High-quality 16S rRNA sequence S000436361 (RDP), M58767 (Genbank). N4Lid DOI: 10.1601/nm.8280

*Flavobacterium frigidarium*<sup>VP</sup> Humphry et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700810. High-quality 16S rRNA sequence S000388383 (RDP), AF162266 (Genbank). N4Lid DOI: 10.1601/nm.8085

*Flavobacterium frigidimaris*<sup>VP</sup> Nogi et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15937. High-quality 16S rRNA sequence S000614621 (RDP), DQ222428 (Genbank). N4Lid 10.1601/nm.9651

*Flavobacterium frigoris*<sup>VP</sup> Van Trappen et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15719. High-quality 16S rRNA sequence S000264514 (RDP), AJ557887 (Genbank). N4Lid DOI: 10.1601/nm.8086

*Flavobacterium fryxellicola*<sup>VP</sup> Van Trappen et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108325. High-quality 16S rRNA sequence S000539636 (RDP), AJ811961 (Genbank). N4Lid 10.1601/nm.9379

*Flavobacterium gelidilacus*<sup>VP</sup> Van Trappen et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15343. High-quality 16S rRNA sequence S000145631 (RDP), AJ440996 (Genbank). N4Lid DOI: 10.1601/nm.8087

*Flavobacterium gillisiae*<sup>VP</sup> McCammon and Bowman 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ACAM 601. N4Lid DOI: 10.1601/nm.8088

*Flavobacterium granuli*<sup>VP</sup> Aslam et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: KCTC 12201. High-quality 16S rRNA sequence S000496376 (RDP), AB180738 (Genbank). N4Lid 10.1601/nm.9378

*Flavobacterium hibernum*<sup>VP</sup> McCammon et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51468. High-quality 16S rRNA sequence S000435923 (RDP), L39067 (Genbank). N4Lid DOI: 10.1601/nm.8093

*Flavobacterium hydatis*<sup>VP</sup> Bernardet et al. 1996. <== *Cytophaga aquatilis* (basonym). Synonym links through N4Lid: 10.1601/ex.8274. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29551. High-quality 16S rRNA sequence S000436358 (RDP), M58764 (Genbank). N4Lid DOI: 10.1601/nm.8094

† *Cytophaga aquatilis*<sup>AL</sup> Strohl and Tait 1978. ==> *Flavobacterium hydatis* (new combination). Synonym links through N4Lid: 10.1601/ex.8274. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29551. High-quality 16S rRNA sequence S000436358 (RDP), M58764 (Genbank). N4Lid DOI: 10.1601/nm.8274

*Flavobacterium johnsoniae*<sup>VP</sup> corrig. (Stanier 1947) Bernardet et al. 1996. <== *Cytophaga johnsonae* (basonym). Synonym links through N4Lid: 10.1601/ex.8282. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 17061. High-quality 16S rRNA sequence S000436431 (RDP), M59051 (Genbank). GOLD ID: Gi00942. GCAT ID: 001056\_GCAT. Entrez genome id: 16082. Sequenced strain: ATCC 17061 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8097

† *Cytophaga johnsonae*<sup>AL</sup> Stanier 1947. ==> *Flavobacterium johnsoniae* (new combination). Synonym links through N4Lid: 10.1601/ex.8282. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 17061. High-quality 16S rRNA sequence S000436431 (RDP), M59051 (Genbank). GOLD ID: Gi00942. GCAT ID: 001056\_GCAT. Entrez genome id: 16082. Sequenced strain: ATCC 17061 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8282

*Flavobacterium limicola*<sup>VP</sup> Tamaki et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15094. High-quality 16S rRNA sequence S000121350 (RDP), AB075230 (Genbank). N4Lid DOI: 10.1601/nm.8098

*Flavobacterium micromati*<sup>VP</sup> Van Trappen et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108161. High-quality 16S rRNA sequence S000263970 (RDP), AJ557888 (Genbank). N4Lid DOI: 10.1601/nm.8101

*Flavobacterium mizutaii*<sup>VP</sup> (Yabuuchi et al. 1983) Holmes et al. 1988. <== *Sphingobacterium mizutaii* (basonym). Synonym links through N4Lid: 10.1601/ex.8228. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33299. High-quality 16S rRNA sequence S000436388 (RDP), M58796 (Genbank). N4Lid DOI: 10.1601/nm.8102

† *Spingobacterium mizutaii*<sup>VP</sup> corrig. Yabuuchi et al. 1983. ==> *Flavobacterium mizutaii* (new combination). Synonym links through N4Lid: 10.1601/ex.8228. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33299. High-quality 16S rRNA sequence S000436388 (RDP), M58796 (Genbank). N4Lid DOI: 10.1601/nm.8228

*Flavobacterium oceanosedimentum*<sup>AL</sup> Carty and Litchfield 1978. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 31317. N4Lid DOI: 10.1601/nm.8104

*Flavobacterium omnivorum*<sup>VP</sup> Zhu et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11313. High-quality 16S rRNA sequence S000394137 (RDP), AF433174 (Genbank). N4Lid DOI: 10.1601/nm.8107

*Flavobacterium pectinovorum*<sup>VP</sup> (Reichenbach 1989) Bernardet et al. 1996. <== *Cytophaga pectinovora* (basonym). Synonym links through N4Lid: 10.1601/ex.8287. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19366. High-quality 16S rRNA sequence S000643553 (RDP), AM230490 (Genbank). N4Lid DOI: 10.1601/nm.8108

† *Cytophaga pectinovora*<sup>VP</sup> (ex Dorey 1959) Reichenbach 1989. ==> *Flavobacterium pectinovorum* (new combination). Synonym links through N4Lid: 10.1601/ex.8287. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19366. High-quality 16S rRNA sequence S000643553 (RDP), AM230490 (Genbank). N4Lid DOI: 10.1601/nm.8287

*Flavobacterium psychrolimnae*<sup>VP</sup> Van Trappen et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108326. High-quality 16S rRNA sequence S000539443 (RDP), AJ585428 (Genbank). N4Lid 10.1601/nm.9380

*Flavobacterium psychrophilum*<sup>VP</sup> (Bernardet and Grimont 1989) Bernardet et al. 1996. <== *Flexibacter psychrophilus* (basonym). Synonym links through N4Lid: 10.1601/ex.8288. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49418. GOLD ID: Gi00252. GCAT ID: 001057\_GCAT. Entrez genome id: 13227. Genome sequence is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8109

† *Cytophaga psychrophila*<sup>VP</sup> (ex Borg 1960) Reichenbach 1989. <== *Flexibacter psychrophilus* (basonym). *Flavobacterium psychrophilum* (new combination). Synonym links through N4Lid: 10.1601/ex.8288. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49418. N4Lid DOI: 10.1601/nm.8288

† *Flexibacter psychrophilus*<sup>VP</sup> (ex Borg 1960) Bernardet and Grimont 1989. ==> *Cytophaga psychrophila* (new combination). Synonym links through N4Lid: 10.1601/ex.8288. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49418. N4Lid DOI: 10.1601/nm.8261

*Flavobacterium resinovorum*<sup>AL</sup> Delaporte and Daste 1956. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33545. N4Lid DOI: 10.1601/nm.8110

† *Cytophaga saccharophila*<sup>VP</sup> (ex Agbo and Moss 1979) Reichenbach 1989. ==> *Flavobacterium saccharophilum* (new combination). Synonym links through N4Lid: 10.1601/ex.8289. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49530. High-quality 16S rRNA sequence S000643554 (RDP), AM230491 (Genbank). N4Lid DOI: 10.1601/nm.8289

*Flavobacterium saccharophilum*<sup>VP</sup> (Reichenbach 1989) Bernardet et al. 1996. <== *Cytophaga saccharophila* (basonym). Synonym links through N4Lid: 10.1601/ex.8289. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49530. High-quality 16S rRNA sequence S000643554 (RDP), AM230491 (Genbank). N4Lid DOI: 10.1601/nm.8111

*Flavobacterium saliperosum*<sup>VP</sup> Wang et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 13331. High-quality 16S rRNA sequence S000541649 (RDP), DQ021903 (Genbank). N4Lid 10.1601/nm.9912

*Flavobacterium segetis*<sup>VP</sup> Yi and Chun 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12385. High-quality 16S rRNA sequence S000573257 (RDP), AY581115 (Genbank). N4Lid DOI: 10.1601/nm.10116



- Flavobacterium soli*<sup>VP</sup> Yoon et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108840. High-quality 16S rRNA sequence S000603878 (RDP), DQ178976 (Genbank). N4Lid DOI: 10.1601/nm.10061
- Flavobacterium succinicans*<sup>VP</sup> (Reichenbach 1989) Bernardet et al. 1996. <== *Cytophaga succinicans* (basonym). Synonym links through N4Lid: 10.1601/ex.8291. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-619. High-quality 16S rRNA sequence S000643555 (RDP), AM230492 (Genbank). N4Lid DOI: 10.1601/nm.8115
- † *Cytophaga succinicans*<sup>VP</sup> (ex Anderson and Ordal 1961) Reichenbach 1989. ==>  
*Flavobacterium succinicans* (new combination). Synonym links through N4Lid: 10.1601/ex.8291. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-619. High-quality 16S rRNA sequence S000643555 (RDP), AM230492 (Genbank). N4Lid DOI: 10.1601/nm.8291
- Flavobacterium suncheonense*<sup>VP</sup> Kim et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17707. N4Lid DOI: 10.1601/nm.10178
- Flavobacterium tegetincola*<sup>VP</sup> McCammon and Bowman 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ACAM 602. N4Lid DOI: 10.1601/nm.8116
- Flavobacterium thermophilum*<sup>VP</sup> Loginova and Egorova 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: VKM 1325. N4Lid DOI: 10.1601/nm.8118
- Flavobacterium weaverense*<sup>VP</sup> Yi and Chun 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12384. High-quality 16S rRNA sequence S000573256 (RDP), AY581114 (Genbank). N4Lid DOI: 10.1601/nm.10115
- Flavobacterium xanthum*<sup>VP</sup> (ex Inoue and Komagata 1976) McCammon and Bowman 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: IFO 14972. High-quality 16S rRNA sequence S000427861 (RDP), AF030380 (Genbank). N4Lid DOI: 10.1601/nm.8120
- Flavobacterium xinjiangense*<sup>VP</sup> Zhu et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11314. High-quality 16S rRNA sequence S000394136 (RDP), AF433173 (Genbank). N4Lid DOI: 10.1601/nm.8121
- Genus *Aequorivita***<sup>VP</sup> Bowman and Nichols 2002. N4Lid DOI: 10.1601/nm.8123
- Aequorivita antarctica*<sup>VP</sup> Bowman and Nichols 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14231. High-quality 16S rRNA sequence S000434562 (RDP), AY027802 (Genbank). N4Lid DOI: 10.1601/nm.8124
- Aequorivita crocea*<sup>VP</sup> Bowman and Nichols 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14293. High-quality 16S rRNA sequence S000434566 (RDP), AY027806 (Genbank). N4Lid DOI: 10.1601/nm.8125
- Aequorivita lipolytica*<sup>VP</sup> Bowman and Nichols 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14236. High-quality 16S rRNA sequence S000434565 (RDP), AY027805 (Genbank). N4Lid DOI: 10.1601/nm.8126
- Aequorivita sublithincola*<sup>VP</sup> Bowman and Nichols 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14238. High-quality 16S rRNA sequence S000388543 (RDP), AF170749 (Genbank). N4Lid DOI: 10.1601/nm.8127
- Genus *Algibacter***<sup>VP</sup> Nedashkovskaya et al. 2004. N4Lid DOI: 10.1601/nm.8447
- Algibacter lectus*<sup>VP</sup> Nedashkovskaya et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15365. High-quality 16S rRNA sequence S000500418 (RDP), AY187689 (Genbank). N4Lid DOI: 10.1601/nm.8448
- Genus *Arenibacter***<sup>VP</sup> Ivanova et al. 2001. N4Lid DOI: 10.1601/nm.8128
- Arenibacter latericius*<sup>VP</sup> Ivanova et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 106861. High-quality 16S rRNA sequence S000428099 (RDP), AF052742 (Genbank). N4Lid DOI: 10.1601/nm.8129
- Arenibacter certesii*<sup>VP</sup> Nedashkovskaya et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 48006. High-quality 16S rRNA sequence S000368220 (RDP), AY271622 (Genbank). N4Lid DOI: 10.1601/nm.8475

*Arenibacter palladensis*<sup>VP</sup> Nedashkovskaya et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108849. High-quality 16S rRNA sequence S000530909 (RDP), AJ575643 (Genbank). N4Lid 10.1601/nm.9856

*Arenibacter troitsensis*<sup>VP</sup> Nedashkovskaya et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11736. High-quality 16S rRNA sequence S000384841 (RDP), AB080771 (Genbank). N4Lid DOI: 10.1601/nm.8130

**Genus *Bergeyella***<sup>VP</sup> Vandamme et al. 1994. N4Lid DOI: 10.1601/nm.8131

*Bergeyella zoohelcum*<sup>VP</sup> (Holmes et al. 1987) Vandamme et al. 1994. <== *Weeksellia zoohelcum* (basonym). Synonym links through N4Lid: 10.1601/ex.8204. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43767. High-quality 16S rRNA sequence S000436903 (RDP), M93153 (Genbank). N4Lid DOI: 10.1601/nm.8132

† *Weeksellia zoohelcum*<sup>VP</sup> Holmes et al. 1987. ==> *Bergeyella zoohelcum* (new combination). Synonym links through N4Lid: 10.1601/ex.8204. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43767. High-quality 16S rRNA sequence S000436903 (RDP), M93153 (Genbank). N4Lid DOI: 10.1601/nm.8204

**Genus *Bizionia***<sup>VP</sup> Nedashkovskaya et al. 2005. N4Lid DOI: 10.1601/nm.8512

*Bizionia paragorgiae*<sup>VP</sup> Nedashkovskaya et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22571. High-quality 16S rRNA sequence S000475776 (RDP), AY651070 (Genbank). N4Lid DOI: 10.1601/nm.8513

*Bizionia algorithergicola*<sup>VP</sup> Bowman and Nichols 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108533. High-quality 16S rRNA sequence S000574865 (RDP), AY694003 (Genbank). N4Lid 10.1601/nm.9549

*Bizionia gelidisalsuginis*<sup>VP</sup> Bowman and Nichols 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108536. High-quality 16S rRNA sequence S000574866 (RDP), AY694004 (Genbank). N4Lid 10.1601/nm.9548

*Bizionia myxarmorum*<sup>VP</sup> Bowman and Nichols 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108535. High-quality 16S rRNA sequence S000574864 (RDP), AY694002 (Genbank). N4Lid 10.1601/nm.9550

*Bizionia saleffrena*<sup>VP</sup> Bowman and Nichols 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108534. High-quality 16S rRNA sequence S000574867 (RDP), AY694005 (Genbank). N4Lid 10.1601/nm.9547

**Genus *Capnocytophaga***<sup>VP</sup> Leadbetter et al. 1982. N4Lid DOI: 10.1601/nm.8133

*Capnocytophaga ochracea*<sup>VP</sup> (Prévot et al. 1956) Leadbetter et al. 1982. <== *Bacteroides ochraceus* (basonym). Synonym links through N4Lid: 10.1601/ex.7969. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27872. High-quality 16S rRNA sequence S000437593 (RDP), U41350 (Genbank). N4Lid DOI: 10.1601/nm.8134

† *Bacteroides ochraceus*<sup>AL</sup> (Prévot et al. 1956) Holdeman and Moore 1972. ==> *Capnocytophaga ochracea* (new combination). Synonym links through N4Lid: 10.1601/ex.7969. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27872. High-quality 16S rRNA sequence S000437593 (RDP), U41350 (Genbank). N4Lid DOI: 10.1601/nm.7969

*Capnocytophaga canimorsus*<sup>VP</sup> Brenner et al. 1990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35979. High-quality 16S rRNA sequence S000414438 (RDP), L14637 (Genbank). N4Lid DOI: 10.1601/nm.8135

*Capnocytophaga cynodegmi*<sup>VP</sup> Brenner et al. 1990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49044. High-quality 16S rRNA sequence S000001064 (RDP), X97245 (Genbank). N4Lid DOI: 10.1601/nm.8136

*Capnocytophaga gingivalis*<sup>VP</sup> Leadbetter et al. 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33624. High-quality 16S rRNA sequence S000000218 (RDP), X67608 (Genbank). N4Lid DOI: 10.1601/nm.8137

*Capnocytophaga granulosa*<sup>VP</sup> Yamamoto et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51502. High-quality 16S rRNA sequence S000002540 (RDP), X97248 (Genbank). N4Lid DOI: 10.1601/nm.8138

- Capnocytophaga haemolytica*<sup>VP</sup> Yamamoto et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51501. High-quality 16S rRNA sequence S000003709 (RDP), X97247 (Genbank). N4Lid DOI: 10.1601/nm.8139
- Capnocytophaga sputigena*<sup>VP</sup> Leadbetter et al. 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33612. High-quality 16S rRNA sequence S000022403 (RDP), X67609 (Genbank). N4Lid DOI: 10.1601/nm.8140
- Genus *Cellulophaga***<sup>VP</sup> Johansen et al. 1999. GOLD ID: Gi00837. GCAT ID: 000850\_GCAT. Entrez genome id: 13544. Sequenced strain: MED134 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.8141
- Cellulophaga lytica*<sup>VP</sup> (Lewin 1969) Johansen et al. 1999. <== *Cytophaga lytica* (basonym). Synonym links through N4Lid: 10.1601/ex.8284. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23178. High-quality 16S rRNA sequence S000439306 (RDP), D12666 (Genbank). N4Lid DOI: 10.1601/nm.8142
- † *Cytophaga lytica*<sup>AL</sup> Lewin 1969. ==> *Cellulophaga lytica* (new combination). Synonym links through N4Lid: 10.1601/ex.8284. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23178. High-quality 16S rRNA sequence S000439306 (RDP), D12666 (Genbank). N4Lid DOI: 10.1601/nm.8284
- Cellulophaga algicola*<sup>VP</sup> Bowman 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ACAM 630. High-quality 16S rRNA sequence S000386854 (RDP), AF001366 (Genbank). N4Lid DOI: 10.1601/nm.8143
- Cellulophaga baltica*<sup>VP</sup> Johansen et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700862. High-quality 16S rRNA sequence S000022753 (RDP), AJ005972 (Genbank). N4Lid DOI: 10.1601/nm.8144
- Cellulophaga fucicola*<sup>VP</sup> Johansen et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700863. High-quality 16S rRNA sequence S000019609 (RDP), AJ005973 (Genbank). N4Lid DOI: 10.1601/nm.8145
- Cellulophaga pacifica*<sup>VP</sup> Nedashkovskaya et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11735. High-quality 16S rRNA sequence S000277252 (RDP), AB100840 (Genbank). N4Lid DOI: 10.1601/nm.8146
- Genus *Chryseobacterium***<sup>VP</sup> Vandamme et al. 1994. N4Lid DOI: 10.1601/nm.8147
- Chryseobacterium gleum*<sup>VP</sup> (Holmes et al. 1984) Vandamme et al. 1994. <== *Flavobacterium gleum* (basonym). Synonym links through N4Lid: 10.1601/ex.8089. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35910. High-quality 16S rRNA sequence S000436366 (RDP), M58772 (Genbank). N4Lid DOI: 10.1601/nm.8148
- † *Flavobacterium gleum*<sup>VP</sup> Holmes et al. 1984. ==> *Chryseobacterium gleum* (new combination). Synonym links through N4Lid: 10.1601/ex.8089. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35910. High-quality 16S rRNA sequence S000436366 (RDP), M58772 (Genbank). N4Lid DOI: 10.1601/nm.8089
- Chryseobacterium balustinum*<sup>VP</sup> (Harrison 1929) Vandamme et al. 1994. <== *Flavobacterium balustinum* (basonym). Synonym links through N4Lid: 10.1601/ex.8075. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33487. High-quality 16S rRNA sequence S000436365 (RDP), M58771 (Genbank). N4Lid DOI: 10.1601/nm.8149
- † *Flavobacterium balustinum*<sup>AL</sup> Harrison 1929. ==> *Chryseobacterium balustinum* (new combination). Synonym links through N4Lid: 10.1601/ex.8075. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33487. High-quality 16S rRNA sequence S000436365 (RDP), M58771 (Genbank). N4Lid DOI: 10.1601/nm.8075
- Chryseobacterium daecheongense*<sup>VP</sup> Kim et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15235. High-quality 16S rRNA sequence S000470977 (RDP), AJ457206 (Genbank). N4Lid DOI: 10.1601/nm.8542
- Chryseobacterium defluvii*<sup>VP</sup> Kämpfer et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14219. High-quality 16S rRNA sequence S000115513 (RDP), AJ309324 (Genbank). N4Lid DOI: 10.1601/nm.8150
- Chryseobacterium formosense*<sup>VP</sup> Young et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 49271. High-quality 16S rRNA sequence S000352767 (RDP), AJ715377 (Genbank). N4Lid DOI: 10.1601/nm.8543



*Chryseobacterium hispanicum*<sup>VP</sup> Gallego et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 13554. High-quality 16S rRNA sequence S000643289 (RDP), AM159183 (Genbank). N4Lid DOI: 10.1601/nm.10173

*Chryseobacterium indologenes*<sup>VP</sup> (Yabuuchi et al. 1983) Vandamme et al. 1994. <==  
*Flavobacterium indologenes* (basonym). Synonym links through N4Lid: 10.1601/ex.8095. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29897. High-quality 16S rRNA sequence S000436367 (RDP), M58773 (Genbank). N4Lid DOI: 10.1601/nm.8151

† *Flavobacterium indologenes*<sup>VP</sup> Yabuuchi et al. 1983. ==> *Chryseobacterium indologenes* (new combination). Synonym links through N4Lid: 10.1601/ex.8095. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29897. High-quality 16S rRNA sequence S000436367 (RDP), M58773 (Genbank). N4Lid DOI: 10.1601/nm.8095

*Chryseobacterium indoltheticum*<sup>VP</sup> (Campbell and Williams 1951) Vandamme et al. 1994. <==  
*Flavobacterium indoltheticum* (basonym). Synonym links through N4Lid: 10.1601/ex.8096. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27950. High-quality 16S rRNA sequence S000436368 (RDP), M58774 (Genbank). N4Lid DOI: 10.1601/nm.8152

† *Flavobacterium indoltheticum*<sup>AL</sup> Campbell and Williams 1951. ==> *Chryseobacterium indoltheticum* (new combination). Synonym links through N4Lid: 10.1601/ex.8096. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27950. High-quality 16S rRNA sequence S000436368 (RDP), M58774 (Genbank). N4Lid DOI: 10.1601/nm.8096

*Chryseobacterium joostei*<sup>VP</sup> Hugo et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 46665. High-quality 16S rRNA sequence S000134119 (RDP), AJ271010 (Genbank). N4Lid DOI: 10.1601/nm.8153

*Chryseobacterium piscium*<sup>VP</sup> de Beer et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 51923. High-quality 16S rRNA sequence S000544650 (RDP), AM040439 (Genbank). N4Lid DOI: 10.1601/nm.10121

*Chryseobacterium scophthalmum*<sup>VP</sup> (Mudarris et al. 1994) Vandamme et al. 1994. <==  
*Flavobacterium scophthalmum* (basonym). Synonym links through N4Lid: 10.1601/ex.8113. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700039. High-quality 16S rRNA sequence S000134386 (RDP), AJ271009 (Genbank). N4Lid DOI: 10.1601/nm.8156

† *Flavobacterium scophthalmum*<sup>VP</sup> Mudarris et al. 1994. ==> *Chryseobacterium scophthalmum* (new combination). Synonym links through N4Lid: 10.1601/ex.8113. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700039. High-quality 16S rRNA sequence S000134386 (RDP), AJ271009 (Genbank). N4Lid DOI: 10.1601/nm.8113

*Chryseobacterium shigense*<sup>VP</sup> Shimomura et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17126. High-quality 16S rRNA sequence S000469874 (RDP), AB193101 (Genbank). N4Lid 10.1601/nm.9642

*Chryseobacterium soldanellicola*<sup>VP</sup> Park et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: KCTC 12382. High-quality 16S rRNA sequence S000618541 (RDP), AY883415 (Genbank). N4Lid 10.1601/nm.9910

*Chryseobacterium taeanense*<sup>VP</sup> Park et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: KCTC 12381. High-quality 16S rRNA sequence S000618542 (RDP), AY883416 (Genbank). N4Lid 10.1601/nm.9911

*Chryseobacterium taichungense*<sup>VP</sup> Shen et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 50001. High-quality 16S rRNA sequence S000539653 (RDP), AJ843132 (Genbank). N4Lid 10.1601/nm.9467

*Chryseobacterium taiwanense*<sup>VP</sup> Tai et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 23355. High-quality 16S rRNA sequence S000636389 (RDP), DQ318789 (Genbank). N4Lid DOI: 10.1601/nm.10254

*Chryseobacterium vrystaatense*<sup>VP</sup> de Beer et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 50970. High-quality 16S rRNA sequence S000484366 (RDP), AJ871397 (Genbank). N4Lid 10.1601/nm.9646

- Chryseobacterium wanjuae*<sup>VP</sup> Weon et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17724. High-quality 16S rRNA sequence S000620619 (RDP), DQ256729 (Genbank). N4Lid DOI: 10.1601/nm.10171
- Genus *Cloacibacterium***<sup>VP</sup> Allen et al. 2006. N4Lid DOI: 10.1601/nm.10120
- Cloacibacterium normanense*<sup>VP</sup> Allen et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-825. High-quality 16S rRNA sequence S000628740 (RDP), AJ575430 (Genbank). N4Lid DOI: 10.1601/nm.10119
- Genus *Coenonia***<sup>VP</sup> Vandamme et al. 1999. N4Lid DOI: 10.1601/nm.8157
- Coenonia anatina*<sup>VP</sup> Vandamme et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 106119. High-quality 16S rRNA sequence S000000215 (RDP), Y17612 (Genbank). N4Lid DOI: 10.1601/nm.8158
- Genus *Croceibacter***<sup>VP</sup> Cho and Giovannoni 2003. N4Lid DOI: 10.1601/nm.8159
- Croceibacter atlanticus*<sup>VP</sup> Cho and Giovannoni 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-628. High-quality 16S rRNA sequence S000399055 (RDP), AY163576 (Genbank). GOLD ID: Gi00838. GCAT ID: 000988\_GCAT. Entrez genome id: 13570. Sequenced strain: HTCC 2559 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8160
- Genus *Costertonia***<sup>VP</sup> Kwon et al. 2006. N4Lid DOI: 10.1601/nm.10123
- Costertonia aggregata*<sup>VP</sup> Kwon et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 13411. High-quality 16S rRNA sequence S000600404 (RDP), DQ167246 (Genbank). N4Lid DOI: 10.1601/nm.10122
- Genus *Dokdonia***<sup>VP</sup> Yoon et al. 2005. N4Lid 10.1601/nm.9754
- Dokdonia donghaensis*<sup>VP</sup> Yoon et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17200. High-quality 16S rRNA sequence S000541404 (RDP), DQ003276 (Genbank). N4Lid 10.1601/nm.9753
- Genus *Donghaeana***<sup>VP</sup> Yoon et al. 2006. N4Lid 10.1601/nm.9865
- Donghaeana dokdonensis*<sup>VP</sup> Yoon et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17205. High-quality 16S rRNA sequence S000541404 (RDP), DQ003276 (Genbank). N4Lid 10.1601/nm.9864
- Genus *Elizabethkingia***<sup>VP</sup> Kim et al. 2005. N4Lid 10.1601/nm.9465
- Elizabethkingia meningoseptica*<sup>VP</sup> (King 1959) Kim et al. 2005. <== *Flavobacterium meningosepticum* (basonym). Synonym links through N4Lid: 10.1601/ex.8100. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 13253. High-quality 16S rRNA sequence S000539540 (RDP), AJ704540 (Genbank). N4Lid 10.1601/nm.9258
- † *Chryseobacterium meningosepticum*<sup>VP</sup> (King 1959) Vandamme et al. 1994. <== *Flavobacterium meningosepticum* (basonym). *Elizabethkingia meningoseptica* (new combination). Synonym links through N4Lid: 10.1601/ex.8100. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 13253. High-quality 16S rRNA sequence S000539540 (RDP), AJ704540 (Genbank). N4Lid DOI: 10.1601/nm.8154
- Elizabethkingia miricola*<sup>VP</sup> (Li et al. 2004) Kim et al. 2005. <== *Chryseobacterium miricola* (basonym). Synonym links through N4Lid: 10.1601/ex.8155. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14571. N4Lid 10.1601/nm.9278
- † *Chryseobacterium miricola*<sup>VP</sup> Li et al. 2004. ==> *Elizabethkingia miricola* (new combination). Synonym links through N4Lid: 10.1601/ex.8155. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14571. N4Lid DOI: 10.1601/nm.8155
- † *Flavobacterium meningosepticum*<sup>AL</sup> King 1959. ==> *Chryseobacterium meningosepticum* (new combination). Synonym links through N4Lid: 10.1601/ex.8100. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 13253. High-quality 16S rRNA sequence S000539540 (RDP), AJ704540 (Genbank). N4Lid DOI: 10.1601/nm.8100
- Genus *Empedobacter***<sup>VP</sup> (ex Prévot 1961) Vandamme et al. 1994. N4Lid DOI: 10.1601/nm.8161

*Empedobacter brevis*<sup>VP</sup> (Holmes and Owen 1982) Vandamme et al. 1994. <== *Flavobacterium breve* (basonym). Synonym links through N4Lid: 10.1601/ex.8077. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43319. High-quality 16S rRNA sequence S000623902 (RDP), AM177497 (Genbank). N4Lid DOI: 10.1601/nm.8162

† *Flavobacterium breve*<sup>VP</sup> (ex Lustig 1890) Holmes and Owen 1982. ==> *Empedobacter brevis* (new combination). Synonym links through N4Lid: 10.1601/ex.8077. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43319. High-quality 16S rRNA sequence S000623902 (RDP), AM177497 (Genbank). N4Lid DOI: 10.1601/nm.8077

**Genus *Epilithonimonas***<sup>VP</sup> O'Sullivan et al. 2006. N4Lid 10.1601/nm.9859

*Epilithonimonas tenax*<sup>VP</sup> O'Sullivan et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16811. High-quality 16S rRNA sequence S000007528 (RDP), AF493696 (Genbank). N4Lid 10.1601/nm.9858

**Genus *Formosa***<sup>VP</sup> Ivanova et al. 2004. N4Lid DOI: 10.1601/nm.8583

*Formosa algae*<sup>VP</sup> Ivanova et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107684. High-quality 16S rRNA sequence S000356926 (RDP), AY228461 (Genbank). N4Lid DOI: 10.1601/nm.8584

*Formosa agariphila*<sup>VP</sup> Nedashkovskaya et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15362. High-quality 16S rRNA sequence S000500417 (RDP), AY187688 (Genbank). N4Lid 10.1601/nm.9857

**Genus *Gaetbulibacter***<sup>VP</sup> Jung et al. 2005. N4Lid 10.1601/nm.9641

*Gaetbulibacter saemankumensis*<sup>VP</sup> Jung et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17032. High-quality 16S rRNA sequence S000481927 (RDP), AY883937 (Genbank). N4Lid 10.1601/nm.9640

**Genus *Gelidibacter***<sup>VP</sup> Bowman et al. 1997. N4Lid DOI: 10.1601/nm.8163

*Gelidibacter algens*<sup>VP</sup> Bowman et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700364. High-quality 16S rRNA sequence S000438031 (RDP), U62914 (Genbank). N4Lid DOI: 10.1601/nm.8164

*Gelidibacter gilvus*<sup>VP</sup> Bowman and Nichols 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108531. High-quality 16S rRNA sequence S000365664 (RDP), AF001369 (Genbank). N4Lid 10.1601/nm.9551

*Gelidibacter mesophilus*<sup>VP</sup> Macián et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-813. High-quality 16S rRNA sequence S000083693 (RDP), AJ344133 (Genbank). N4Lid DOI: 10.1601/nm.8165

*Gelidibacter salicanalis*<sup>VP</sup> Bowman and Nichols 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108532. High-quality 16S rRNA sequence S000574871 (RDP), AY694009 (Genbank). N4Lid 10.1601/nm.9552

**Genus *Gillisia***<sup>VP</sup> Van Trappen et al. 2004. N4Lid DOI: 10.1601/nm.8166

*Gillisia hiemivivida*<sup>VP</sup> Bowman and Nichols 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108528. High-quality 16S rRNA sequence S000574868 (RDP), AY694006 (Genbank). N4Lid 10.1601/nm.9555

*Gillisia illustrilutea*<sup>VP</sup> Bowman and Nichols 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108530. High-quality 16S rRNA sequence S000574870 (RDP), AY694008 (Genbank). N4Lid 10.1601/nm.9553

*Gillisia limnaea*<sup>VP</sup> Van Trappen et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15749. High-quality 16S rRNA sequence S000276451 (RDP), AJ440991 (Genbank). N4Lid DOI: 10.1601/nm.8167

*Gillisia mitskevichiae*<sup>VP</sup> Nedashkovskaya et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NBRC 100590. High-quality 16S rRNA sequence S000475293 (RDP), AY576655 (Genbank). N4Lid DOI: 10.1601/nm.8592

*Gillisia myxillae*<sup>VP</sup> Lee et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-41416. High-quality 16S rRNA sequence S000613911 (RDP), DQ202393 (Genbank). N4Lid DOI: 10.1601/nm.10258

- Gillisia sandarakina*<sup>VP</sup> Bowman and Nichols 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108529. High-quality 16S rRNA sequence S000574869 (RDP), AY694007 (Genbank). N4Lid 10.1601/nm.9554
- Genus *Gramella***<sup>VP</sup> Nedashkovskaya et al. 2005. N4Lid DOI: 10.1601/nm.8597
- Gramella echinicola*<sup>VP</sup> Nedashkovskaya et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NBRC 100593. High-quality 16S rRNA sequence S000475575 (RDP), AY608409 (Genbank). N4Lid DOI: 10.1601/nm.8598
- Gramella portivictoriae*<sup>VP</sup> Lau et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-41137. High-quality 16S rRNA sequence S000541380 (RDP), DQ002871 (Genbank). N4Lid 10.1601/nm.9758
- Genus *Kaistella***<sup>VP</sup> Kim et al. 2004. N4Lid 10.1601/nm.8633
- Kaistella koreensis*<sup>VP</sup> Kim et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: IAM 15050. High-quality 16S rRNA sequence S000458552 (RDP), AF344179 (Genbank). N4Lid 10.1601/nm.8634
- Genus *Kordia***<sup>VP</sup> Sohn et al. 2004. N4Lid 10.1601/nm.8648
- Kordia algicida*<sup>VP</sup> Sohn et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NBRC 100336. High-quality 16S rRNA sequence S000356564 (RDP), AY195836 (Genbank). GOLD ID: Gi01417. GCAT ID: 000881\_GCAT. Sequenced strain: OT-1 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid 10.1601/nm.8649
- Genus *Krokinobacter***<sup>VP</sup> Khan et al. 2006. N4Lid 10.1601/nm.9907
- Krokinobacter diaphorus*<sup>VP</sup> Khan et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108745. High-quality 16S rRNA sequence S000606688 (RDP), AB198088 (Genbank). N4Lid 10.1601/nm.9909
- Krokinobacter eikastus*<sup>VP</sup> Khan et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108743. High-quality 16S rRNA sequence S000606689 (RDP), AB198089 (Genbank). N4Lid 10.1601/nm.9908
- Krokinobacter genikus*<sup>VP</sup> Khan et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108744. High-quality 16S rRNA sequence S000606686 (RDP), AB198086 (Genbank). N4Lid 10.1601/nm.9906
- Genus *Lacinutrix***<sup>VP</sup> Bowman and Nichols 2005. N4Lid 10.1601/nm.9546
- Lacinutrix copepodicola*<sup>VP</sup> Bowman and Nichols 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108538. High-quality 16S rRNA sequence S000574863 (RDP), AY694001 (Genbank). N4Lid 10.1601/nm.9545
- Genus *Lutibacter***<sup>VP</sup> Choi and Cho 2006. N4Lid DOI: 10.1601/nm.10006
- Lutibacter litoralis*<sup>VP</sup> Choi and Cho 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 13034. High-quality 16S rRNA sequence S000515802 (RDP), AY962293 (Genbank). N4Lid DOI: 10.1601/nm.10005
- Genus *Maribacter***<sup>VP</sup> Nedashkovskaya et al. 2004. N4Lid 10.1601/nm.8680
- Maribacter sedimenticola*<sup>VP</sup> Nedashkovskaya et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 47098. High-quality 16S rRNA sequence S000368221 (RDP), AY271623 (Genbank). N4Lid 10.1601/nm.8683
- Maribacter dokdonensis*<sup>VP</sup> Yoon et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17201. High-quality 16S rRNA sequence S000515715 (RDP), AY960749 (Genbank). N4Lid 10.1601/nm.9643
- Maribacter orientalis*<sup>VP</sup> Nedashkovskaya et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 48008. High-quality 16S rRNA sequence S000368222 (RDP), AY271624 (Genbank). N4Lid 10.1601/nm.8682
- Maribacter aquivivus*<sup>VP</sup> Nedashkovskaya et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 48009. High-quality 16S rRNA sequence S000368223 (RDP), AY271625 (Genbank). N4Lid 10.1601/nm.8681
- Maribacter ulvicola*<sup>VP</sup> Nedashkovskaya et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15366. High-quality 16S rRNA sequence S000368224 (RDP), AY271626 (Genbank). N4Lid 10.1601/nm.8684

- Genus *Mariniflexile*** <sup>VP</sup> Nedashkovskaya et al. 2006. N4Lid DOI: 10.1601/nm.10175  
*Mariniflexile gromovii* <sup>VP</sup> Nedashkovskaya et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22578. High-quality 16S rRNA sequence S000635946 (RDP), DQ312294 (Genbank). N4Lid DOI: 10.1601/nm.10174
- Genus *Mesonia*** <sup>VP</sup> Nedashkovskaya et al. 2003. N4Lid DOI: 10.1601/nm.8168  
*Mesonia algae* <sup>VP</sup> Nedashkovskaya et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 47092. High-quality 16S rRNA sequence S000432054 (RDP), AF536383 (Genbank). N4Lid DOI: 10.1601/nm.8169
- Genus *Muricauda*** <sup>VP</sup> Bruns et al. 2001. N4Lid DOI: 10.1601/nm.8170  
*Muricauda ruestringensis* <sup>VP</sup> Bruns et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13258. High-quality 16S rRNA sequence S000389346 (RDP), AF218782 (Genbank). N4Lid DOI: 10.1601/nm.8171  
*Muricauda aquimarina* <sup>VP</sup> Yoon et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11811. High-quality 16S rRNA sequence S000540543 (RDP), AY445075 (Genbank). N4Lid 10.1601/nm.9454  
*Muricauda flavescens* <sup>VP</sup> Yoon et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11812. High-quality 16S rRNA sequence S000540541 (RDP), AY445073 (Genbank). N4Lid 10.1601/nm.9453
- Genus *Myroides*** <sup>VP</sup> Vancanneyt et al. 1996. N4Lid DOI: 10.1601/nm.8172  
*Myroides odoratus* <sup>VP</sup> (Stutzer 1929) Vancanneyt et al. 1996. <== *Flavobacterium odoratum* (**basonym**). Synonym links through N4Lid: 10.1601/ex.8105. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 4651. High-quality 16S rRNA sequence S000436371 (RDP), M58777 (Genbank). N4Lid DOI: 10.1601/nm.8173  
† *Flavobacterium odoratum* <sup>AL</sup> Stutzer 1929. ==> *Myroides odoratus* (**new combination**). Synonym links through N4Lid: 10.1601/ex.8105. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 4651. High-quality 16S rRNA sequence S000436371 (RDP), M58777 (Genbank). N4Lid DOI: 10.1601/nm.8105  
*Myroides odoratimimus* <sup>VP</sup> Vancanneyt et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-634. High-quality 16S rRNA sequence S000440832 (RDP), AJ854059 (Genbank). N4Lid DOI: 10.1601/nm.8174  
*Myroides pelagicus* <sup>VP</sup> Yoon et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: KCTC 12661. High-quality 16S rRNA sequence S000543031 (RDP), AB176662 (Genbank). N4Lid DOI: 10.1601/nm.10263
- Genus *Nonlabens*** <sup>VP</sup> Lau et al. 2005. N4Lid 10.1601/nm.9749  
*Nonlabens tegetincola* <sup>VP</sup> Lau et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-41136. High-quality 16S rRNA sequence S000527995 (RDP), AY987349 (Genbank). N4Lid 10.1601/nm.9808
- Genus *Olleya*** <sup>VP</sup> Mancuso Nichols et al. 2005. N4Lid 10.1601/nm.9560  
*Olleya marilimosa* <sup>VP</sup> Mancuso Nichols et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108537. High-quality 16S rRNA sequence S000573281 (RDP), AY586527 (Genbank). N4Lid 10.1601/nm.9559
- Genus *Ornithobacterium*** <sup>VP</sup> Vandamme et al. 1994. N4Lid DOI: 10.1601/nm.8175  
*Ornithobacterium rhinotracheale* <sup>VP</sup> Vandamme et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51463. High-quality 16S rRNA sequence S000414485 (RDP), L19156 (Genbank). N4Lid DOI: 10.1601/nm.8176
- Genus *Persicivirga*** <sup>VP</sup> O'Sullivan et al. 2006. N4Lid 10.1601/nm.9861  
*Persicivirga xylanidelens* <sup>VP</sup> O'Sullivan et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16809. High-quality 16S rRNA sequence S000500088 (RDP), AF493688 (Genbank). N4Lid 10.1601/nm.9860
- Genus *Pibocella*** <sup>VP</sup> Nedashkovskaya et al. 2005. N4Lid 10.1601/nm.8780  
*Pibocella ponti* <sup>VP</sup> Nedashkovskaya et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NBRC 100591. High-quality 16S rRNA sequence S000475292 (RDP), AY576654 (Genbank). N4Lid 10.1601/nm.8781



**Genus *Polaribacter*** <sup>VP</sup> Gosink et al. 1998. N4Lid DOI: 10.1601/nm.8177

*Polaribacter filamentus* <sup>VP</sup> Gosink et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700397. High-quality 16S rRNA sequence S000438413 (RDP), U73726 (Genbank). GOLD ID: Gi00476. GCAT ID: 001364\_GCAT. Entrez genome id: 13335. Genome sequence is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8178

*Polaribacter butkevichii* <sup>VP</sup> Nedashkovskaya et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 48005. High-quality 16S rRNA sequence S000435483 (RDP), AY189722 (Genbank). N4Lid DOI: 10.1601/nm.10200

*Polaribacter dokdonensis* <sup>VP</sup> Yoon et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17204. High-quality 16S rRNA sequence S000541413 (RDP), DQ004686 (Genbank). N4Lid DOI: 10.1601/nm.10117

*Polaribacter franzmannii* <sup>VP</sup> Gosink et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700399. High-quality 16S rRNA sequence S000437169 (RDP), U14586 (Genbank). N4Lid DOI: 10.1601/nm.8179

*Polaribacter glomeratus* <sup>VP</sup> (McGuire et al. 1988) Gosink et al. 1998. <== *Flectobacillus glomeratus* (basonym). Synonym links through N4Lid: 10.1601/ex.8298. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43844. High-quality 16S rRNA sequence S000436369 (RDP), M58775 (Genbank). N4Lid DOI: 10.1601/nm.8180

† *Flectobacillus glomeratus* <sup>VP</sup> McGuire et al. 1988. ==> *Polaribacter glomeratus* (new combination). Synonym links through N4Lid: 10.1601/ex.8298. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43844. High-quality 16S rRNA sequence S000436369 (RDP), M58775 (Genbank). N4Lid DOI: 10.1601/nm.8298

*Polaribacter irgensii* <sup>VP</sup> Gosink et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700398. GOLD ID: Gi00871. GCAT ID: 001365\_GCAT. Entrez genome id: 13451. Sequenced strain: ATCC 700398 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8181

**Genus *Psychroflexus*** <sup>VP</sup> Bowman et al. 1999. N4Lid DOI: 10.1601/nm.8182

*Psychroflexus torquis* <sup>VP</sup> Bowman et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700755. High-quality 16S rRNA sequence S000438597 (RDP), U85881 (Genbank). GOLD ID: Gi00877. GCAT ID: 001395\_GCAT. Entrez genome id: 13542. Sequenced strain: ATCC 700755 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8183

*Psychroflexus gondwanensis* <sup>VP</sup> corrig. (Dobson et al. 1993) Bowman et al. 1999. <== *Flavobacterium gondwanense* (basonym). Synonym links through N4Lid: 10.1601/ex.8090. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51278. High-quality 16S rRNA sequence S000436881 (RDP), M92278 (Genbank). N4Lid DOI: 10.1601/nm.8184

† *Flavobacterium gondwanense* <sup>VP</sup> Dobson et al. 1993. ==> *Psychroflexus gondwanensis* (new combination). Synonym links through N4Lid: 10.1601/ex.8090. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51278. High-quality 16S rRNA sequence S000436881 (RDP), M92278 (Genbank). N4Lid DOI: 10.1601/nm.8090

*Psychroflexus tropicus* <sup>VP</sup> Donachie et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-734. High-quality 16S rRNA sequence S000539209 (RDP), AF513434 (Genbank). N4Lid 10.1601/nm.8807

**Genus *Psychroserpens*** <sup>VP</sup> Bowman et al. 1997. N4Lid DOI: 10.1601/nm.8185

*Psychroserpens burtonensis* <sup>VP</sup> Bowman et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700359. High-quality 16S rRNA sequence S000438030 (RDP), U62913 (Genbank). N4Lid DOI: 10.1601/nm.8186

*Psychroserpens mesophilus* <sup>VP</sup> Kwon et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 13413. High-quality 16S rRNA sequence S000541367 (RDP), DQ001321 (Genbank). N4Lid DOI: 10.1601/nm.10062

**Genus *Riemerella*** <sup>VP</sup> Segers et al. 1993. N4Lid DOI: 10.1601/nm.8187

*Riemerella anatipestifer*<sup>VP</sup> (Hendrickson and Hilbert 1932) Segers et al. 1993. <== *Moraxella anatipestifer* (basonym). Synonym links through N4Lid: 10.1601/ex.2748. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 11845. High-quality 16S rRNA sequence S000437981 (RDP), U60101 (Genbank). N4Lid DOI: 10.1601/nm.8188

† *Moraxella anatipestifer*<sup>AL</sup> (Hendrickson and Hilbert 1932) Bruner and Fabricant 1954. ==> *Riemerella anatipestifer* (new combination). Synonym links through N4Lid: 10.1601/ex.2748. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 11845. High-quality 16S rRNA sequence S000437981 (RDP), U60101 (Genbank). N4Lid DOI: 10.1601/nm.2748

*Riemerella columbina*<sup>VP</sup> Vancanneyt et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 106288. High-quality 16S rRNA sequence S000021400 (RDP), AF181448 (Genbank). N4Lid DOI: 10.1601/nm.8189

**Genus *Robiginitalea***<sup>VP</sup> Cho and Giovannoni 2004. N4Lid 10.1601/nm.8816

*Robiginitalea biformata*<sup>VP</sup> Cho and Giovannoni 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-864. High-quality 16S rRNA sequence S000368745 (RDP), AY424899 (Genbank). GOLD ID: Gi00880. GCAT ID: 001428\_GCAT. Entrez genome id: 13461. Sequenced strain: HTCC 2501 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid 10.1601/nm.8817

**Genus *Salegentibacter***<sup>VP</sup> McCammon and Bowman 2000. N4Lid DOI: 10.1601/nm.8190

*Salegentibacter salegens*<sup>VP</sup> (Dobson et al. 1993) McCammon and Bowman 2000. <== *Flavobacterium salegens* (basonym). Synonym links through N4Lid: 10.1601/ex.8112. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51522. High-quality 16S rRNA sequence S000436882 (RDP), M92279 (Genbank). N4Lid DOI: 10.1601/nm.8191

† *Flavobacterium salegens*<sup>VP</sup> Dobson et al. 1993. ==> *Salegentibacter salegens* (new combination). Synonym links through N4Lid: 10.1601/ex.8112. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51522. High-quality 16S rRNA sequence S000436882 (RDP), M92279 (Genbank). N4Lid DOI: 10.1601/nm.8112

**Genus *Sandarakinotalea***<sup>VP</sup> Khan et al. 2006. N4Lid DOI: 10.1601/nm.10058

*Sandarakinotalea sediminis*<sup>VP</sup> Khan et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 23247. High-quality 16S rRNA sequence S000690385 (RDP), AB206954 (Genbank). N4Lid DOI: 10.1601/nm.10057

**Genus *Sediminicola***<sup>VP</sup> Khan et al. 2006. N4Lid DOI: 10.1601/nm.10009

*Sediminicola luteus*<sup>VP</sup> Khan et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 23246. High-quality 16S rRNA sequence S000616212 (RDP), AB206956 (Genbank). N4Lid DOI: 10.1601/nm.10008

*Salegentibacter agarivorans*<sup>VP</sup> Nedashkovskaya et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 23205. High-quality 16S rRNA sequence S000605343 (RDP), DQ191176 (Genbank). N4Lid DOI: 10.1601/nm.10010

*Salegentibacter flavus*<sup>VP</sup> Ivanova et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107843. High-quality 16S rRNA sequence S000374967 (RDP), AY682200 (Genbank). N4Lid 10.1601/nm.9955

*Salegentibacter holothuriorum*<sup>VP</sup> Nedashkovskaya et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NBRC 100249. High-quality 16S rRNA sequence S000364646 (RDP), AB116148 (Genbank). N4Lid 10.1601/nm.8828

*Salegentibacter mishustinae*<sup>VP</sup> Nedashkovskaya et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NBRC 100592. High-quality 16S rRNA sequence S000475291 (RDP), AY576653 (Genbank). N4Lid 10.1601/nm.8829

**Genus *Sejongia***<sup>VP</sup> Yi et al. 2005. N4Lid 10.1601/nm.8836

*Sejongia antarctica*<sup>VP</sup> Yi et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12381. High-quality 16S rRNA sequence S000475017 (RDP), AY553293 (Genbank). N4Lid 10.1601/nm.8837



*Sejongia jeonii*<sup>VP</sup> Yi et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12382. High-quality 16S rRNA sequence S000475018 (RDP), AY553294 (Genbank). N4Lid 10.1601/nm.8838

**Genus *Stenothermobacter***<sup>VP</sup> Lau et al. 2006. N4Lid 10.1601/nm.9863

*Stenothermobacter spongiae*<sup>VP</sup> Lau et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-41138. High-quality 16S rRNA sequence S000537628 (RDP), DQ064789 (Genbank). N4Lid 10.1601/nm.9862

**Genus *Subsaxibacter***<sup>VP</sup> Bowman and Nichols 2005. N4Lid 10.1601/nm.9544

*Subsaxibacter broadyi*<sup>VP</sup> Bowman and Nichols 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108527. High-quality 16S rRNA sequence S000574861 (RDP), AY693999 (Genbank). N4Lid 10.1601/nm.9543

**Genus *Subsaximicrobium***<sup>VP</sup> Bowman and Nichols 2005. N4Lid 10.1601/nm.9542

*Subsaximicrobium saxinquilinus*<sup>VP</sup> Bowman and Nichols 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108526. High-quality 16S rRNA sequence S000574860 (RDP), AY693998 (Genbank). N4Lid 10.1601/nm.9541

*Subsaximicrobium wynnwilliamsii*<sup>VP</sup> Bowman and Nichols 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108525. High-quality 16S rRNA sequence S000574859 (RDP), AY693997 (Genbank). N4Lid 10.1601/nm.9540

**Genus *Tenacibaculum***<sup>VP</sup> Suzuki et al. 2001. GOLD ID: Gi00896. GCAT ID: 001597\_GCAT. Entrez genome id: 13543. Sequenced strain: MED152 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.8192

*Tenacibaculum maritimum*<sup>VP</sup> (Wakabayashi et al. 1986) Suzuki et al. 2001. <== *Flexibacter maritimus* (basonym). Synonym links through N4Lid: 10.1601/ex.8258. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43398. High-quality 16S rRNA sequence S000436626 (RDP), M64629 (Genbank). N4Lid DOI: 10.1601/nm.8193

† *Cytophaga marina*<sup>VP</sup> (ex Hikida et al. 1979) Reichenbach 1989. == *Tenacibaculum maritimum* (earlier homotypic synonym), links through 10.1601/ex.8258. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43398. High-quality 16S rRNA sequence S000436626 (RDP), M64629 (Genbank). N4Lid DOI: 10.1601/nm.8285

† *Flexibacter maritimus*<sup>VP</sup> Wakabayashi et al. 1986. ==> *Tenacibaculum maritimum* (new combination). Synonym links through N4Lid: 10.1601/ex.8258. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43398. High-quality 16S rRNA sequence S000436626 (RDP), M64629 (Genbank). N4Lid DOI: 10.1601/nm.8258

*Tenacibaculum aestuarii*<sup>VP</sup> Jung et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 13491. High-quality 16S rRNA sequence S000636106 (RDP), DQ314760 (Genbank). N4Lid DOI: 10.1601/nm.10172

*Tenacibaculum amylolyticum*<sup>VP</sup> Suzuki et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13766. High-quality 16S rRNA sequence S000382985 (RDP), AB032505 (Genbank). N4Lid DOI: 10.1601/nm.8194

*Tenacibaculum litoreum*<sup>VP</sup> Choi et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 13039. High-quality 16S rRNA sequence S000515803 (RDP), AY962294 (Genbank). N4Lid 10.1601/nm.9957

*Tenacibaculum lutimaris*<sup>VP</sup> Yoon et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16505. High-quality 16S rRNA sequence S000504855 (RDP), AY661691 (Genbank). N4Lid 10.1601/nm.9381

*Tenacibaculum mesophilum*<sup>VP</sup> Suzuki et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13764. High-quality 16S rRNA sequence S000382981 (RDP), AB032501 (Genbank). N4Lid DOI: 10.1601/nm.8195

*Tenacibaculum ovolyticum*<sup>VP</sup> (Hansen et al. 1992) Suzuki et al. 2001. <== *Flexibacter ovolyticus* (basonym). Synonym links through N4Lid: 10.1601/ex.8259. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51887. N4Lid DOI: 10.1601/nm.8196

† *Flexibacter ovolyticus*<sup>VP</sup> Hansen et al. 1992. ==> *Tenacibaculum ovolyticum* (new combination). Synonym links through N4Lid: 10.1601/ex.8259. Source of type material

recommended for DOE sponsored genome sequencing by the JGI: ATCC 51887. N4Lid DOI: 10.1601/nm.8259

*Tenacibaculum skagerrakense*<sup>VP</sup> Frette et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-458. High-quality 16S rRNA sequence S000395057 (RDP), AF469612 (Genbank). N4Lid DOI: 10.1601/nm.8197

**Genus *Ulvibacter***<sup>VP</sup> Nedashkovskaya et al. 2004. N4Lid DOI: 10.1601/nm.8198

*Ulvibacter litoralis*<sup>VP</sup> Nedashkovskaya et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 47093. High-quality 16S rRNA sequence S000404311 (RDP), AY243096 (Genbank). N4Lid DOI: 10.1601/nm.8199

**Genus *Vitellibacter***<sup>VP</sup> Nedashkovskaya et al. 2003. N4Lid DOI: 10.1601/nm.8200

*Vitellibacter vladivostokensis*<sup>VP</sup> Nedashkovskaya et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11732. High-quality 16S rRNA sequence S000384493 (RDP), AB071382 (Genbank). N4Lid DOI: 10.1601/nm.8201

**Genus *Weeksella***<sup>VP</sup> Holmes et al. 1987. N4Lid DOI: 10.1601/nm.8202

*Weeksella virosa*<sup>VP</sup> Holmes et al. 1987. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43766. High-quality 16S rRNA sequence S000436902 (RDP), M93152 (Genbank). N4Lid DOI: 10.1601/nm.8203

**Genus *Winogradskyella***<sup>VP</sup> Nedashkovskaya et al. 2005. N4Lid 10.1601/nm.8908

*Winogradskyella thalassocola*<sup>VP</sup> Nedashkovskaya et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15363. High-quality 16S rRNA sequence S000474439 (RDP), AY521223 (Genbank). N4Lid 10.1601/nm.8911

*Winogradskyella epiphytica*<sup>VP</sup> Nedashkovskaya et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 47091. High-quality 16S rRNA sequence S000474440 (RDP), AY521224 (Genbank). N4Lid 10.1601/nm.8909

*Winogradskyella eximia*<sup>VP</sup> Nedashkovskaya et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22474. High-quality 16S rRNA sequence S000474441 (RDP), AY521225 (Genbank). N4Lid 10.1601/nm.8910

*Winogradskyella poriferorum*<sup>VP</sup> Lau et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-41101. High-quality 16S rRNA sequence S000468424 (RDP), AY848823 (Genbank). N4Lid 10.1601/nm.9561

**Genus *Yeosuana***<sup>VP</sup> Kwon et al. 2006. N4Lid DOI: 10.1601/nm.10004

*Yeosuana aromatorans*<sup>VP</sup> Kwon et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12862. High-quality 16S rRNA sequence S000374972 (RDP), AY682382 (Genbank). N4Lid DOI: 10.1601/nm.10003

**Genus *Zobellia***<sup>VP</sup> Barbeyron et al. 2001. N4Lid DOI: 10.1601/nm.8205

*Zobellia galactanivorans*<sup>VP</sup> corrig. Barbeyron et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 12802. High-quality 16S rRNA sequence S000389071 (RDP), AF208293 (Genbank). GOLD ID: Gi01090. GCAT ID: 001728\_GCAT. Entrez genome id: 16099. Sequenced strain: DsijT is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8206

*Zobellia amurskyensis*<sup>VP</sup> Nedashkovskaya et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 47080. High-quality 16S rRNA sequence S000415132 (RDP), AB121974 (Genbank). N4Lid 10.1601/nm.8921

*Zobellia laminariae*<sup>VP</sup> Nedashkovskaya et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 47083. High-quality 16S rRNA sequence S000415133 (RDP), AB121975 (Genbank). N4Lid 10.1601/nm.8922

*Zobellia russellii*<sup>VP</sup> Nedashkovskaya et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 47084. High-quality 16S rRNA sequence S000415134 (RDP), AB121976 (Genbank). N4Lid 10.1601/nm.8923

*Zobellia uliginosa*<sup>VP</sup> (ZoBell and Upham 1944) Barbeyron et al. 2001. <== *Flavobacterium uliginosum* (basonym). Synonym links through N4Lid: 10.1601/ex.8119. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14397. High-quality 16S rRNA sequence S000016650 (RDP), M62799 (Genbank). N4Lid DOI: 10.1601/nm.8207

† *Cellulophaga uliginosa*<sup>VP</sup> (ZoBell and Upham 1944) Bowman 2000. <== *Flavobacterium uliginosum* (basonym). *Zobellia uliginosa* (new combination). Synonym links through N4Lid: 10.1601/ex.8119. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14397. High-quality 16S rRNA sequence S000016650 (RDP), M62799 (Genbank). N4Lid 10.1601/nm.9211

† *Cytophaga uliginosa*<sup>VP</sup> (ZoBell and Upham 1944) Reichenbach 1989. <== *Flavobacterium uliginosum* (basonym). *Cellulophaga uliginosa* (new combination). Synonym links through N4Lid: 10.1601/ex.8119. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14397. High-quality 16S rRNA sequence S000016650 (RDP), M62799 (Genbank). N4Lid DOI: 10.1601/nm.8292

† *Flavobacterium uliginosum*<sup>AL</sup> ZoBell and Upham 1944. ==> *Cytophaga uliginosa* (new combination). Synonym links through N4Lid: 10.1601/ex.8119. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14397. High-quality 16S rRNA sequence S000016650 (RDP), M62799 (Genbank). N4Lid DOI: 10.1601/nm.8119

**Family "Blattabacteriaceae"** N4Lid DOI: 10.1601/nm.8208

**Genus *Blattabacterium***<sup>AL</sup> Hollande and Favre 1931. GOLD ID: Gi01158. GCAT ID: 000781\_GCAT. Genome sequence is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.8209

*Blattabacterium cuenoti*<sup>AL</sup> (Mercier 1906) Hollande and Favre 1931. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.8210

**Family *Cryomorphaceae***<sup>VP</sup> Bowman et al 2003. N4Lid DOI: 10.1601/nm.8211

**Genus *Cryomorpha***<sup>VP</sup> Bowman et al. 2003. N4Lid DOI: 10.1601/nm.8212

*Cryomorpha ignava*<sup>VP</sup> Bowman et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107453. High-quality 16S rRNA sequence S000388532 (RDP), AF170738 (Genbank). N4Lid DOI: 10.1601/nm.8213

**Genus *Fluviicola***<sup>VP</sup> O'Sullivan et al. 2005. N4Lid 10.1601/nm.9648

*Fluviicola taffensis*<sup>VP</sup> O'Sullivan et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16823. High-quality 16S rRNA sequence S000500091 (RDP), AF493694 (Genbank). N4Lid 10.1601/nm.9647

**Genus *Algoriphagus***<sup>VP</sup> Bowman et al. 2003. GOLD ID: Gi01414. GCAT ID: 000878\_GCAT. Sequenced strain: PR1 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.8214

*Algoriphagus ratkovskyi*<sup>VP</sup> Bowman et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107452. High-quality 16S rRNA sequence S000438607 (RDP), U85891 (Genbank). N4Lid DOI: 10.1601/nm.8215

*Algoriphagus antarcticus*<sup>VP</sup> Van Trappen et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15986. High-quality 16S rRNA sequence S000440159 (RDP), AJ577141 (Genbank). N4Lid DOI: 10.1601/nm.8451

*Algoriphagus aquimarinus*<sup>VP</sup> Nedashkovskaya et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 47101. High-quality 16S rRNA sequence S000416838 (RDP), AJ575264 (Genbank). N4Lid DOI: 10.1601/nm.8452

*Algoriphagus chordae*<sup>VP</sup> Nedashkovskaya et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 47095. High-quality 16S rRNA sequence S000416839 (RDP), AJ575265 (Genbank). N4Lid DOI: 10.1601/nm.8453

*Algoriphagus halophilus*<sup>VP</sup> (Yi and Chun 2004) Nedashkovskaya et al. 2004. <== *Hongiella halophila* (basonym). Synonym links through N4Lid: 10.1601/ex.8302. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15292. High-quality 16S rRNA sequence S000404973 (RDP), AY264839 (Genbank). N4Lid DOI: 10.1601/nm.8454

† *Hongiella halophila*<sup>VP</sup> Yi and Chun 2004. ==> *Algoriphagus halophilus* (new combination). Synonym links through N4Lid: 10.1601/ex.8302. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15292. High-quality 16S rRNA sequence S000404973 (RDP), AY264839 (Genbank). N4Lid DOI: 10.1601/nm.8302

- Algoriphagus locisalis*<sup>VP</sup> Yoon et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12597. High-quality 16S rRNA sequence S000575556 (RDP), AY835922 (Genbank). N4Lid 10.1601/nm.9562
- Algoriphagus terrigena*<sup>VP</sup> Yoon et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108837. High-quality 16S rRNA sequence S000603881 (RDP), DQ178979 (Genbank). N4Lid DOI: 10.1601/nm.10007
- Algoriphagus winogradskyi*<sup>VP</sup> Nedashkovskaya et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 47094. High-quality 16S rRNA sequence S000416837 (RDP), AJ575263 (Genbank). N4Lid DOI: 10.1601/nm.8455
- Algoriphagus yeomjeoni*<sup>VP</sup> Yoon et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12598. High-quality 16S rRNA sequence S000505129 (RDP), AY699794 (Genbank). N4Lid 10.1601/nm.9386
- Genus *Brumimicrobium***<sup>VP</sup> Bowman et al. 2003. N4Lid DOI: 10.1601/nm.8216
- Brumimicrobium glaciale*<sup>VP</sup> Bowman et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107451. High-quality 16S rRNA sequence S000431077 (RDP), AF521195 (Genbank). N4Lid DOI: 10.1601/nm.8217
- Genus *Crocinitomix***<sup>VP</sup> Bowman et al. 2003. N4Lid DOI: 10.1601/nm.8218
- Crocinitomix catalasitica*<sup>VP</sup> Bowman et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23190. N4Lid DOI: 10.1601/nm.8219
- Genus *Owenweeksia***<sup>VP</sup> Lau et al. 2005. N4Lid 10.1601/nm.9458
- Owenweeksia hongkongensis*<sup>VP</sup> Lau et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-23963. High-quality 16S rRNA sequence S000542971 (RDP), AB125062 (Genbank). N4Lid 10.1601/nm.9457

**Class "*Sphingobacteria*"** N4Lid DOI: 10.1601/nm.8220

**Order "*Sphingobacteriales*"** N4Lid DOI: 10.1601/nm.8221

**Family *Sphingobacteriaceae***<sup>VP</sup> Steyn et al 1998. N4Lid DOI: 10.1601/nm.8222

**Genus *Sphingobacterium***<sup>VP</sup> Yabuuchi et al. 1983. N4Lid DOI: 10.1601/nm.8223

*Sphingobacterium spiritivorum*<sup>VP</sup> (Holmes et al. 1982) Yabuuchi et al. 1983. <==  
*Flavobacterium spiritivorum* (basonym). Synonym links through N4Lid: 10.1601/ex.8114. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33861. High-quality 16S rRNA sequence S000436372 (RDP), M58778 (Genbank). N4Lid DOI: 10.1601/nm.8224

† *Flavobacterium yabuuchiae*<sup>VP</sup> Holmes et al. 1988. ≈ *Sphingobacterium spiritivorum* (earlier heterotypic synonym), links through 10.1601/nm.8224. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 26765. N4Lid DOI: 10.1601/nm.8122

† *Flavobacterium spiritivorum*<sup>VP</sup> Holmes et al. 1982. ==> *Sphingobacterium spiritivorum* (new combination). Synonym links through N4Lid: 10.1601/ex.8114. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33861. High-quality 16S rRNA sequence S000436372 (RDP), M58778 (Genbank). N4Lid DOI: 10.1601/nm.8114

*Sphingobacterium antarcticum*<sup>VP</sup> corrig. Shivaji et al. 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51969. N4Lid DOI: 10.1601/nm.8225

*Sphingobacterium daejeonense*<sup>VP</sup> Kim et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 52468. High-quality 16S rRNA sequence S000642493 (RDP), AB249372 (Genbank). N4Lid DOI: 10.1601/nm.10294

*Sphingobacterium faecium*<sup>VP</sup> Takeuchi and Yokota 1993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 104193. High-quality 16S rRNA sequence S000000915 (RDP), AJ438176 (Genbank). N4Lid DOI: 10.1601/nm.8226

*Sphingobacterium multivorum*<sup>VP</sup> (Holmes et al. 1981) Yabuuchi et al. 1983. <==  
*Flavobacterium multivorum* (basonym). Synonym links through N4Lid: 10.1601/ex.8103. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33613. High-quality 16S rRNA sequence S000413484 (RDP), D14025 (Genbank). N4Lid DOI: 10.1601/nm.8229



† *Flavobacterium multivorum*<sup>VP</sup> Holmes et al. 1981. ==> *Sphingobacterium multivorum* (new combination). Synonym links through N4Lid: 10.1601/ex.8103. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33613. High-quality 16S rRNA sequence S000413484 (RDP), D14025 (Genbank). N4Lid DOI: 10.1601/nm.8103

† *Flavobacterium thalpophilum*<sup>VP</sup> Holmes et al. 1983. ==> *Sphingobacterium thalpophilum* (new combination). Synonym links through N4Lid: 10.1601/ex.8117. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43320. High-quality 16S rRNA sequence S000436373 (RDP), M58779 (Genbank). N4Lid DOI: 10.1601/nm.8117

*Sphingobacterium thalpophilum*<sup>VP</sup> (Holmes et al. 1983) Takeuchi and Yokota 1993. <== *Flavobacterium thalpophilum* (basonym). Synonym links through N4Lid: 10.1601/ex.8117. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43320. High-quality 16S rRNA sequence S000436373 (RDP), M58779 (Genbank). N4Lid DOI: 10.1601/nm.8231

**Genus *Pedobacter***<sup>VP</sup> Steyn et al. 1998. N4Lid DOI: 10.1601/nm.8232

*Pedobacter heparinus*<sup>VP</sup> (Payza and Korn 1956) Steyn et al. 1998. <== *Flavobacterium heparinum* (basonym). Synonym links through N4Lid: 10.1601/ex.8092. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 13125. N4Lid DOI: 10.1601/nm.8233

† *Sphingobacterium heparinum*<sup>VP</sup> (Payza and Korn 1956) Takeuchi and Yokota 1993. <== *Flavobacterium heparinum* (basonym). *Pedobacter heparinus* (new combination). Synonym links through N4Lid: 10.1601/ex.8092. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 13125. N4Lid DOI: 10.1601/nm.8227

† *Cytophaga heparina*<sup>VP</sup> (Payza and Korn 1956) Christensen 1980. <== *Flavobacterium heparinum* (basonym). *Sphingobacterium heparinum* (new combination). Synonym links through N4Lid: 10.1601/ex.8092. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 13125. N4Lid DOI: 10.1601/nm.8281

† *Flavobacterium heparinum*<sup>AL</sup> Payza and Korn 1956. ==> *Cytophaga heparina* (new combination). Synonym links through N4Lid: 10.1601/ex.8092. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 13125. N4Lid DOI: 10.1601/nm.8092

*Pedobacter africanus*<sup>VP</sup> Steyn et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 39353. High-quality 16S rRNA sequence S000021044 (RDP), AJ438171 (Genbank). N4Lid DOI: 10.1601/nm.8234

*Pedobacter aquatilis*<sup>VP</sup> Gallego et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 13454. High-quality 16S rRNA sequence S000608884 (RDP), AM114396 (Genbank). N4Lid DOI: 10.1601/nm.10260

*Pedobacter caeni*<sup>VP</sup> Vanparys et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16990. High-quality 16S rRNA sequence S000539631 (RDP), AJ786798 (Genbank). N4Lid 10.1601/nm.9468

*Pedobacter cryoconitis*<sup>VP</sup> Margesin et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14825. High-quality 16S rRNA sequence S000146771 (RDP), AJ438170 (Genbank). N4Lid DOI: 10.1601/nm.8235

*Pedobacter himalayensis*<sup>VP</sup> Shivaji et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12171. High-quality 16S rRNA sequence S000539438 (RDP), AJ583425 (Genbank). N4Lid 10.1601/nm.9459

*Pedobacter piscium*<sup>VP</sup> (Takeuchi and Yokota 1993) Steyn et al. 1998. <== *Sphingobacterium piscium* (basonym). Synonym links through N4Lid: 10.1601/ex.8230. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 104195. High-quality 16S rRNA sequence S000020497 (RDP), AJ438174 (Genbank). N4Lid DOI: 10.1601/nm.8236

*Pedobacter roseus*<sup>VP</sup> Hwang et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 13399. High-quality 16S rRNA sequence S000584168 (RDP), DQ112353 (Genbank). N4Lid DOI: 10.1601/nm.10259

† *Sphingobacterium piscium*<sup>VP</sup> Takeuchi and Yokota 1993. ==> *Pedobacter piscium* (new combination). Synonym links through N4Lid: 10.1601/ex.8230. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 104195. High-quality 16S rRNA sequence S000020497 (RDP), AJ438174 (Genbank). N4Lid DOI: 10.1601/nm.8230



*Pedobacter saltans*<sup>VP</sup> Steyn et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 39354. High-quality 16S rRNA sequence S000016742 (RDP), AJ438173 (Genbank). N4Lid DOI: 10.1601/nm.8237

*Pedobacter sandarakinus*<sup>VP</sup> Yoon et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108922. High-quality 16S rRNA sequence S000619894 (RDP), DQ235228 (Genbank). N4Lid DOI: 10.1601/nm.10118

**Family "Saprospiraceae"** N4Lid DOI: 10.1601/nm.8238

**Genus *Saprospira***<sup>AL</sup> Gross 1911. N4Lid DOI: 10.1601/nm.8239

*Saprospira grandis*<sup>AL</sup> Gross 1911. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23119. High-quality 16S rRNA sequence S000436387 (RDP), M58795 (Genbank). N4Lid DOI: 10.1601/nm.8240

**Genus *Haliscomenobacter***<sup>AL</sup> van Veen et al. 1973. N4Lid DOI: 10.1601/nm.8241

*Haliscomenobacter hydrossis*<sup>AL</sup> van Veen et al. 1973. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27775. High-quality 16S rRNA sequence S000436382 (RDP), M58790 (Genbank). N4Lid DOI: 10.1601/nm.8242

**Genus *Lewinella***<sup>VP</sup> Sly et al. 1998. N4Lid DOI: 10.1601/nm.8243

*Lewinella cohaerens*<sup>VP</sup> (Lewin 1970) Sly et al. 1998. <== *Herpetosiphon cohaerens* (basonym). Synonym links through N4Lid: 10.1601/ex.570. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23123. High-quality 16S rRNA sequence S000427980 (RDP), AF039292 (Genbank). N4Lid DOI: 10.1601/nm.8244

† *Herpetosiphon cohaerens*<sup>AL</sup> Lewin 1970. ==> *Lewinella cohaerens* (new combination). Synonym links through N4Lid: 10.1601/ex.570. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23123. High-quality 16S rRNA sequence S000427980 (RDP), AF039292 (Genbank). N4Lid DOI: 10.1601/nm.570

*Lewinella nigricans*<sup>VP</sup> (Lewin 1970) Sly et al. 1998. <== *Herpetosiphon nigricans* (basonym). Synonym links through N4Lid: 10.1601/ex.572. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23147. High-quality 16S rRNA sequence S000427982 (RDP), AF039294 (Genbank). N4Lid DOI: 10.1601/nm.8245

† *Herpetosiphon nigricans*<sup>AL</sup> Lewin 1970. ==> *Lewinella nigricans* (new combination). Synonym links through N4Lid: 10.1601/ex.572. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23147. High-quality 16S rRNA sequence S000427982 (RDP), AF039294 (Genbank). N4Lid DOI: 10.1601/nm.572

*Lewinella persica*<sup>VP</sup> (Lewin 1970) Sly et al. 1998. <== *Herpetosiphon persicus* (basonym). Synonym links through N4Lid: 10.1601/ex.573. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23167. High-quality 16S rRNA sequence S000427983 (RDP), AF039295 (Genbank). N4Lid DOI: 10.1601/nm.8246

† *Herpetosiphon persicus*<sup>AL</sup> Lewin 1970. ==> *Lewinella persica* (new combination). Synonym links through N4Lid: 10.1601/ex.573. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23167. High-quality 16S rRNA sequence S000427983 (RDP), AF039295 (Genbank). N4Lid DOI: 10.1601/nm.573

**Family "Flexibacteraceae"** N4Lid DOI: 10.1601/nm.8247

**Genus *Flexibacter***<sup>AL</sup> Soriano 1945. N4Lid DOI: 10.1601/nm.8248

*Flexibacter flexilis*<sup>AL</sup> Soriano 1945. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23079. High-quality 16S rRNA sequence S000022547 (RDP), M62794 (Genbank). N4Lid DOI: 10.1601/nm.8249

*Flexibacter aggregans*<sup>AL</sup> (Lewin 1969) Leadbetter 1974. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23162. High-quality 16S rRNA sequence S000436625 (RDP), M64628 (Genbank). N4Lid DOI: 10.1601/nm.8250

*Flexibacter aurantiacus*<sup>AL</sup> Lewin 1969. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23107. N4Lid DOI: 10.1601/nm.8251

*Flexibacter canadensis*<sup>VP</sup> Christensen 1980. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29591. High-quality 16S rRNA sequence S000016681 (RDP), M62793 (Genbank). N4Lid DOI: 10.1601/nm.8252

*Flexibacter elegans*<sup>VP</sup> (ex Lewin 1969, non Soriano 1945) Reichenbach 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23112. High-quality 16S rRNA sequence S000436375 (RDP), M58782 (Genbank). N4Lid DOI: 10.1601/nm.8254

*Flexibacter litoralis*<sup>AL</sup> Lewin 1969. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23117. High-quality 16S rRNA sequence S000436377 (RDP), M58784 (Genbank). N4Lid DOI: 10.1601/nm.8257

*Flexibacter polymorphus*<sup>AL</sup> Lewin 1974. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27820. High-quality 16S rRNA sequence S000436378 (RDP), M58786 (Genbank). N4Lid DOI: 10.1601/nm.8260

*Flexibacter roseolus*<sup>AL</sup> Lewin 1969. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23088. High-quality 16S rRNA sequence S000436379 (RDP), M58787 (Genbank). N4Lid DOI: 10.1601/nm.8262

*Flexibacter ruber*<sup>AL</sup> Lewin 1969. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23103. High-quality 16S rRNA sequence S000436380 (RDP), M58788 (Genbank). N4Lid DOI: 10.1601/nm.8263

*Flexibacter tractuosus*<sup>AL</sup> (Lewin 1969) Leadbetter 1974. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23168. High-quality 16S rRNA sequence S000436381 (RDP), M58789 (Genbank). N4Lid DOI: 10.1601/nm.8265

**Genus *Adhaeribacter***<sup>VP</sup> Rickard et al. 2005. N4Lid 10.1601/nm.9384

*Adhaeribacter aquaticus*<sup>VP</sup> Rickard et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16391. High-quality 16S rRNA sequence S000539472 (RDP), AJ626894 (Genbank). N4Lid 10.1601/nm.9383

**Genus *Aquiflexum***<sup>VP</sup> Brettar et al. 2004. N4Lid DOI: 10.1601/nm.8469

*Aquiflexum balticum*<sup>VP</sup> Brettar et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16537. High-quality 16S rRNA sequence S000440297 (RDP), AJ744861 (Genbank). N4Lid DOI: 10.1601/nm.8470

**Genus *Aquimarina***<sup>VP</sup> Nedashkovskaya et al. 2005. ≈ *Aquimarina* (later heterotypic synonym), links through 10.1601/nm.8471. N4Lid DOI: 10.1601/nm.8471

*Aquimarina muelleri*<sup>VP</sup> Nedashkovskaya et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22569. High-quality 16S rRNA sequence S000475572 (RDP), AY608406 (Genbank). N4Lid DOI: 10.1601/nm.8472

*Aquimarina brevivitae*<sup>VP</sup> (Yoon et al. 2006) Nedashkovskaya et al. 2006. <==

*Gaetbulimicrobium brevivitae* (basonym). Synonym links through N4Lid: 10.1601/ex.9853. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23177. High-quality 16S rRNA sequence S000439305 (RDP), D12665 (Genbank). N4Lid 10.1601/nm.9853

† *Gaetbulimicrobium brevivitae*<sup>VP</sup> Yoon et al. 2006. ==> *Aquimarina brevivitae* (new combination). Synonym links through N4Lid: 10.1601/ex.9853. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23177. High-quality 16S rRNA sequence S000527996 (RDP), AY987367 (Genbank). N4Lid DOI: 10.1601/nm.10303

*Aquimarina intermedia*<sup>VP</sup> Nedashkovskaya et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17527. High-quality 16S rRNA sequence S000711219 (RDP), AM113977 (Genbank). N4Lid DOI: 10.1601/nm.10302

*Aquimarina latercula*<sup>VP</sup> (Lewin 1969) Nedashkovskaya et al. 2006. <== *Cytophaga latercula* (basonym). Synonym links through N4Lid: 10.1601/ex.8283. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23177. High-quality 16S rRNA sequence S000436363 (RDP), M58769 (Genbank). N4Lid 10.1601/nm.9780

† *Stanierella latercula*<sup>VP</sup> (Lewin 1969) Nedashkovskaya et al. 2005. <== *Cytophaga latercula* (basonym). *Aquimarina latercula* (new combination). Synonym links through N4Lid: 10.1601/ex.8283. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23177. High-quality 16S rRNA sequence S000436363 (RDP), M58769 (Genbank). N4Lid 10.1601/nm.8857

† *Cytophaga latercula*<sup>AL</sup> Lewin 1969. ==> *Stanierella latercula* (new combination). Synonym links through N4Lid: 10.1601/ex.8283. Source of type material recommended for DOE sponsored

genome sequencing by the JGI: ATCC 23177. High-quality 16S rRNA sequence S000436363 (RDP), M58769 (Genbank). N4Lid DOI: 10.1601/nm.8283

**Genus** † *Stanierella*<sup>VP</sup> Nedashkovskaya et al. 2005. ≈ *Aquimarina* (earlier heterotypic synonym), links through 10.1601./nm.8471. N4Lid 10.1601/nm.8856

**Genus** † *Gaetbulimicrobium*<sup>VP</sup> Yoon et al. 2006. ≈ *Aquimarina* (earlier heterotypic synonym), links through 10.1601./nm.8471. N4Lid 10.1601/nm.9854

**Genus** *Arcicella*<sup>VP</sup> Nikitin et al. 2004. N4Lid DOI: 10.1601/nm.8473

*Arcicella aquatica*<sup>VP</sup> Nikitin et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107990. High-quality 16S rRNA sequence S000351837 (RDP), AJ535729 (Genbank). N4Lid DOI: 10.1601/nm.8474

**Genus** *Belliella*<sup>VP</sup> Brettar et al. 2004. N4Lid DOI: 10.1601/nm.8266

*Belliella baltica*<sup>VP</sup> Brettar et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15883. High-quality 16S rRNA sequence S000323434 (RDP), AJ564643 (Genbank). N4Lid DOI: 10.1601/nm.8267

**Genus** *Chimaericella*<sup>VP</sup> Tiago et al. 2006. N4Lid DOI: 10.1601/nm.10070

*Chimaericella alkaliphila*<sup>VP</sup> Tiago et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108740. N4Lid DOI: 10.1601/nm.10069

**Genus** "*Cardinium*" N4Lid 10.1601/nm.8988

"*Cardinium hertigii*" Zchori-Fein et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. High-quality 16S rRNA sequence S000358005 (RDP), AY331187 (Genbank). GOLD ID: Gi01565. GCAT ID: 000864\_GCAT. Genome sequence is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid 10.1601/nm.8957

**Genus** *Cyclobacterium*<sup>VP</sup> Raj and Maloy 1990. N4Lid DOI: 10.1601/nm.8268

*Cyclobacterium marinum*<sup>VP</sup> corrig. (Raj 1976) Raj and Maloy 1990. <== *Flectobacillus marinum* (basonym). Synonym links through N4Lid: 10.1601/ex.8299. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25205. High-quality 16S rRNA sequence S000016665 (RDP), M62788 (Genbank). N4Lid DOI: 10.1601/nm.8269

† *Flectobacillus marinum*<sup>AL</sup> (Raj 1976) Borrall and Larkin 1978. ==> *Cyclobacterium marinum* (new combination). Synonym links through N4Lid: 10.1601/ex.8299. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25205. High-quality 16S rRNA sequence S000016665 (RDP), M62788 (Genbank). N4Lid DOI: 10.1601/nm.8299

*Cyclobacterium amurskyense*<sup>VP</sup> Nedashkovskaya et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 23026. High-quality 16S rRNA sequence S000515766 (RDP), AY960985 (Genbank). N4Lid 10.1601/nm.9755

**Genus** *Cytophaga*<sup>AL</sup> Winogradsky 1929. N4Lid DOI: 10.1601/nm.8270

*Cytophaga hutchinsonii*<sup>AL</sup> Winogradsky 1929. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33406. High-quality 16S rRNA sequence S000436362 (RDP), M58768 (Genbank). GOLD ID: Gc00400. GCAT ID: 000209\_GCAT. Entrez genome id: 54. Sequenced strain: ATCC 33406 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8271

*Cytophaga aurantiaca*<sup>VP</sup> (ex Winogradsky 1929) Reichenbach 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 12208. High-quality 16S rRNA sequence S000439298 (RDP), D12658 (Genbank). N4Lid DOI: 10.1601/nm.8276

*Cytophaga columnaris*<sup>VP</sup> (ex Davis 1922) Reichenbach 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23463. N4Lid DOI: 10.1601/nm.8277

*Cytophaga fermentans*<sup>AL</sup> Bachmann 1955. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19072. High-quality 16S rRNA sequence S000436360 (RDP), M58766 (Genbank). N4Lid DOI: 10.1601/nm.8279

*Cytophaga xylanolytica*<sup>VP</sup> Haack and Breznak 1993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51429. N4Lid DOI: 10.1601/nm.8293

**Genus** *Dyadobacter*<sup>VP</sup> Chelius and Triplett 2000. N4Lid DOI: 10.1601/nm.8294

- Dyadobacter fermentans*<sup>VP</sup> Chelius and Triplett 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700827. High-quality 16S rRNA sequence S000470279 (RDP), AF137029 (Genbank). N4Lid DOI: 10.1601/nm.8295
- Dyadobacter crusticola*<sup>VP</sup> Reddy and Garcia-Pichel 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1036. High-quality 16S rRNA sequence S000539640 (RDP), AJ821885 (Genbank). N4Lid 10.1601/nm.9466
- Dyadobacter ginsengisoli*<sup>VP</sup> Liu et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 23409. High-quality 16S rRNA sequence S000627905 (RDP), AB245369 (Genbank). N4Lid DOI: 10.1601/nm.10264
- Dyadobacter hamtensis*<sup>VP</sup> Chaturvedi et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12919. N4Lid 10.1601/nm.9634
- Genus *Echinicola***<sup>VP</sup> Nedashkovskaya et al. 2006. N4Lid DOI: 10.1601/nm.10056
- Echinicola pacifica*<sup>VP</sup> Nedashkovskaya et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 23350. High-quality 16S rRNA sequence S000612855 (RDP), DQ185611 (Genbank). N4Lid DOI: 10.1601/nm.10055
- Genus *Effluviibacter***<sup>VP</sup> Suresh et al. 2006. N4Lid DOI: 10.1601/nm.10180
- Effluviibacter roseus*<sup>VP</sup> Suresh et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17521. High-quality 16S rRNA sequence S000544813 (RDP), AM049256 (Genbank). N4Lid DOI: 10.1601/nm.10179
- Genus *Emticicia***<sup>VP</sup> Saha and Chakrabarti 2006. N4Lid DOI: 10.1601/nm.10060
- Emticicia oligotrophica*<sup>VP</sup> Saha and Chakrabarti 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17448. High-quality 16S rRNA sequence S000627044 (RDP), AY904352 (Genbank). N4Lid DOI: 10.1601/nm.10059
- Genus *Fabibacter***<sup>VP</sup> Lau et al. 2006. N4Lid DOI: 10.1601/nm.10064
- Fabibacter halotolerans*<sup>VP</sup> Lau et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-41220. High-quality 16S rRNA sequence S000557768 (RDP), DQ080995 (Genbank). N4Lid DOI: 10.1601/nm.10063
- Genus *Flectobacillus***<sup>AL</sup> Larkin et al. 1977. N4Lid DOI: 10.1601/nm.8296
- Flectobacillus major*<sup>AL</sup> (Gromov 1963) Larkin et al. 1977. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29496. High-quality 16S rRNA sequence S000021760 (RDP), M62787 (Genbank). N4Lid DOI: 10.1601/nm.8297
- Flectobacillus lacus*<sup>VP</sup> Hwang and Cho 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 13398. High-quality 16S rRNA sequence S000584167 (RDP), DQ112352 (Genbank). N4Lid DOI: 10.1601/nm.10114
- Genus *Hongiella***<sup>VP</sup> Yi and Chun 2004. N4Lid DOI: 10.1601/nm.8300
- Hongiella mannitolivorans*<sup>VP</sup> Yi and Chun 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15301. High-quality 16S rRNA sequence S000404972 (RDP), AY264838 (Genbank). N4Lid DOI: 10.1601/nm.8301
- Hongiella marincola*<sup>VP</sup> Yoon et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16067. High-quality 16S rRNA sequence S000420519 (RDP), AY533663 (Genbank). N4Lid 10.1601/nm.8617
- Hongiella ornithinivorans*<sup>VP</sup> Yi and Chun 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15282. High-quality 16S rRNA sequence S000404974 (RDP), AY264840 (Genbank). N4Lid DOI: 10.1601/nm.8303
- Genus *Hymenobacter***<sup>VP</sup> Hirsch et al. 1999. N4Lid DOI: 10.1601/nm.8304
- Hymenobacter roseosalivarius*<sup>VP</sup> Hirsch et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11622. High-quality 16S rRNA sequence S000019071 (RDP), Y18833 (Genbank). N4Lid DOI: 10.1601/nm.8305
- Hymenobacter actinosclerus*<sup>VP</sup> Collins et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 39621. High-quality 16S rRNA sequence S000018007 (RDP), Y17356 (Genbank). N4Lid DOI: 10.1601/nm.8307
- Hymenobacter aerophilus*<sup>VP</sup> Buczolits et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13606. High-quality 16S rRNA sequence S000019997 (RDP), AJ276901 (Genbank). N4Lid DOI: 10.1601/nm.8306

*Hymenobacter chitinivorans*<sup>VP</sup> Buczolits et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11115. High-quality 16S rRNA sequence S000019101 (RDP), Y18837 (Genbank). N4Lid DOI: 10.1601/nm.10309

*Hymenobacter gelipurpurascens*<sup>VP</sup> Buczolits et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11116. High-quality 16S rRNA sequence S000017522 (RDP), Y18836 (Genbank). N4Lid DOI: 10.1601/nm.10308

*Hymenobacter norwichensis*<sup>VP</sup> Buczolits et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15439. High-quality 16S rRNA sequence S000118541 (RDP), AJ549285 (Genbank). N4Lid DOI: 10.1601/nm.10310

*Hymenobacter ocellatus*<sup>VP</sup> Buczolits et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11117. High-quality 16S rRNA sequence S000006685 (RDP), Y18838 (Genbank). N4Lid DOI: 10.1601/nm.10307

*Hymenobacter rigui*<sup>VP</sup> et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: KCTC 12533. High-quality 16S rRNA sequence S000558790 (RDP), DQ089669 (Genbank). N4Lid DOI: 10.1601/nm.10295

**Genus *Larkinella***<sup>VP</sup> Vancanneyt et al. 2006. N4Lid 10.1601/nm.9867

*Larkinella insperata*<sup>VP</sup> Vancanneyt et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22510. High-quality 16S rRNA sequence S000629071 (RDP), AM000022 (Genbank). N4Lid 10.1601/nm.9866

**Genus *Leadbetterella***<sup>VP</sup> Weon et al. 2005. N4Lid 10.1601/nm.9751

*Leadbetterella byssohyla*<sup>VP</sup> Weon et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17132. High-quality 16S rRNA sequence S000509769 (RDP), AY854022 (Genbank). N4Lid 10.1601/nm.9750

**Genus *Leeuwenhoekiella***<sup>VP</sup> Nedashkovskaya et al. 2005. N4Lid 10.1601/nm.9456

*Leeuwenhoekiella marinoflava*<sup>VP</sup> (Reichenbach 1989) Nedashkovskaya et al. 2005. <=== *Cytophaga marinoflava* (basonym). Synonym links through N4Lid: 10.1601/ex.8286. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19326. High-quality 16S rRNA sequence S000436364 (RDP), M58770 (Genbank). N4Lid 10.1601/nm.9268

† *Cytophaga marinoflava*<sup>VP</sup> (ex Colwell et al. 1966) Reichenbach 1989. ==> *Leeuwenhoekiella marinoflava* (new combination). Synonym links through N4Lid: 10.1601/ex.8286. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19326. High-quality 16S rRNA sequence S000436364 (RDP), M58770 (Genbank). N4Lid DOI: 10.1601/nm.8286

*Leeuwenhoekiella aequorea*<sup>VP</sup> Nedashkovskaya et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 50091. N4Lid 10.1601/nm.9455

*Leeuwenhoekiella blandensis*<sup>VP</sup> Pinhassi et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 51940. High-quality 16S rRNA sequence S000625868 (RDP), DQ294290 (Genbank). GOLD ID: Gi00843. GCAT ID: 001058\_GCAT. Entrez genome id: 13573. Sequenced strain: MED217 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.10170

**Genus *Meniscus***<sup>AL</sup> Irgens 1977. N4Lid DOI: 10.1601/nm.8308

*Meniscus glaucopis*<sup>AL</sup> Irgens 1977. Source of type material recommended for DOE sponsored genome sequencing by the JGI:NIVA CYA 277/1. N4Lid DOI: 10.1601/nm.8309

**Genus *Microscilla***<sup>AL</sup> Pringsheim 1951. N4Lid DOI: 10.1601/nm.8310

*Microscilla marina*<sup>AL</sup> (Pringsheim 1951) Lewin 1969. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23134. High-quality 16S rRNA sequence S000436385 (RDP), M58793 (Genbank). GOLD ID: Gi00853. GCAT ID: 001213\_GCAT. Entrez genome id: 13411. Sequenced strain: ATCC 23134 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8311

**Genus *Niastella***<sup>VP</sup> Weon et al. 2006. N4Lid DOI: 10.1601/nm.10256



*Niastella koreensis*<sup>VP</sup> Weon et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17620. High-quality 16S rRNA sequence S000620070 (RDP), DQ244077 (Genbank). N4Lid DOI: 10.1601/nm.10255

*Niastella yeongjuensis*<sup>VP</sup> Weon et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17621. High-quality 16S rRNA sequence S000620069 (RDP), DQ244076 (Genbank). N4Lid DOI: 10.1601/nm.10257

**Genus** *Reichenbachiella*<sup>VP</sup> Nedashkovskaya et al. 2005. N4Lid 10.1601/nm.9762

*Reichenbachiella agariperforans*<sup>VP</sup> (Nedashkovskaya et al. 2003) Nedashkovskaya et al. 2005. <== *Reichenbachia agariperforans* (basonym). Synonym links through N4Lid: 10.1601/ex.8313. Source of type material recommended for DOE sponsored genome sequencing by the JGI: IFO 16625. High-quality 16S rRNA sequence S000383917 (RDP), AB058919 (Genbank). N4Lid 10.1601/nm.9277

† *Reichenbachia agariperforans*<sup>VP</sup> Nedashkovskaya et al. 2003. ==> *Reichenbachiella agariperforans* (new combination). Synonym links through N4Lid: 10.1601/ex.8313. Source of type material recommended for DOE sponsored genome sequencing by the JGI: IFO 16625. High-quality 16S rRNA sequence S000383917 (RDP), AB058919 (Genbank). N4Lid DOI: 10.1601/nm.8313

**Genus** † *Reichenbachia*<sup>VP</sup> Nedashkovskaya et al. 2003. Illegitimate name. DOI: 10.1601/nm.8312

**Genus** *Roseivirga*<sup>VP</sup> Nedashkovskaya et al. 2005. ≈ *Roseivirga* (later heterotypic synonym), links through 10.1601/nm.8820. N4Lid 10.1601/nm.8820

*Roseivirga ehrenbergii*<sup>VP</sup> Nedashkovskaya et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22567. High-quality 16S rRNA sequence S000475576 (RDP), AY608410 (Genbank). N4Lid 10.1601/nm.8821

*Roseivirga spongicola*<sup>VP</sup> Lau et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-41219. High-quality 16S rRNA sequence S000557769 (RDP), DQ080996 (Genbank). N4Lid DOI: 10.1601/nm.10065

*Roseivirga seohaensis*<sup>VP</sup> (Yoon et al. 2005) Lau et al. 2006. <== *Marinicola seohaensis* (basonym). Synonym links through N4Lid: 10.1601/ex.9806. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12600. N4Lid 10.1601/nm.9806

† *Marinicola seohaensis*<sup>VP</sup> Yoon et al. 2005. ==> *Roseivirga seohaensis* (new combination). Synonym links through N4Lid: 10.1601/ex.9806. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12600. High-quality 16S rRNA sequence S000505499 (RDP), AY739663 (Genbank). N4Lid 10.1601/nm.9768

*Roseivirga echinomitans*<sup>VP</sup> Nedashkovskaya et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22587. High-quality 16S rRNA sequence S000426605 (RDP), AY753206 (Genbank). N4Lid 10.1601/nm.9638

**Genus** † *Marinicola*<sup>VP</sup> Yoon et al. 2005. ≈ *Roseivirga* (earlier heterotypic synonym), links through 10.1601/nm.8820. N4Lid 10.1601/nm.9385

**Genus** *Runella*<sup>AL</sup> Larkin and Williams 1978. N4Lid DOI: 10.1601/nm.8314

*Runella slithyformis*<sup>AL</sup> Larkin and Williams 1978. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29530. High-quality 16S rRNA sequence S000016670 (RDP), M62786 (Genbank). N4Lid DOI: 10.1601/nm.8315

*Runella zae*<sup>VP</sup> Chelius et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-293. High-quality 16S rRNA sequence S000498586 (RDP), AF137381 (Genbank). N4Lid DOI: 10.1601/nm.8316

**Genus** *Spirosoma*<sup>AL</sup> Migula 1894. N4Lid DOI: 10.1601/nm.8317

*Spirosoma linguale*<sup>AL</sup> Migula 1894. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33905. High-quality 16S rRNA sequence S000629072 (RDP), AM000023 (Genbank). N4Lid DOI: 10.1601/nm.8318

**Genus** *Sporocytophaga*<sup>AL</sup> Stanier 1940. N4Lid DOI: 10.1601/nm.8319

*Sporocytophaga myxococcoides*<sup>AL</sup> (Krzemieniewska 1933) Stanier 1940. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 10010. High-quality 16S rRNA sequence S000012082 (RDP), AJ310654 (Genbank). N4Lid DOI: 10.1601/nm.8320

**Family "Flammeovirgaceae"** N4Lid DOI: 10.1601/nm.8321**Genus *Flammeovirga***<sup>VP</sup> Nakagawa et al. 1997. N4Lid DOI: 10.1601/nm.8322

*Flammeovirga aprica*<sup>VP</sup> (Reichenbach 1989) Nakagawa et al. 1997. <== *Cytophaga aprica* (basonym). Synonym links through N4Lid: 10.1601/ex.8273. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23126. High-quality 16S rRNA sequence S000439295 (RDP), D12655 (Genbank). N4Lid DOI: 10.1601/nm.8323

† *Cytophaga aprica*<sup>VP</sup> (ex Lewin 1969) Reichenbach 1989. ==> *Flammeovirga aprica* (new combination). Synonym links through N4Lid: 10.1601/ex.8273. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23126. High-quality 16S rRNA sequence S000439295 (RDP), D12655 (Genbank). N4Lid DOI: 10.1601/nm.8273

*Flammeovirga arenaria*<sup>VP</sup> (ex Lewin 1969) Takahashi et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 109101. High-quality 16S rRNA sequence S000711005 (RDP), AB247553 (Genbank). N4Lid DOI: 10.1601/nm.10304

*Flammeovirga yaeyamensis*<sup>VP</sup> Takahashi et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 109099. High-quality 16S rRNA sequence S000711006 (RDP), AB247554 (Genbank). N4Lid DOI: 10.1601/nm.10305

**Genus *Flexithrix***<sup>AL</sup> Lewin 1970. N4Lid DOI: 10.1601/nm.8324

*Flexithrix dorotheae*<sup>AL</sup> Lewin 1970. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23163. High-quality 16S rRNA sequence S000427984 (RDP), AF039296 (Genbank). N4Lid DOI: 10.1601/nm.8325

**Genus *Persicobacter***<sup>VP</sup> Nakagawa et al. 1997. N4Lid DOI: 10.1601/nm.8326

*Persicobacter diffluens*<sup>VP</sup> (Reichenbach 1989) Nakagawa et al. 1997. <== *Cytophaga diffluens* (basonym). Synonym links through N4Lid: 10.1601/ex.8278. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49458. High-quality 16S rRNA sequence S000439300 (RDP), D12660 (Genbank). N4Lid DOI: 10.1601/nm.8327

† *Cytophaga diffluens*<sup>VP</sup> (ex Stanier 1940) Reichenbach 1989. ==> *Persicobacter diffluens* (new combination). Synonym links through N4Lid: 10.1601/ex.8278. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49458. High-quality 16S rRNA sequence S000439300 (RDP), D12660 (Genbank). N4Lid DOI: 10.1601/nm.8278

**Genus *Thermonema***<sup>VP</sup> Hudson et al. 1989. N4Lid DOI: 10.1601/nm.8328

*Thermonema lapsum*<sup>VP</sup> Hudson et al. 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43542. N4Lid DOI: 10.1601/nm.8329

*Thermonema rossianum*<sup>VP</sup> Nobre et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 10300. High-quality 16S rRNA sequence S000016110 (RDP), Y08956 (Genbank). N4Lid DOI: 10.1601/nm.8330

**Family *Crenotrichaceae***<sup>AL</sup> Hansgirg 1888. N4Lid DOI: 10.1601/nm.8331**Genus *Crenothrix***<sup>AL</sup> Cohn 1870. N4Lid DOI: 10.1601/nm.8332

*Crenothrix polyspora*<sup>AL</sup> Cohn 1870. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. GOLD ID: Gi01569. GCAT ID: 000987\_GCAT. Genome sequence is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.8333

**Genus *Balneola***<sup>VP</sup> Urios et al. 2006. N4Lid DOI: 10.1601/nm.10262

*Balneola vulgaris*<sup>VP</sup> Urios et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17893. High-quality 16S rRNA sequence S000594445 (RDP), AY576749 (Genbank). N4Lid DOI: 10.1601/nm.10261

**Genus *Chitinophaga***<sup>VP</sup> Sangkhobol and Skerman 1981. N4Lid DOI: 10.1601/nm.8334

*Chitinophaga pinensis*<sup>VP</sup> Sangkhobol and Skerman 1981. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43595. High-quality 16S rRNA sequence S000428531 (RDP), AF078775 (Genbank). N4Lid DOI: 10.1601/nm.8335

*Chitinophaga arvensicola*<sup>VP</sup> (Oyaizu et al. 1983) Kämpfer et al. 2006. <== *Cytophaga arvensicola* (basonym). Synonym links through N4Lid: 10.1601/ex.8275. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51264. High-quality 16S rRNA sequence S000439297 (RDP), D12657 (Genbank). N4Lid 10.1601/nm.9779

- † *Cytophaga arvensicola*<sup>VP</sup> Oyaizu et al. 1983. ==> *Chitinophaga arvensicola* (new combination). Synonym links through N4Lid: 10.1601/ex.8275. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51264. High-quality 16S rRNA sequence S000439297 (RDP), D12657 (Genbank). N4Lid DOI: 10.1601/nm.8275
- Chitinophaga filiformis*<sup>VP</sup> (Reichenbach 1989) Kämpfer et al. 2006. <== *Flexibacter filiformis* (basonym). Synonym links through N4Lid: 10.1601/ex.8255. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29495. High-quality 16S rRNA sequence S000436375 (RDP), M58782 (Genbank). N4Lid 10.1601/nm.9791
- † *Flexibacter filiformis*<sup>VP</sup> (ex Solntseva 1940) Reichenbach 1989. ==> *Chitinophaga filiformis* (new combination). Synonym links through N4Lid: 10.1601/ex.8255. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29495. High-quality 16S rRNA sequence S000436415 (RDP), M57743 (Genbank). N4Lid DOI: 10.1601/nm.8255
- Chitinophaga japonensis*<sup>VP</sup> (Fujita et al. 1997) Kämpfer et al. 2006. <== *Flexibacter japonensis* (basonym). Synonym links through N4Lid: 10.1601/ex.8256. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13484. High-quality 16S rRNA sequence S000384749 (RDP), AB078055 (Genbank). N4Lid 10.1601/nm.9795
- † *Flexibacter japonensis*<sup>VP</sup> Fujita et al. 1997. ==> *Chitinophaga japonensis* (new combination). Synonym links through N4Lid: 10.1601/ex.8256. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13484. High-quality 16S rRNA sequence S000384749 (RDP), AB078055 (Genbank). N4Lid DOI: 10.1601/nm.8256
- Chitinophaga sancti*<sup>VP</sup> (Lewin 1969) Kämpfer et al. 2006. <== *Flexibacter sancti* (basonym). Synonym links through N4Lid: 10.1601/ex.8264. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23092. High-quality 16S rRNA sequence S000013697 (RDP), M62795 (Genbank). N4Lid 10.1601/nm.9783
- † *Flexibacter sancti*<sup>AL</sup> Lewin 1969. ==> *Chitinophaga sancti* (new combination). Synonym links through N4Lid: 10.1601/ex.8264. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23092. High-quality 16S rRNA sequence S000013697 (RDP), M62795 (Genbank). N4Lid DOI: 10.1601/nm.8264
- Chitinophaga skermanii*<sup>VP</sup> Kämpfer et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 52510. High-quality 16S rRNA sequence S000537535 (RDP), DQ062743 (Genbank). N4Lid DOI: 10.1601/nm.10306
- Genus *Rhodothermus***<sup>VP</sup> Alfredsson et al. 1995. N4Lid DOI: 10.1601/nm.8336
- Rhodothermus marinus*<sup>VP</sup> Alfredsson et al. 1995. ≈ *Rhodothermus obamensis* (later heterotypic synonym), links through 10.1601/nm.8337. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43812. High-quality 16S rRNA sequence S000129434 (RDP), X80994 (Genbank). N4Lid DOI: 10.1601/nm.8337
- † *Rhodothermus obamensis*<sup>VP</sup> Sako et al. 1996. ≈ *Rhodothermus marinus* (earlier heterotypic synonym), links through 10.1601/nm.8337. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 4252. High-quality 16S rRNA sequence S000129434 (RDP), X80994 (Genbank). N4Lid DOI: 10.1601/nm.8338
- Genus *Salinibacter***<sup>VP</sup> Antón et al. 2002. N4Lid DOI: 10.1601/nm.8339
- Salinibacter ruber*<sup>VP</sup> Antón et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-605. High-quality 16S rRNA sequence S000391577 (RDP), AF323500 (Genbank). GOLD ID: Gc00331. GCAT ID: 000279\_GCAT. Entrez genome id: 16159. Sequenced strain: DSM 13855 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 2 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8340
- Genus *Terrimonas***<sup>VP</sup> Xie and Yokota 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: newname. N4Lid DOI: 10.1601/nm.10067
- Terrimonas ferruginea*<sup>VP</sup> (Sickles and Shaw 1934) Xie and Yokota 2006. <== *Flavobacterium ferrugineum* (basonym). Synonym links through N4Lid: 10.1601/ex.8083. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 13524. High-quality 16S rRNA sequence S000007584 (RDP), M62798 (Genbank). N4Lid 10.1601/nm.9782
- † *Flavobacterium ferrugineum*<sup>AL</sup> Sickles and Shaw 1934. ==> *Terrimonas ferruginea* (new combination). Synonym links through N4Lid: 10.1601/ex.8083. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 13524. High-quality 16S rRNA sequence S000007584 (RDP), M62798 (Genbank). N4Lid DOI: 10.1601/nm.8083

*Terrimonas lutea*<sup>VP</sup> Xie and Yokota 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: IAM 15284. N4Lid DOI: 10.1601/nm.10066

**Genus *Toxothrix***<sup>AL</sup> Molisch 1925. N4Lid DOI: 10.1601/nm.8341

*Toxothrix trichogenes*<sup>AL</sup> (Cholodny 1924) Beger 1953. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.8342

**Phylum "*Fusobacteria*"** N4Lid DOI: 10.1601/nm.8343

**Class "*Fusobacteria*"** N4Lid DOI: 10.1601/nm.8344

**Order "*Fusobacteriales*"** N4Lid DOI: 10.1601/nm.8345

**Family "*Fusobacteriaceae*"** N4Lid DOI: 10.1601/nm.8346

**Genus *Fusobacterium***<sup>AL</sup> Knorr 1922. N4Lid DOI: 10.1601/nm.8347

*Fusobacterium nucleatum subsp. nucleatum*<sup>VP</sup> Knorr 1922. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 10953. High-quality 16S rRNA sequence S000259985 (RDP), X55401 (Genbank). GOLD ID: Gc00085. GCAT ID: 000525\_GCAT. Entrez genome id: 295. Sequenced strain: ATCC 10953 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 2 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8348

*Fusobacterium nucleatum subsp. animalis*<sup>VP</sup> Gharbia and Shah 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51191. High-quality 16S rRNA sequence S000259986 (RDP), X55404 (Genbank). N4Lid DOI: 10.1601/nm.8349

*Fusobacterium nucleatum subsp. fusiforme*<sup>VP</sup> (ex Veillon and Zuber 1898) Gharbia and Shah 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51190. High-quality 16S rRNA sequence S000260777 (RDP), X55403 (Genbank). N4Lid DOI: 10.1601/nm.8350

*Fusobacterium nucleatum subsp. polymorphum*<sup>VP</sup> (ex Knorr 1922) Dzink et al. 1990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 10953. High-quality 16S rRNA sequence S000260617 (RDP), X55402 (Genbank). GOLD ID: Gi00264. GCAT ID: 001094\_GCAT. Entrez genome id: 17261. Sequenced strain: ATCC 10953 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8351

*Fusobacterium nucleatum subsp. vincentii*<sup>VP</sup> Dzink et al. 1990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49256. High-quality 16S rRNA sequence S000130331 (RDP), AJ006964 (Genbank). GOLD ID: Gi00265. GCAT ID: 001095\_GCAT. Entrez genome id: 1419. Sequenced strain: ATCC 49256 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8352

*Fusobacterium canifelinum*<sup>VP</sup> Conrads et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-689. High-quality 16S rRNA sequence S000417698 (RDP), AY162220 (Genbank). N4Lid DOI: 10.1601/nm.8585

*Fusobacterium equinum*<sup>VP</sup> Dorsch et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11174. High-quality 16S rRNA sequence S000126816 (RDP), AJ295750 (Genbank). N4Lid DOI: 10.1601/nm.8354

*Fusobacterium gonidiaformans*<sup>AL</sup> (Tunncliffe and Jackson 1925) Moore and Holdeman 1970. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25563. High-quality 16S rRNA sequence S000260569 (RDP), X55410 (Genbank). N4Lid DOI: 10.1601/nm.8355

*Fusobacterium mortiferum*<sup>AL</sup> (Harris 1901) Moore and Holdeman 1970. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25557. High-quality 16S rRNA sequence S000260074 (RDP), X55414 (Genbank). N4Lid DOI: 10.1601/nm.8356

*Fusobacterium naviforme*<sup>AL</sup> (Jungano 1909) Moore and Holdeman 1970. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25832. N4Lid DOI: 10.1601/nm.8357

*Fusobacterium necrogenes*<sup>AL</sup> (Weinberg et al. 1937) Moore and Holdeman 1970. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25556. High-

quality 16S rRNA sequence S000260333 (RDP), X55408 (Genbank). N4Lid DOI: 10.1601/nm.8358

*Fusobacterium necrophorum* subsp. *necrophorum*<sup>VP</sup> (Flügge 1886) Moore and Holdeman 1969. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25286. High-quality 16S rRNA sequence S000260848 (RDP), X55411 (Genbank). N4Lid DOI: 10.1601/nm.8359

*Fusobacterium necrophorum* subsp. *funduliforme*<sup>VP</sup> (ex Hallé 1898) Shinjo et al. 1991. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51357. N4Lid DOI: 10.1601/nm.8360

*Fusobacterium perfoetens*<sup>AL</sup> (Tissier 1905) Moore and Holdeman 1973. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29250. High-quality 16S rRNA sequence S000013707 (RDP), M58684 (Genbank). N4Lid DOI: 10.1601/nm.8361

*Fusobacterium periodonticum*<sup>VP</sup> Slots et al. 1984. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33693. High-quality 16S rRNA sequence S000260849 (RDP), X55405 (Genbank). N4Lid DOI: 10.1601/nm.8362

*Fusobacterium russii*<sup>AL</sup> (Hauduroy et al. 1937) Moore and Holdeman 1970. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25533. High-quality 16S rRNA sequence S000260568 (RDP), X55409 (Genbank). N4Lid DOI: 10.1601/nm.8367

*Fusobacterium simiae*<sup>VP</sup> Slots and Potts 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33568. High-quality 16S rRNA sequence S000259938 (RDP), X55407 (Genbank). N4Lid DOI: 10.1601/nm.8368

*Fusobacterium ulcerans*<sup>VP</sup> Adriaans and Shah 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49185. High-quality 16S rRNA sequence S000260725 (RDP), X55412 (Genbank). N4Lid DOI: 10.1601/nm.8370

*Fusobacterium varium*<sup>AL</sup> (Eggerth and Gagnon 1933) Moore and Holdeman 1969. ≈ *Fusobacterium pseudonecrophorum* (later heterotypic synonym), links through 10.1601/nm.8371. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 8501. High-quality 16S rRNA sequence S000013698 (RDP), M58686 (Genbank). N4Lid DOI: 10.1601/nm.8371

† *Fusobacterium pseudonecrophorum*<sup>VP</sup> (ex Harris and Brown 1927) Shinjo et al. 1990. ≈ *Fusobacterium varium* (earlier heterotypic synonym), links through 10.1601/nm.8371. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51644. N4Lid DOI: 10.1601/nm.8366

**Genus *Ilyobacter***<sup>VP</sup> Stieb and Schink 1985. N4Lid DOI: 10.1601/nm.8372

*Ilyobacter polytropus*<sup>VP</sup> Stieb and Schink 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51220. High-quality 16S rRNA sequence S000018604 (RDP), AJ307981 (Genbank). N4Lid DOI: 10.1601/nm.8373

*Ilyobacter delafieldii*<sup>VP</sup> Janssen and Harfoot 1991. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49679. N4Lid DOI: 10.1601/nm.8374

*Ilyobacter insuetus*<sup>VP</sup> Brune et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-291. High-quality 16S rRNA sequence S000022851 (RDP), AJ307980 (Genbank). N4Lid DOI: 10.1601/nm.8375

*Ilyobacter tartaricus*<sup>VP</sup> Schink 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35898. High-quality 16S rRNA sequence S000019144 (RDP), AJ307982 (Genbank). N4Lid DOI: 10.1601/nm.8376

**Genus *Leptotrichia***<sup>AL</sup> Trevisan 1879. N4Lid DOI: 10.1601/nm.8377

*Leptotrichia buccalis*<sup>AL</sup> (Robin 1853) Trevisan 1879. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14201. High-quality 16S rRNA sequence S000129455 (RDP), X90831 (Genbank). N4Lid DOI: 10.1601/nm.8378

*Leptotrichia goodfellowii*<sup>VP</sup> Eribe et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 32286. High-quality 16S rRNA sequence S000434625 (RDP), AY029807 (Genbank). N4Lid DOI: 10.1601/nm.8379



*Leptotrichia hofstadii*<sup>VP</sup> Eribe et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 47504. High-quality 16S rRNA sequence S000434621 (RDP), AY029803 (Genbank). N4Lid DOI: 10.1601/nm.8380

*Leptotrichia shahii*<sup>VP</sup> Eribe et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 47503. High-quality 16S rRNA sequence S000434624 (RDP), AY029806 (Genbank). N4Lid DOI: 10.1601/nm.8381

*Leptotrichia trevisanii*<sup>VP</sup> Tee et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700907. High-quality 16S rRNA sequence S000018119 (RDP), AF206305 (Genbank). N4Lid DOI: 10.1601/nm.8382

*Leptotrichia wadei*<sup>VP</sup> Eribe et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 47505. N4Lid DOI: 10.1601/nm.8383

**Genus *Propionigenium***<sup>VP</sup> Schink and Pfennig 1983. N4Lid DOI: 10.1601/nm.8384

*Propionigenium modestum*<sup>VP</sup> Schink and Pfennig 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35614. High-quality 16S rRNA sequence S000127119 (RDP), X54275 (Genbank). N4Lid DOI: 10.1601/nm.8385

*Propionigenium maris*<sup>VP</sup> Janssen and Liesack 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 9537. High-quality 16S rRNA sequence S000011991 (RDP), X84049 (Genbank). N4Lid DOI: 10.1601/nm.8386

**Genus *Sebaldella***<sup>VP</sup> Collins and Shah 1986. N4Lid DOI: 10.1601/nm.8387

*Sebaldella termitidis*<sup>VP</sup> (Sebald 1962) Collins and Shah 1986. <== *Bacteroides termitidis* (basonym). Synonym links through N4Lid: 10.1601/ex.7989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33386. High-quality 16S rRNA sequence S000021758 (RDP), M58678 (Genbank). N4Lid DOI: 10.1601/nm.8388

† *Bacteroides termitidis*<sup>AL</sup> (Sebald 1962) Holdeman and Moore 1970. ==> *Sebaldella termitidis* (new combination). Synonym links through N4Lid: 10.1601/ex.7989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33386. High-quality 16S rRNA sequence S000021758 (RDP), M58678 (Genbank). N4Lid DOI: 10.1601/nm.7989

**Genus *Streptobacillus***<sup>AL</sup> Levaditi et al. 1925. N4Lid DOI: 10.1601/nm.8389

*Streptobacillus moniliformis*<sup>AL</sup> Levaditi et al. 1925. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14647. High-quality 16S rRNA sequence S000022303 (RDP), Z35305 (Genbank). N4Lid DOI: 10.1601/nm.8390

**Genus *Sneathia***<sup>VP</sup> Collins et al. 2002. N4Lid DOI: 10.1601/nm.8391

*Sneathia sanguinegens*<sup>VP</sup> Collins et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 41628. High-quality 16S rRNA sequence S000096693 (RDP), AJ344093 (Genbank). N4Lid DOI: 10.1601/nm.8392

**Family *Incertae sedis II***<sup>NVP</sup> N4Lid DOI: 10.1601/nm.8393

**Genus *Cetobacterium***<sup>VP</sup> Foster et al. 1996. N4Lid DOI: 10.1601/nm.8394

*Cetobacterium ceti*<sup>VP</sup> Foster et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700028. High-quality 16S rRNA sequence S000020432 (RDP), X78419 (Genbank). N4Lid DOI: 10.1601/nm.8395

*Cetobacterium somerae*<sup>VP</sup> Finegold et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-474. High-quality 16S rRNA sequence S000273264 (RDP), AJ438155 (Genbank). N4Lid DOI: 10.1601/nm.8396

**Phylum "*Verrucomicrobia*"** N4Lid DOI: 10.1601/nm.8397

**Class *Verrucomicrobiae***<sup>VP</sup> Hedlund et al 1998. N4Lid DOI: 10.1601/nm.8398

**Order *Verrucomicrobiales***<sup>VP</sup> Ward-Rainey et al 1996. N4Lid DOI: 10.1601/nm.8399

**Family *Verrucomicrobiaceae***<sup>VP</sup> Ward-Rainey et al 1996. N4Lid DOI: 10.1601/nm.8400

**Genus *Verrucomicrobium***<sup>VP</sup> Schlesner 1988. GOLD ID: Gi01048. GCAT ID: 001645\_GCAT. Sequenced strain: 2D6 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.8401

*Verrucomicrobium spinosum*<sup>VP</sup> Schlesner 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43997. High-quality 16S rRNA sequence S000021618 (RDP), X90515 (Genbank). GOLD ID: Gi00677. GCAT ID: 001644\_GCAT. Entrez

genome id: 10620. Sequenced strain: DSM 4136 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8402

**Genus *Akkermansia*** <sup>VP</sup> Derrien et al. 2004. N4Lid DOI: 10.1601/nm.8445

*Akkermansia muciniphila* <sup>VP</sup> Derrien et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-835. GOLD ID: Gi00999. GCAT ID: 000693\_GCAT. Entrez genome id: 15682. Sequenced strain: ATCC BAA-835 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8446

**Genus *Prostheco bacter*** <sup>VP</sup> (ex Staley et al. 1976) Staley et al. 1980. N4Lid DOI: 10.1601/nm.8403

*Prostheco bacter fusiformis* <sup>VP</sup> (ex Staley et al. 1976) Staley et al. 1980. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25309. High-quality 16S rRNA sequence S000437979 (RDP), U60015 (Genbank). N4Lid DOI: 10.1601/nm.8404

*Prostheco bacter debontii* <sup>VP</sup> Hedlund et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700200. High-quality 16S rRNA sequence S000437978 (RDP), U60014 (Genbank). N4Lid DOI: 10.1601/nm.8405

*Prostheco bacter dejongeii* <sup>VP</sup> Hedlund et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27091. High-quality 16S rRNA sequence S000437977 (RDP), U60012 (Genbank). GOLD ID: Gi00484. GCAT ID: 001376\_GCAT. Entrez genome id: 13453. Sequenced strain: ATCC 27091 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8406

*Prostheco bacter vanneervenii* <sup>VP</sup> Hedlund et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700199. High-quality 16S rRNA sequence S000004778 (RDP), U60013 (Genbank). N4Lid DOI: 10.1601/nm.8407

**Family "*Opiritaceae*"** GOLD ID: Gi01740. GCAT ID: 000686\_GCAT. Entrez genome id: 18333. Sequenced strain: TAV2 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8408

**Genus *Opiritus*** <sup>VP</sup> Chin et al. 2001. N4Lid DOI: 10.1601/nm.8409

*Opiritus terrae* <sup>VP</sup> Chin et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11246. High-quality 16S rRNA sequence S000018839 (RDP), AJ229235 (Genbank). GOLD ID: Gi01027. GCAT ID: 001343\_GCAT. Entrez genome id: 16101. Sequenced strain: 4 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8410

**Genus *Alterococcus*** <sup>VP</sup> Shieh and Jean 1999. N4Lid DOI: 10.1601/nm.3100

*Alterococcus agarolyticus* <sup>VP</sup> Shieh and Jean 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 106113. High-quality 16S rRNA sequence S000428476 (RDP), AF075271 (Genbank). N4Lid DOI: 10.1601/nm.3101

**Genus *Rubritalea*** <sup>VP</sup> Scheuermayer et al. 2006. N4Lid DOI: 10.1601/nm.10299

*Rubritalea marina* <sup>VP</sup> Scheuermayer et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17716. High-quality 16S rRNA sequence S000651744 (RDP), DQ302104 (Genbank). N4Lid DOI: 10.1601/nm.10298

**Family "*Xiphinematobacteriaceae*"** N4Lid DOI: 10.1601/nm.8414

**Genus "*Xiphinematobacter*"** N4Lid DOI: 10.1601/nm.8415

*"Xiphinematobacter brevicollis"* Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. High-quality 16S rRNA sequence S000389303 (RDP), AF217462 (Genbank). N4Lid DOI: 10.1601/nm.8416

*"Xiphinematobacter americanii"* Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. High-quality 16S rRNA sequence S000389301 (RDP), AF217460 (Genbank). N4Lid DOI: 10.1601/nm.8417

*"Xiphinematobacter revesi"* Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. High-quality 16S rRNA sequence S000389302 (RDP), AF217461 (Genbank). N4Lid DOI: 10.1601/nm.8418

**Phylum "*Dictyoglomi*"** N4Lid DOI: 10.1601/nm.8419

**Class "Dictyoglomi"** N4Lid DOI: 10.1601/nm.8420

**Order "Dictyoglomales"** N4Lid DOI: 10.1601/nm.8421

**Family "Dictyoglomaceae"** N4Lid DOI: 10.1601/nm.8422

**Genus *Dictyoglossus*<sup>VP</sup>** Saiki et al. 1985. N4Lid DOI: 10.1601/nm.8423

*Dictyoglossus thermophilum*<sup>VP</sup> Saiki et al. 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35947. High-quality 16S rRNA sequence S000010022 (RDP), X69194 (Genbank). GOLD ID: Gi00738. GCAT ID: 001004\_GCAT. Entrez genome id: 12523. Sequenced strain: DSM 3960 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8424

*Dictyoglossus turgidum*<sup>VP</sup> corrig. Svetlichny and Svetlichnayá 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 6724. N4Lid DOI: 10.1601/nm.8425

**Phylum "Gemmatimonadetes"** Zhang et al. 2003. N4Lid DOI: 10.1601/nm.8426

**Class "Gemmatimonadetes"** N4Lid DOI: 10.1601/nm.8427

**Order *Gemmatimonadales*<sup>VP</sup>** Zhang et al 2003. N4Lid DOI: 10.1601/nm.8428

**Family *Gemmatimonadaceae*<sup>VP</sup>** Zhang et al 2003. N4Lid DOI: 10.1601/nm.8429

**Genus *Gemmatimonas*<sup>VP</sup>** Zhang et al. 2003. N4Lid DOI: 10.1601/nm.8430

*Gemmatimonas aurantiaca*<sup>VP</sup> Zhang et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14586. High-quality 16S rRNA sequence S000251887 (RDP), AB072735 (Genbank). GOLD ID: Gi01301. GCAT ID: 001101\_GCAT. Sequenced strain: DSM 14586 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.8431

**Phylum "Lentisphaerae"** Cho et al. 2004. N4Lid 10.1601/nm.8952

**Class "Lentisphaerae"** N4Lid 10.1601/nm.8953

**Order *Lentisphaerales*<sup>VP</sup>** Cho et al 2004. N4Lid 10.1601/nm.8940

**Family "Lentisphaeraceae"** N4Lid 10.1601/nm.8954

**Genus *Lentisphaera*<sup>VP</sup>** Cho et al. 2004. N4Lid 10.1601/nm.8670

*Lentisphaera araneosa*<sup>VP</sup> Cho et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-859. High-quality 16S rRNA sequence S000358543 (RDP), AY390428 (Genbank). GOLD ID: Gi00847. GCAT ID: 001163\_GCAT. Entrez genome id: 13437. Sequenced strain: HTCC 2155 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid 10.1601/nm.8671

**Order *Victivallales*<sup>VP</sup>** Cho et al 2004. N4Lid 10.1601/nm.8951

**Family "Victivallaceae"** N4Lid DOI: 10.1601/nm.8411

**Genus *Victivallis*<sup>VP</sup>** Zoetendal et al. 2003. N4Lid DOI: 10.1601/nm.8412

*Victivallis vadensis*<sup>VP</sup> Zoetendal et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-548. High-quality 16S rRNA sequence S000434907 (RDP), AY049713 (Genbank). GOLD ID: Gi01047. GCAT ID: 001633\_GCAT. Entrez genome id: 15583. Sequenced strain: DSM 14823 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.8413