Archaea-Euryarchaeota-Archaeoglobi-Archaeoglobales-Archaeoglobaceae-Archaeoglobus_profundus_WP_012940499.1 —— Archaea-Euryarchaeota-Archaeoglobi-Archaeoglobales-Archaeoglobaceae-Ferroglobus_placidus_WP_048086478.1 Archaea-Euryarchaeota-Archaeoglobi-Archaeoglobales-Archaeoglobaceae-Geoglobus_ahangari_WP_048094747.1 — Eukaryota-Amoebozoa-NA-NA-Paramoebidae-Paramoeba_atlantica_MMETSP0151_c32036_g1_i1.p1 a-Haptophyta-NA-Phaeocystales-Phaeocystaceae-Phaeocystis_antarctica_MMETSP1444_c16673_g1_i1.p1 Eukaryota-Haptophyta-NA-Prymnesiales-NA-Chrysochromulina_rotalis_MMETSP0287_c6310_g1_i1.p1 Eukaryota-Ciliophora-NA-Unranked-NA-Tiarina_fusus_MMETSP0472_c2263_g1_i1.p1 Eukaryota-Cercozoa-Chlorarachniophyceae-NA-NA-Bigelowiella_natans_MMETSP1052_c5377_g1_i1.p1 karyota-Amoebozoa-NA-NA-Paramoebidae-Mayorella_sp_MMETSP0417_c4452_g1_i1.p1 Eukaryota-Amoebozoa-NA-NA-Paramoebidae-Stygamoeba_regulata_MMETSP0447_c7457_g1_i1.p1 Eukaryota-Nematoda-Chromadorea-Rhabditida-Rhabditidae-Caenorhabditis_elegans_NP_509122.2 Eukaryota-Choanoflagellata-Choanoflagellata-Choanoflagellata-Salpingoecidae-Monosiga brevicollis XP 001745462.1 garyota-Apicomplexa-NA-Unranked-NA-Alveolata_sp_MMETSP0288_c17964_g1_i1.p1 Eukaryota-Chromeraceae-NA-NA-NA-Vitrella_brassicaformis_MMETSP1451_c23612_g1_i1.p1 Eukaryota-Chromeraceae-NA-NA-NA-Chromera_velia_MMETSP0290_c885_g1_i1.p1 llorophyta-NA-NA-NA-Picochlorum oklahomensis MMETSP1161 c2695 g1 i1.p1 Eukaryota-Chlorophyta-NA-Pyramimonadales-NA-Pyramimonas_amylifera_MMETSP1081_c2039_g1_i1.p1 · Eukaryota-Euglenida-NA-Eutreptiales-NA-Eutreptiella_gymnastica_MMETSP0039_c19307_g1_i1.p1 Eukaryota-Streptophyta-Liliopsida-Poales-Poaceae-Aegilops_tauschii_XP_020197862.1 — Eukaryota-Streptophyta-Liliopsida-Poales-Poaceae-Oryza_sativa_XP_015651104.1 Eukaryota-Glaucophyta-Glaucophyta-Gloeochaetales-Gloeochaetaceae-Gloeochaete_witrockiana_MMETSP0308_c661_g1_i2.p1 Eukaryota-Rhodophyta-Bangiophyceae-NA-NA-Rhodosorus_marinus_MMETSP0011_c5674_g1_i1.p1 Eukaryota-Rhodophyta-Bangiophyceae-Porphyridiales-Porphyridiaceae-Porphyridium_purpureum_2095.3 Eukaryota-Rhodophyta-Florideophyceae-Gracilariales-Gracilariaceae-Gracilariopsis_chorda_PXF47519.1 Eukaryota-Glaucophyta-Glaucophyta-NA-Cyanophoraceae-Cyanophora_paradoxa_tig00000194_g14749.t1 Eukaryota-Glaucophyta-Glaucophyta-NA-NA-Cyanoptyche_gloeocystis_MMETSP1086_c12802_g1_i1.p1 Eukaryota-Ciliophora-NA-Unranked-NA-Myrionecta_rubra_MMETSP0798_c11434_g1_i1.p1 Eukaryota-Ciliophora-NA-Unranked-NA-Strombidinopsis_sp_MMETSP0463_c23832_g1_i1.p1

- Eukaryota-Cryptophyta-NA-Pyrenomonadales-Pyrenomonadaceae-Rhodomonas_lens_MMETSP0484_c25299_g1_i1.p1 Eukaryota-Cryptophyta-NA-Pyrenomonadales-Geminigeraceae-Guillardia_theta_CCMP2712_jgi65159 Eukaryota-Nematoda-Chromadorea-Strongylida-Ancylostomatidae-Necator_americanus_XP_013309134.1 Archaea-Thaumarchaeota-NA-NA-NA-NA WP_048083510.1 Archaea-Thaumarchaeota-NA-Nitrosopumilales-Nitrosopumilaceae-Candidatus_Nitrosomarinus_catalina_WP_086907288.1 Archaea-Thaumarchaeota-NA-Nitrosopumilales-Nitrosopumilaceae-Nitrosopumilus_sp._Nsub_WP_067958448.1 — Bacteria-Actinobacteria-Actinobacteria-Corynebacteriales-Nocardiaceae-Rhodococcus_sp._SAORIC690_WP_105028211.1 LEukaryota-Alveolata-Dinophyceae-NA-Unranked-Glenodinium_foliaceum_MMETSP0119_c59128_g1_i1.p2 Telepharyota-Cryptophyta-NA-Goniomondales-NA-Goniomonas_pacifica_MMETSP0108_c53833_g1_i1.p4 Eukaryota-Stramenopiles-Raphidophyceae-Chattonellales-Chattonellaceae-Heterosigma_akashiwo_MMETSP0409_c21570_g1_i1.p2 Bacteria-Firmicutes-Bacilli-Bacillales-Bacillaceae-Bacillus_sp._SRB_336_WP_113723705.1 Bacteria-Proteobacteria-Gammaproteobacteria-Xanthomonadales-Rhodanobacteraceae-Dokdonella_fugitiva_WP_132000144.1 — Bacteria-Proteobacteria-Gammaproteobacteria-Chromatiales-Ectothiorhodospiraceae-NA_WP_018144735.1 Bacteria-NA-NA-NA-NA-bacterium_endosymbiont_of_Bathymodiolus_sp._5_South_WP_139660095.1 Eukaryota-Stramenopiles-Coscinodiscophyceae-Thalassiosirales-Thalassiosiraceae-Thalassiosira_miniscula_MMETSP0740_c7087_g1_i1.p1 — Bacteria-Proteobacteria-Gammaproteobacteria-NA-NA-Pseudohongiella_nitratireducens_WP_068812015.1 - Bacteria-Proteobacteria-Gammaproteobacteria-Thiotrichales-Thiotrichaceae-Leucothrix_mucor_WP_022950658.1 —— Bacteria-Proteobacteria-Gammaproteobacteria-Enterobacterales-NA-NA_WP_014227507.1 Eukaryota-Choanoflagellata-Choanoflagellata-Choanoflagellata-NA-Acanthoeca_sp_MMETSP0105_c34358_g1_i1.p1 Bacteria-Proteobacteria-Gammaproteobacteria-NA-NA-Solemya_velesiana_gill_symbiont_WP_078485608.1 Eukaryota-Stramenopiles-Dictyochophyceae-Pedinellales-NA-Pseudopedinella_elastica_MMETSP1097_c14262_g1_i1.p2 — Paulinella_ovalis_nuclear_SingleCell___SAG1_utg7180000002468.g1116.t1 ———— MSTRG.11290.1.p1 Paulinella_chromatophora_CCAC0185_nuclear___scaffold5555-m48871 — Bacteria-Firmicutes-Bacilli-Bacillales-Alicyclobacillaceae-Kyrpidia_tusciae_WP_013074868.1 — Bacteria-Firmicutes-Clostridia-Halanaerobiales-Halobacteroidaceae-Orenia_metallireducens_WP_097016781.1 Bacteria-Bacteroidetes-Bacteroidia-Bacteroidales-Muribaculaceae-Muribaculaceae_bacterium_Isolate037_Harlan_WP_123484253.1 Bacteria-Bacteroidetes-Bacteroidia-Bacteroidales-NA-Bacteroidales_bacterium_WP_135985460.1 Archaea-NA-NA-NA-NA-anaerobic_archaeon_MKD1_WP_147665250.1 Archaea-NA-NA-NA-NA-archaeon AArcSI WP 119816124.1 —— Archaea-Crenarchaeota-Thermoprotei-Desulfurococcales-Desulfurococcaceae-Ignicoccus_hospitalis_WP_011998201.1 ——— Archaea-Crenarchaeota-Thermoprotei-Sulfolobales-Sulfolobaceae-Acidianus_manzaensis_WP_148692044.1 —— Archaea-Crenarchaeota-Thermoprotei-Sulfolobales-Sulfolobaceae-Sulfodiicoccus_acidiphilus_WP_126449072.1