**S3 Table.** Top 100 features for predicting the death event location (indoors, outdoors, hospital, vehicular) using three machine learning methods: xgboost, random forest, and neural network. A feature is defined as a characteristic (metadata or microbial) of the dataset used as predictor variables in each machine learning methods. The metadata for each case consisted of age, sex, race, season, event location, estimated postmortem interval, weight status, body mass index and manner of death; and microbial taxa were at the operational taxonomic unit (OTU) level. All features are ordered according to importance resulting from each method.

|  |  |
| --- | --- |
| **Machine Learning Method** | **Feature** |
| xgboost | [1] Age |
| [2] BMI |
| [3] MoD |
| [4] Season |
| [5] Estimated\_PMI |
| [6] Race |
| [7] Weight\_Status |
| [8] Sex |
| [9] Taxon |
| [10] denovo3384047: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [11] denovo219151: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Pseudomonadales; f\_\_Moraxellaceae; g\_\_; s\_\_ |
| [12] denovo4425214: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [13] denovo4411138: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Micrococcaceae; g\_\_Rothia; s\_\_mucilaginosa |
| [14] denovo782953: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Enterobacteriales; f\_\_Enterobacteriaceae; g\_\_; s\_\_ |
| [15] denovo1100972: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Lactococcus; s\_\_ |
| [16] denovo856920: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_[Tissierellaceae]; g\_\_Gallicola; s\_\_ |
| [17] denovo4345285: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_ |
| [18] denovo4430826: k\_\_Bacteria; p\_\_Fusobacteria; c\_\_Fusobacteriia; o\_\_Fusobacteriales; f\_\_Leptotrichiaceae; g\_\_Leptotrichia; s\_\_ |
| [19] denovo525942: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_melaninogenica |
| [20] denovo947112: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Corynebacteriaceae; g\_\_Corynebacterium; s\_\_ |
| [21] denovo753638: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Veillonellaceae; g\_\_Dialister; s\_\_ |
| [22] denovo4446902: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Gemellales; f\_\_Gemellaceae; g\_\_; s\_\_ |
| [23] denovo4321559: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Porphyromonadaceae; g\_\_Porphyromonas; s\_\_ |
| [24] denovo4447248: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_melaninogenica |
| [25] denovo4309301: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [26] denovo511378: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Veillonellaceae; g\_\_Veillonella; s\_\_ |
| [27] denovo4477696: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Pasteurellales; f\_\_Pasteurellaceae; g\_\_Haemophilus; s\_\_parainfluenzae |
| [28] denovo4483015: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Carnobacteriaceae; g\_\_Granulicatella; s\_\_ |
| [29] denovo495451: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Porphyromonadaceae; g\_\_Porphyromonas; s\_\_ |
| [30] denovo30062: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_[Tissierellaceae]; g\_\_Anaerococcus; s\_\_ |
| [31] denovo1012948: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Corynebacteriaceae; g\_\_Corynebacterium; s\_\_ |
| [32] denovo2119418: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Enterobacteriales; f\_\_Enterobacteriaceae; g\_\_Pantoea; s\_\_agglomerans |
| [33] denovo271159: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Carnobacteriaceae; g\_\_Granulicatella; s\_\_ |
| [34] denovo4387092: k\_\_Bacteria; p\_\_Fusobacteria; c\_\_Fusobacteriia; o\_\_Fusobacteriales; f\_\_Fusobacteriaceae; g\_\_Fusobacterium; s\_\_ |
| [35] denovo4470078: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Corynebacteriaceae; g\_\_Corynebacterium; s\_\_ |
| [36] denovo495067: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Corynebacteriaceae; g\_\_Corynebacterium; s\_\_ |
| [37] denovo747980: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_nigrescens |
| [38] denovo1790396: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Pseudomonadales; f\_\_Moraxellaceae; g\_\_Acinetobacter; s\_\_johnsonii |
| [39] denovo933546: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Betaproteobacteria; o\_\_Neisseriales; f\_\_Neisseriaceae; g\_\_; s\_\_ |
| [40] denovo4386920: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Pseudomonadales; f\_\_Pseudomonadaceae; g\_\_Pseudomonas; s\_\_ |
| [41] denovo984924: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_ |
| [42] denovo851821: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_[Tissierellaceae]; g\_\_Peptoniphilus; s\_\_ |
| [43] denovo4297119: k\_\_Bacteria; p\_\_Fusobacteria; c\_\_Fusobacteriia; o\_\_Fusobacteriales; f\_\_Leptotrichiaceae; g\_\_Leptotrichia; s\_\_ |
| [44] denovo386273: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Epsilonproteobacteria; o\_\_Campylobacterales; f\_\_Campylobacteraceae; g\_\_Campylobacter; s\_\_ureolyticus |
| [45] denovo269907: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_[Paraprevotellaceae]; g\_\_[Prevotella]; s\_\_ |
| [46] denovo4311939: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Micrococcaceae; g\_\_Rothia; s\_\_dentocariosa |
| [47] denovo4338372: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_ |
| [48] denovo755148: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_[Tissierellaceae]; g\_\_1-68; s\_\_ |
| [49] denovo4422456: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Veillonellaceae; g\_\_Veillonella; s\_\_dispar |
| [50] denovo4453501: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Veillonellaceae; g\_\_Veillonella; s\_\_dispar |
| [51] denovo4439603: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [52] denovo939252: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_ |
| [53] denovo1023075: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Veillonellaceae; g\_\_Veillonella; s\_\_ |
| [54] denovo186732: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Ruminococcaceae; g\_\_; s\_\_ |
| [55] denovo996487: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_epidermidis |
| [56] denovo545299: k\_\_Bacteria; p\_\_Fusobacteria; c\_\_Fusobacteriia; o\_\_Fusobacteriales; f\_\_Fusobacteriaceae; g\_\_Fusobacterium; s\_\_ |
| [57] denovo282360: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Corynebacteriaceae; g\_\_Corynebacterium; s\_\_ |
| [58] denovo159711: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Pseudomonadales; f\_\_Moraxellaceae; g\_\_Acinetobacter; s\_\_lwoffii |
| [59] denovo1077373: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_ |
| [60] denovo913149: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Corynebacteriaceae; g\_\_Corynebacterium; s\_\_ |
| [61] denovo1096610: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_[Tissierellaceae]; g\_\_Finegoldia; s\_\_ |
| [62] denovo4315658: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Lactobacillaceae; g\_\_Lactobacillus; s\_\_ |
| [63] denovo1100471: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_[Tissierellaceae]; g\_\_Peptoniphilus; s\_\_ |
| [64] denovo4392350: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Flavobacteriia; o\_\_Flavobacteriales; f\_\_Flavobacteriaceae; g\_\_Capnocytophaga; s\_\_ |
| [65] denovo544480: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Corynebacteriaceae; g\_\_Corynebacterium; s\_\_ |
| [66] denovo4458959: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Veillonellaceae; g\_\_Veillonella; s\_\_ |
| [67] denovo4465561: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_melaninogenica |
| [68] denovo103411: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Pseudomonadales; f\_\_Moraxellaceae; g\_\_Acinetobacter; s\_\_ |
| [69] denovo4405869: k\_\_Bacteria; p\_\_Fusobacteria; c\_\_Fusobacteriia; o\_\_Fusobacteriales; f\_\_Fusobacteriaceae; g\_\_Fusobacterium; s\_\_ |
| [70] denovo504674: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_[Tissierellaceae]; g\_\_Anaerococcus; s\_\_ |
| [71] denovo505670: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_[Tissierellaceae]; g\_\_WAL\_1855D; s\_\_ |
| [72] denovo4323555: k\_\_Bacteria; p\_\_Fusobacteria; c\_\_Fusobacteriia; o\_\_Fusobacteriales; f\_\_Fusobacteriaceae; g\_\_Fusobacterium; s\_\_ |
| [73] denovo960695: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_aureus |
| [74] denovo4307484: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [75] denovo714766: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Lachnospiraceae; g\_\_Moryella; s\_\_ |
| [76] denovo4437024: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [77] denovo4326219: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Epsilonproteobacteria; o\_\_Campylobacterales; f\_\_Campylobacteraceae; g\_\_Campylobacter; s\_\_ |
| [78] denovo4430843: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_ |
| [79] denovo3600504: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Bacteroidaceae; g\_\_Bacteroides; s\_\_ |
| [80] denovo494906: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_[Tissierellaceae]; g\_\_Peptoniphilus; s\_\_ |
| [81] denovo885628: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Aerococcaceae; g\_\_Alloiococcus; s\_\_otitis |
| [82] denovo979261: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_epidermidis |
| [83] denovo4396235: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Betaproteobacteria; o\_\_Neisseriales; f\_\_Neisseriaceae; g\_\_Neisseria; s\_\_subflava |
| [84] denovo4296424: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Actinomycetaceae; g\_\_Actinomyces; s\_\_ |
| [85] denovo4307391: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_melaninogenica |
| [86] denovo403701: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Veillonellaceae; g\_\_Dialister; s\_\_ |
| [87] denovo4451251: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Coriobacteriia; o\_\_Coriobacteriales; f\_\_Coriobacteriaceae; g\_\_Atopobium; s\_\_ |
| [88] denovo524725: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Coriobacteriia; o\_\_Coriobacteriales; f\_\_Coriobacteriaceae; g\_\_Atopobium; s\_\_ |
| [89] denovo760967: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_ |
| [90] denovo1048420: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [91] denovo137183: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Bifidobacteriales; f\_\_Bifidobacteriaceae; g\_\_Gardnerella; s\_\_ |
| [92] denovo1000547: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [93] denovo584109: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [94] denovo430191: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Epsilonproteobacteria; o\_\_Campylobacterales; f\_\_Campylobacteraceae; g\_\_Campylobacter; s\_\_rectus |
| [95] denovo4344207: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_anginosus |
| [96] denovo4429335: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_[Tissierellaceae]; g\_\_Peptoniphilus; s\_\_ |
| [97] denovo2751958: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_[Tissierellaceae]; g\_\_Anaerococcus; s\_\_ |
| [98] denovo4460404: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_melaninogenica |
| [99] denovo525391: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_; s\_\_ |
| [100] denovo1039016: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Bacillaceae; g\_\_; s\_\_ |
| random forest | [1] Age |
| [2] MoD |
| [3] Season |
| [4] Weight\_Status |
| [5] BMI |
| [6] Race |
| [7] Estimated\_PMI |
| [8] denovo219439: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Xanthomonadales; f\_\_Xanthomonadaceae; g\_\_; s\_\_ |
| [9] Taxon |
| [10] Sex |
| [11] denovo4393181: k\_\_Bacteria; p\_\_Tenericutes; c\_\_Mollicutes; o\_\_Mycoplasmatales; f\_\_Mycoplasmataceae; g\_\_Mycoplasma; s\_\_ |
| [12] denovo4423410: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Alphaproteobacteria; o\_\_Sphingomonadales; f\_\_Sphingomonadaceae; g\_\_Sphingomonas; s\_\_ |
| [13] denovo870751: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_epidermidis |
| [14] denovo184238: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Lachnospiraceae; g\_\_Blautia; s\_\_ |
| [15] denovo4345285: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_ |
| [16] denovo3384047: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [17] denovo4310398: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_nanceiensis |
| [18] denovo4477696: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Pasteurellales; f\_\_Pasteurellaceae; g\_\_Haemophilus; s\_\_parainfluenzae |
| [19] denovo4387092: k\_\_Bacteria; p\_\_Fusobacteria; c\_\_Fusobacteriia; o\_\_Fusobacteriales; f\_\_Fusobacteriaceae; g\_\_Fusobacterium; s\_\_ |
| [20] denovo4321559: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Porphyromonadaceae; g\_\_Porphyromonas; s\_\_ |
| [21] denovo4411138: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Micrococcaceae; g\_\_Rothia; s\_\_mucilaginosa |
| [22] denovo4425214: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [23] denovo4422519: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Corynebacteriaceae; g\_\_Corynebacterium; s\_\_ |
| [24] denovo197004: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Lachnospiraceae; g\_\_; s\_\_ |
| [25] denovo147702: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Ruminococcaceae; g\_\_Faecalibacterium; s\_\_prausnitzii |
| [26] denovo225088: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Pseudomonadales; f\_\_Pseudomonadaceae; g\_\_Pseudomonas; s\_\_ |
| [27] denovo4309301: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [28] denovo4410166: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_copri |
| [29] denovo495067: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Corynebacteriaceae; g\_\_Corynebacterium; s\_\_ |
| [30] denovo4483015: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Carnobacteriaceae; g\_\_Granulicatella; s\_\_ |
| [31] denovo4330849: k\_\_Bacteria; p\_\_SR1; c\_\_; o\_\_; f\_\_; g\_\_; s\_\_ |
| [32] denovo386273: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Epsilonproteobacteria; o\_\_Campylobacterales; f\_\_Campylobacteraceae; g\_\_Campylobacter; s\_\_ureolyticus |
| [33] denovo4396235: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Betaproteobacteria; o\_\_Neisseriales; f\_\_Neisseriaceae; g\_\_Neisseria; s\_\_subflava |
| [34] denovo4453501: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Veillonellaceae; g\_\_Veillonella; s\_\_dispar |
| [35] denovo70363: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Betaproteobacteria; o\_\_Burkholderiales; f\_\_Alcaligenaceae; g\_\_Oligella; s\_\_ |
| [36] denovo102915: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Alphaproteobacteria; o\_\_Sphingomonadales; f\_\_Sphingomonadaceae; g\_\_Sphingomonas; s\_\_asaccharolytica |
| [37] denovo4415689: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Dermabacteraceae; g\_\_Brachybacterium; s\_\_ |
| [38] denovo11427: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Geodermatophilaceae; g\_\_Blastococcus; s\_\_aggregatus |
| [39] denovo4442130: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [40] denovo525942: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_melaninogenica |
| [41] denovo4458304: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_ |
| [42] denovo219151: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Pseudomonadales; f\_\_Moraxellaceae; g\_\_; s\_\_ |
| [43] denovo4307484: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [44] denovo885628: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Aerococcaceae; g\_\_Alloiococcus; s\_\_otitis |
| [45] denovo4418009: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Betaproteobacteria; o\_\_Burkholderiales; f\_\_Oxalobacteraceae; g\_\_; s\_\_ |
| [46] denovo12574: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Actinomycetaceae; g\_\_Actinomyces; s\_\_ |
| [47] denovo4321398: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_ |
| [48] denovo1012948: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Corynebacteriaceae; g\_\_Corynebacterium; s\_\_ |
| [49] denovo4431355: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Betaproteobacteria; o\_\_Neisseriales; f\_\_Neisseriaceae; g\_\_; s\_\_ |
| [50] denovo4471251: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Pasteurellales; f\_\_Pasteurellaceae; g\_\_Haemophilus; s\_\_ |
| [51] denovo185575: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Ruminococcaceae; g\_\_; s\_\_ |
| [52] denovo4446058: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_aureus |
| [53] denovo271159: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Carnobacteriaceae; g\_\_Granulicatella; s\_\_ |
| [54] denovo4315974: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [55] denovo4430826: k\_\_Bacteria; p\_\_Fusobacteria; c\_\_Fusobacteriia; o\_\_Fusobacteriales; f\_\_Leptotrichiaceae; g\_\_Leptotrichia; s\_\_ |
| [56] denovo930422: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Pseudomonadales; f\_\_Moraxellaceae; g\_\_Moraxella; s\_\_ |
| [57] denovo960695: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_aureus |
| [58] denovo4372058: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_ |
| [59] denovo181961: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Ruminococcaceae; g\_\_Ruminococcus; s\_\_ |
| [60] denovo828676: k\_\_Bacteria; p\_\_Fusobacteria; c\_\_Fusobacteriia; o\_\_Fusobacteriales; f\_\_Fusobacteriaceae; g\_\_Fusobacterium; s\_\_ |
| [61] denovo4456252: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Veillonellaceae; g\_\_Megasphaera; s\_\_ |
| [62] denovo520657: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_stercorea |
| [63] denovo2751958: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_[Tissierellaceae]; g\_\_Anaerococcus; s\_\_ |
| [64] denovo875735: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Actinomycetaceae; g\_\_Actinomyces; s\_\_ |
| [65] denovo1040220: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Planococcaceae; g\_\_; s\_\_ |
| [66] denovo727220: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Bacillaceae; g\_\_Anoxybacillus; s\_\_kestanbolensis |
| [67] denovo4465561: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_melaninogenica |
| [68] denovo4336070: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Actinomycetaceae; g\_\_Actinomyces; s\_\_ |
| [69] denovo4306048: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [70] denovo4458959: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Veillonellaceae; g\_\_Veillonella; s\_\_ |
| [71] denovo866280: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Micrococcaceae; g\_\_Rothia; s\_\_mucilaginosa |
| [72] denovo4302049: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [73] denovo1086805: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_aureus |
| [74] denovo269907: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_[Paraprevotellaceae]; g\_\_[Prevotella]; s\_\_ |
| [75] denovo4457554: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Alphaproteobacteria; o\_\_Caulobacterales; f\_\_Caulobacteraceae; g\_\_Mycoplana; s\_\_ |
| [76] denovo4429335: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_[Tissierellaceae]; g\_\_Peptoniphilus; s\_\_ |
| [77] denovo947112: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Corynebacteriaceae; g\_\_Corynebacterium; s\_\_ |
| [78] denovo4461906: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Corynebacteriaceae; g\_\_Corynebacterium; s\_\_ |
| [79] denovo494906: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_[Tissierellaceae]; g\_\_Peptoniphilus; s\_\_ |
| [80] denovo4446902: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Gemellales; f\_\_Gemellaceae; g\_\_; s\_\_ |
| [81] denovo451449: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_[Tissierellaceae]; g\_\_Anaerococcus; s\_\_ |
| [82] denovo4307391: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_melaninogenica |
| [83] denovo1053321: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Pseudomonadales; f\_\_Moraxellaceae; g\_\_Moraxella; s\_\_ |
| [84] denovo1134896: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Brevibacteriaceae; g\_\_Brevibacterium; s\_\_ |
| [85] denovo404338: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Corynebacteriaceae; g\_\_Corynebacterium; s\_\_ |
| [86] denovo4383953: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Clostridiaceae; g\_\_; s\_\_ |
| [87] denovo782953: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Enterobacteriales; f\_\_Enterobacteriaceae; g\_\_; s\_\_ |
| [88] denovo4472294: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Betaproteobacteria; o\_\_Burkholderiales; f\_\_Burkholderiaceae; g\_\_Lautropia; s\_\_ |
| [89] denovo2119418: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Enterobacteriales; f\_\_Enterobacteriaceae; g\_\_Pantoea; s\_\_agglomerans |
| [90] denovo4422456: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Veillonellaceae; g\_\_Veillonella; s\_\_dispar |
| [91] denovo891034: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Pasteurellales; f\_\_Pasteurellaceae; g\_\_Haemophilus; s\_\_parainfluenzae |
| [92] denovo615020: k\_\_Bacteria; p\_\_Tenericutes; c\_\_Mollicutes; o\_\_Mycoplasmatales; f\_\_Mycoplasmataceae; g\_\_Mycoplasma; s\_\_ |
| [93] denovo1077373: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_ |
| [94] denovo4465803: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Porphyromonadaceae; g\_\_Porphyromonas; s\_\_ |
| [95] denovo851733: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Lactobacillaceae; g\_\_Lactobacillus; s\_\_ |
| [96] denovo928538: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_ |
| [97] denovo544480: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Corynebacteriaceae; g\_\_Corynebacterium; s\_\_ |
| [98] denovo4353757: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Pasteurellales; f\_\_Pasteurellaceae; g\_\_Aggregatibacter; s\_\_ |
| [99] denovo4304512: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Alphaproteobacteria; o\_\_Caulobacterales; f\_\_Caulobacteraceae; g\_\_Mycoplana; s\_\_ |
| [100] denovo4363066: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Pasteurellales; f\_\_Pasteurellaceae; g\_\_Aggregatibacter; s\_\_ |
| neural network | [1] Age |
| [2] Season |
| [3] Weight\_Status |
| [4] Estimated\_PMI |
| [5] Sex |
| [6] denovo399197: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Bacillaceae; g\_\_Bacillus; s\_\_ |
| [7] Race |
| [8] denovo960695: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_aureus |
| [9] MoD |
| [10] denovo4446058: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_aureus |
| [11] BMI |
| [12] denovo4345285: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_ |
| [13] denovo12394: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Micrococcaceae; g\_\_Renibacterium; s\_\_ |
| [14] denovo134786: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_[Tissierellaceae]; g\_\_Anaerococcus; s\_\_ |
| [15] denovo870751: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_epidermidis |
| [16] denovo4326452: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Veillonellaceae; g\_\_Veillonella; s\_\_dispar |
| [17] denovo996487: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_epidermidis |
| [18] denovo495067: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Corynebacteriaceae; g\_\_Corynebacterium; s\_\_ |
| [19] denovo1068955: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_ |
| [20] denovo1995363: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_epidermidis |
| [21] denovo4321559: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Porphyromonadaceae; g\_\_Porphyromonas; s\_\_ |
| [22] denovo984924: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_ |
| [23] denovo4428042: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [24] denovo1015518: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Corynebacteriaceae; g\_\_Corynebacterium; s\_\_ |
| [25] denovo1790396: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Pseudomonadales; f\_\_Moraxellaceae; g\_\_Acinetobacter; s\_\_johnsonii |
| [26] Taxon |
| [27] denovo1058950: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Planococcaceae; g\_\_; s\_\_ |
| [28] denovo4425214: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [29] denovo495451: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Porphyromonadaceae; g\_\_Porphyromonas; s\_\_ |
| [30] denovo928538: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_ |
| [31] denovo1042479: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_melaninogenica |
| [32] denovo495007: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_[Tissierellaceae]; g\_\_ph2; s\_\_ |
| [33] denovo859700: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [34] denovo195937: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Lachnospiraceae; g\_\_Blautia; s\_\_ |
| [35] denovo328472: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Actinomycetaceae; g\_\_Varibaculum; s\_\_ |
| [36] denovo753638: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Veillonellaceae; g\_\_Dialister; s\_\_ |
| [37] denovo159711: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Pseudomonadales; f\_\_Moraxellaceae; g\_\_Acinetobacter; s\_\_lwoffii |
| [38] denovo4421864: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Veillonellaceae; g\_\_Selenomonas; s\_\_ |
| [39] denovo4429335: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_[Tissierellaceae]; g\_\_Peptoniphilus; s\_\_ |
| [40] denovo494906: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_[Tissierellaceae]; g\_\_Peptoniphilus; s\_\_ |
| [41] denovo1081058: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_ |
| [42] denovo4310208: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Veillonellaceae; g\_\_Veillonella; s\_\_dispar |
| [43] denovo4430843: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_ |
| [44] denovo947112: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Corynebacteriaceae; g\_\_Corynebacterium; s\_\_ |
| [45] denovo885628: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Aerococcaceae; g\_\_Alloiococcus; s\_\_otitis |
| [46] denovo4312969: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_epidermidis |
| [47] denovo219151: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Pseudomonadales; f\_\_Moraxellaceae; g\_\_; s\_\_ |
| [48] denovo4318284: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Veillonellaceae; g\_\_Dialister; s\_\_ |
| [49] denovo864465: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [50] denovo4326219: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Epsilonproteobacteria; o\_\_Campylobacterales; f\_\_Campylobacteraceae; g\_\_Campylobacter; s\_\_ |
| [51] denovo72820: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Bifidobacteriales; f\_\_Bifidobacteriaceae; g\_\_Bifidobacterium; s\_\_longum |
| [52] denovo4324467: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Lachnospiraceae; g\_\_; s\_\_ |
| [53] denovo544480: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Corynebacteriaceae; g\_\_Corynebacterium; s\_\_ |
| [54] denovo4430826: k\_\_Bacteria; p\_\_Fusobacteria; c\_\_Fusobacteriia; o\_\_Fusobacteriales; f\_\_Leptotrichiaceae; g\_\_Leptotrichia; s\_\_ |
| [55] denovo526682: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Actinomycetaceae; g\_\_Actinomyces; s\_\_ |
| [56] denovo71165: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_; g\_\_; s\_\_ |
| [57] denovo1100471: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_[Tissierellaceae]; g\_\_Peptoniphilus; s\_\_ |
| [58] denovo525942: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_melaninogenica |
| [59] denovo3866487: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Lachnospiraceae; g\_\_Oribacterium; s\_\_ |
| [60] denovo393051: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_; g\_\_; s\_\_ |
| [61] denovo4481613: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Coriobacteriia; o\_\_Coriobacteriales; f\_\_Coriobacteriaceae; g\_\_Collinsella; s\_\_aerofaciens |
| [62] Sample\_Area |
| [63] denovo979707: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Porphyromonadaceae; g\_\_Porphyromonas; s\_\_ |
| [64] denovo4428313: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Lactobacillaceae; g\_\_Lactobacillus; s\_\_ |
| [65] denovo1076316: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_ |
| [66] denovo128382: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Veillonellaceae; g\_\_Dialister; s\_\_ |
| [67] denovo386273: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Epsilonproteobacteria; o\_\_Campylobacterales; f\_\_Campylobacteraceae; g\_\_Campylobacter; s\_\_ureolyticus |
| [68] denovo979261: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_epidermidis |
| [69] denovo4304901: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_ |
| [70] denovo3805726: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_[Mogibacteriaceae]; g\_\_; s\_\_ |
| [71] denovo4307391: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_melaninogenica |
| [72] denovo931950: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [73] denovo4422405: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Micrococcaceae; g\_\_Micrococcus; s\_\_ |
| [74] denovo4340454: k\_\_Bacteria; p\_\_Spirochaetes; c\_\_Spirochaetes; o\_\_Spirochaetales; f\_\_Spirochaetaceae; g\_\_Treponema; s\_\_ |
| [75] denovo4447394: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Propionibacteriaceae; g\_\_Propionibacterium; s\_\_acnes |
| [76] denovo137183: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Bifidobacteriales; f\_\_Bifidobacteriaceae; g\_\_Gardnerella; s\_\_ |
| [77] denovo103411: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Pseudomonadales; f\_\_Moraxellaceae; g\_\_Acinetobacter; s\_\_ |
| [78] denovo4470078: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Corynebacteriaceae; g\_\_Corynebacterium; s\_\_ |
| [79] denovo495017: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Porphyromonadaceae; g\_\_Porphyromonas; s\_\_ |
| [80] denovo4315974: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [81] denovo4306048: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [82] denovo611110: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_intermedia |
| [83] denovo289734: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Lachnospiraceae; g\_\_; s\_\_ |
| [84] denovo137056: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Planococcaceae; g\_\_; s\_\_ |
| [85] denovo919562: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_aureus |
| [86] denovo505670: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_[Tissierellaceae]; g\_\_WAL\_1855D; s\_\_ |
| [87] denovo894774: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Planococcaceae; g\_\_; s\_\_ |
| [88] denovo4422456: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Veillonellaceae; g\_\_Veillonella; s\_\_dispar |
| [89] denovo4458304: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_ |
| [90] denovo3385021: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Bacillales; f\_\_Staphylococcaceae; g\_\_Staphylococcus; s\_\_epidermidis |
| [91] denovo816702: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Enterobacteriales; f\_\_Enterobacteriaceae; g\_\_; s\_\_ |
| [92] denovo4302049: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [93] denovo913149: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Corynebacteriaceae; g\_\_Corynebacterium; s\_\_ |
| [94] denovo3384047: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Streptococcaceae; g\_\_Streptococcus; s\_\_ |
| [95] denovo4483015: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Bacilli; o\_\_Lactobacillales; f\_\_Carnobacteriaceae; g\_\_Granulicatella; s\_\_ |
| [96] denovo4316391: k\_\_Bacteria; p\_\_Firmicutes; c\_\_Clostridia; o\_\_Clostridiales; f\_\_Veillonellaceae; g\_\_Veillonella; s\_\_dispar |
| [97] denovo4443207: k\_\_Bacteria; p\_\_Fusobacteria; c\_\_Fusobacteriia; o\_\_Fusobacteriales; f\_\_Leptotrichiaceae; g\_\_Leptotrichia; s\_\_ |
| [98] denovo4477696: k\_\_Bacteria; p\_\_Proteobacteria; c\_\_Gammaproteobacteria; o\_\_Pasteurellales; f\_\_Pasteurellaceae; g\_\_Haemophilus; s\_\_parainfluenzae |
| [99] denovo1012948: k\_\_Bacteria; p\_\_Actinobacteria; c\_\_Actinobacteria; o\_\_Actinomycetales; f\_\_Corynebacteriaceae; g\_\_Corynebacterium; s\_\_ |
| [100] denovo760967: k\_\_Bacteria; p\_\_Bacteroidetes; c\_\_Bacteroidia; o\_\_Bacteroidales; f\_\_Prevotellaceae; g\_\_Prevotella; s\_\_ |