

**Supplemental Table 6. Fungal lineages used to sort IBD from healthy controls (pooled pediatric and adult). Results from Random Forests classifier of 95.2% fungal OTUs that discriminate the fecal microbiota according to health.**

| OTU-ID                      | Taxonomic assignment   | Importance Score |                | Relative abundance of 95.2% ID OTU in each group (mean ± SD) |   |          |          |   |          |
|-----------------------------|--|------------------|----------------|--|---|----------|----------|---|----------|
|                             |  | Average          | Standard Error | Healthy  |   | IBD      |          |   |          |
| New.CleanUp.ReferenceOTU495 | k__Fungi; p__Ascomycota; c__Saccharomycetes; o__Saccharomycetales; f__Pichiaceae; g__Pichia; s__Pichia_jadinii                     | 0.028690         | 0.003731       | 1.033  | ± | 4.120    | 14.645   | ± | 19.766   |
| GU370744                    | k__Fungi; p__Ascomycota; c__Saccharomycetes; o__Saccharomycetales; f__Pichiaceae; g__Pichia; s__Pichia_jadinii                     | 0.017258         | 0.003071       | 659.511  | ± | 2626.004 | 1818.968 | ± | 1940.458 |
| EU288196                    | k__Fungi; p__Ascomycota; c__Saccharomycetes; o__Saccharomycetales; f__Incertae_sedis; g__Candida; s__Candida_tropicalis            | 0.015514         | 0.002635       | 14.211   | ± | 69.415   | 185.258  | ± | 257.346  |
| New.ReferenceOTU1           | k__Fungi; p__Ascomycota; c__Saccharomycetes; o__Saccharomycetales; f__Pichiaceae; g__Pichia; s__Pichia_jadinii                     | 0.014734         | 0.003401       | 2.989  | ± | 12.742   | 15.258   | ± | 19.122   |
| New.CleanUp.ReferenceOTU194 | k__Fungi; p__Ascomycota; c__Saccharomycetes; o__Saccharomycetales; f__Pichiaceae; g__Pichia; s__Pichia_jadinii                     | 0.011599         | 0.003261       | 0.067  | ± | 0.328    | 1.419    | ± | 2.405    |
| New.CleanUp.ReferenceOTU209 | k__Fungi; p__Ascomycota; c__Saccharomycetes; o__Saccharomycetales; f__Pichiaceae; g__Pichia; s__Pichia_jadinii                     | 0.007729         | 0.002015       | 0.089  | ± | 0.441    | 1.323    | ± | 2.856    |
| New.CleanUp.ReferenceOTU120 | k__Fungi; p__Ascomycota; c__Saccharomycetes; o__Saccharomycetales; f__Saccharomycetaceae; g__Debaryomyces; s__Debaryomyces_sp_R344 | 0.005597         | 0.001956       | 0.000  | ± | 0.000    | 0.129    | ± | 0.341    |
| GQ458025                    | k__Fungi; p__Ascomycota; c__Saccharomycetes; o__Saccharomycetales; f__Saccharomycetaceae; g__Debaryomyces                          | 0.004499         | 0.001730       | 17.278   | ± | 57.348   | 127.581  | ± | 324.125  |
| New.CleanUp.ReferenceOTU398 | k__Fungi; p__Ascomycota; c__Saccharomycetes; o__Saccharomycetales; f__Pichiaceae; g__Pichia; s__Pichia_jadinii                     | 0.004117         | 0.001058       | 0.000  | ± | 0.000    | 0.258    | ± | 0.514    |
| New.CleanUp.ReferenceOTU283 | k__Fungi; p__Ascomycota; c__Saccharomycetes; o__Saccharomycetales; f__Pichiaceae; g__Pichia; s__Pichia_jadinii                     | 0.003488         | 0.001839       | 0.256  | ± | 0.919    | 1.129    | ± | 1.500    |
| DQ683113                    | k__Fungi; p__Ascomycota; c__Saccharomycetes;   | 0.002649         | 0.001075       | 0.133  | ± | 0.603    | 0.935    | ± | 2.707    |

|                             |  |          |          |         |   |         |         |   |          |
|-----------------------------|--|----------|----------|---------|---|---------|---------|---|----------|
| New.CleanUp.ReferenceOTU159 | o__Saccharomycetales; f__Saccharomycetaceae; g__Debaryomyces<br>k__Fungi; p__Ascomycota; c__Saccharomycetes;<br>o__Saccharomycetales; f__Pichiaceae; g__Pichia;<br>s__Pichia_jadinii | 0.002220 | 0.000939 | 0.000   | ± | 0.000   | 0.194   | ± | 0.477    |
| New.CleanUp.ReferenceOTU93  | k__Fungi; p__Ascomycota; c__Saccharomycetes;<br>o__Saccharomycetales; f__Pichiaceae; g__Pichia;<br>s__Pichia_jadinii   | 0.002216 | 0.001361 | 0.100   | ± | 0.369   | 1.194   | ± | 3.038    |
| New.CleanUp.ReferenceOTU378 | k__Fungi; p__Ascomycota; c__Saccharomycetes;<br>o__Saccharomycetales; f__Pichiaceae; g__Pichia;<br>s__Pichia_jadinii   | 0.002215 | 0.001166 | 0.056   | ± | 0.313   | 0.355   | ± | 0.798    |
| AB369915                    | k__Fungi; p__Ascomycota; c__Saccharomycetes;<br>o__Saccharomycetales; f__Incertae_sedis;<br>g__Candida; s__Candida_sp.   | 0.002199 | 0.000932 | 276.033 | ± | 906.876 | 545.806 | ± | 1511.539 |
| FJ466722                    | k__Fungi; p__Ascomycota; c__Eurotiomycetes;<br>o__Eurotiales; f__Trichocomaceae; g__Penicillium;<br>s__Penicillium_citrinum  | 0.002070 | 0.000796 | 0.000   | ± | 0.000   | 3.484   | ± | 10.132   |
| New.CleanUp.ReferenceOTU212 | k__Fungi; p__Ascomycota; c__Saccharomycetes;<br>o__Saccharomycetales; f__Pichiaceae; g__Pichia;<br>s__Pichia_jadinii   | 0.001945 | 0.000977 | 0.011   | ± | 0.105   | 0.129   | ± | 0.341    |
| JN905688                    | k__Fungi; p__Basidiomycota; c__Tremellomycetes;<br>o__Cystofilobasidiales; f__unidentified;<br>g__unidentified; s__unculturedGuehomyces  | 0.001564 | 0.001037 | 7.522   | ± | 41.467  | 23.258  | ± | 80.593   |
| New.CleanUp.ReferenceOTU27  | k__Fungi; p__Ascomycota; c__Saccharomycetes;<br>o__Saccharomycetales; f__Incertae_sedis;<br>g__Candida; s__Candida_tropicalis  | 0.001290 | 0.000659 | 0.011   | ± | 0.105   | 0.258   | ± | 0.682    |
| New.CleanUp.ReferenceOTU140 | k__Fungi; p__Ascomycota; c__Saccharomycetes;<br>o__Saccharomycetales; f__Pichiaceae; g__Pichia;<br>s__Pichia_jadinii   | 0.001290 | 0.000628 | 0.011   | ± | 0.105   | 0.290   | ± | 0.824    |
| New.CleanUp.ReferenceOTU416 | k__Fungi; p__Ascomycota; c__Saccharomycetes;<br>o__Saccharomycetales; f__Pichiaceae; g__Pichia;<br>s__Pichia_jadinii   | 0.001613 | 0.000651 | 0.678   | ± | 3.193   | 0.129   | ± | 0.341    |
| EU490138                    | k__Fungi; p__Ascomycota; c__Dothideomycetes;<br>o__Capnodiales; f__Mycosphaerellaceae;<br>g__Cladosporium;<br>s__Cladosporium_cladosporioides  | 0.001444 | 0.000887 | 36.767  | ± | 112.166 | 4.806   | ± | 8.912    |
| AM901702                    | k__Fungi; p__Ascomycota; c__Eurotiomycetes;<br>o__Eurotiales; f__Trichocomaceae; g__Eurotium;<br>s__Eurotium_niveoglaucum  | 0.001394 | 0.000716 | 12.500  | ± | 68.748  | 2.226   | ± | 5.420    |
| EU489956                    | k__Fungi; p__Ascomycota; c__Dothideomycetes;<br>o__Pleosporales; f__Pleosporaceae; g__Alternaria;  | 0.001081 | 0.001360 | 19.533  | ± | 67.183  | 17.419  | ± | 45.593   |

|  |                         |  |  |  |  |
|--|-------------------------|--|--|--|--|
|  | s_Alternaria_sp_MY_2011 |  |  |  |  |
|--|-------------------------|--|--|--|--|