CORA Cork Open Research Archive
Cartlann Taighde Oscailte Chorcaí

Title	Tumour-associated and non-tumour-associated microbiota in colorectal cancer
Authors	Flemer, Burkhardt;Lynch, Denise B.;Brown, Jillian R. M.;Jeffery, Ian B.;Ryan, Feargal J.;Claesson, Marcus J.;O'Riordain, Micheal G.;Shanahan, Fergus;O'Toole, Paul W.
Publication date	2017
Original Citation	Flemer, B., Lynch, D. B., Brown, J. R. M., Jeffery, I. B., Ryan, F. J., Claesson, M. J., O'Riordain, M., Shanahan, F. and O'Toole, P. W. (2017) 'Tumour-associated and non-tumour-associated microbiota in colorectal cancer', Gut, 66(4), (12pp). doi: 10.1136/gutjnl-2015-309595
Type of publication	Article (peer-reviewed)
Link to publisher's version	http://gut.bmj.com/content/66/4/633 - 10.1136/gutjnl-2015-309595
Rights	© 2016, the Authors. Published by the BMJ Publishing Group Limited. For permission to use (where not already granted under a licence) please go to http://www.bmj.com/company/products-services/rights-and-licensing/. This is an Open Access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited and the use is non-commercial. See: http://creativecommons.org/licenses/by-nc/4.0/ - https://creativecommons.org/licenses/by-nc/4.0/
Download date	2024-03-29 10:25:56
Item downloaded from	https://hdl.handle.net/10468/5383



University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

Supplementary Table 3: Wilcoxon test (OTUs) between individuals with CRC (tumor sample if available, otherwise noncancerous tissue) and controls

	padjust	Genus	mean CRC [%]	mean HC [%]	ratio
OTU_1	0.000507599	Blautia	2.46614478	8.136278563	0.303104762
OTU_10	0.02726218	Roseburia	4.157082916	1.447008213	2.872881356
OTU_100	0.047509788	Granulicatella	0.461677151	0.00453936	101.7053455
OTU_101	0.938043524	Parasutterella	0.277072576	0.197985921	1.399455953
OTU_1010	0.927833881	Bifidobacterium	0.07921094	0.087993743	0.900188324
OTU_1011	0.002552837	unclassified.Ruminococcaceae	0.123953521	0.018157439	6.826597132
OTU_1016	0.668165901	Barnesiella	0.013257061	0.015014805	0.882932598
OTU_103	0.547151909	unclassified.Firmicutes	0.148479084	0.186812112	0.794804372
OTU_1039	0.007157286	Blautia	0.033805506	0.078565842	0.430282486
OTU_104	0.547151909	unclassified.Clostridiales	0.190238826	0.013268898	14.33719893
OTU_1040	0.896228729	Lachnospiracea_incertae_sedis	0.006628531	0.00453936	1.460234681
OTU_105	0.002118349	Peptostreptococcus	0.478248477	0.004190178	114.1355932
OTU_106	0.052144987	Butyricicoccus	0.091142295	0.17703503	0.51482633
OTU_1063	0.297539791	unclassified.Ruminococcaceae	0.026845549	0.01606235	1.671333825
OTU_1068	0.562114035	Flavonifractor	0.020217018	0.020252528	0.998246639
OTU_107	0.19319445	Oscillibacter	0.064959599	0.058313314	1.113975439
OTU_1078	0.367290731	Clostridium_sensu_stricto	0.083188058	0.012221353	6.806779661
OTU_108	0.555843821	Bifidobacterium	0.098102252	0.083454383	1.175519467
OTU_1080	0.981797202	Faecalibacterium	0.003977118	0.003491815	1.138983051
OTU_1083	0.36195865	Cellulosilyticum	0.179301751	0.013618079	13.16644937
OTU_109	0.185874478	Blautia	0.802715046	0.901586681	0.890335963
OTU_1090	0.951367616	Coprococcus	0.037451197	0.0321247	1.165806927
OTU_11	0.069568678	Lachnospiracea_incertae_sedis	0.747698243	2.644002458	0.282790298
OTU_110	0.00021391	Clostridium_IV	0.0162399	0.072280574	0.224678621
OTU_1111	0.547151909	unclassified.Lachnospiraceae	0.06297104	0.030029611	2.096964919
OTU_1117	0.853127971	Asaccharobacter	0.004639971	0.00453936	1.022164276
OTU_112	0.966426158	unclassified.Ruminococcaceae	0.07059385	0.101961003	0.692361272
OTU_1129	0.978949846	Lachnospiracea_incertae_sedis	0.004971398	0.004190178	1.186440678
OTU_113	0.002767097	Lachnospiracea_incertae_sedis	0.351974971	0.896348958	0.392676276
OTU_114	0.927833881	Flavonifractor	0.05435395	0.045742779	1.188252038
OTU_115	0.177661508	Clostridium_IV	0.192227385	0.016760713	11.46892655
OTU_1157	0.918421127	Dorea	0.00861709	0.006634449	1.298840321
OTU_1159	0.927833881	Lachnospiracea_incertae_sedis	0.009942796	0.012221353	0.813559322
OTU_116	0.959978504	Parabacteroides	0.024525563	0.093580647	0.262079433
OTU_1167	0.011354549	Lachnospiracea_incertae_sedis	0.005302824	0.038409967	0.138058552
OTU_1172	0.943454772	Butyricimonas	0.00762281	0.008729538	0.873220339
OTU_1174	0.002118349	Blautia	0.749686802	1.852407956	0.40470934
OTU_118	0.722259554	Clostridium_XlVa	0.007291384	0.008729538	0.835254237
OTU_12	8.81E-08	Coprococcus	0.035131212	2.257458517	0.015562285
OTU_120	0.074750396	Anaerococcus	0.253209866	0.001047545	241.7175141
OTU_1200	0.927833881	Prevotella	0.014251341	0.008031175	1.774502579
OTU_1204	0.996686159	Flavonifractor	0.016902753	0.016760713	1.008474576
OTU_121	0.943225998	unclassified.Rhodospirillales	0.127599213	0.026537795	4.808206958
OTU_122	0.951367616	Bacteroides	0.094787986	0.083105201	1.140578265
OTU_1228	0.869026557	unclassified.Lachnospiraceae	0.108045047	0.091136376	1.185531528
OTU_1229	0.383463827	Lachnospiracea_incertae_sedis	0.027839828	0.01850662	1.504317237
OTU_123	0.927833881	Catenibacterium	0.180627457	0.046790323	3.860359221
OTU_1230	0.760229166	Lachnospiracea_incertae_sedis	0.006628531	0.008031175	0.825350037
OTU_1232	0.059373384	Lachnospiracea_incertae_sedis	0.040434036	0.011173809	3.618644068
OTU_125	0.607496467	unclassified.Clostridiales	0.031816947	0.010824627	2.939311099
OTU_1250	0.077961722	Faecalibacterium	0.839171964	1.121920219	0.747978287
OTU_1256	0.759229927	Lachnospiracea_incertae_sedis	0.031154093	0.003142634	9.913370998
OTU_126	0.381984253	unclassified.Deltaproteobacteria	0.017565606	0.091485558	0.19200414
OTU_1262	0.015965768	Lachnospiracea_incertae_sedis	0.028171255	0.052726409	0.534291166
OTU_1266	0.927933035	unclassified.Lachnospiraceae	0.69069288	0.557642885	1.238593549
OTU_1267	0.002518263	unclassified.Lachnospiraceae	0.051702538	0.164464495	0.314368995

OTU_1277	0.574278814	unclassified.Lachnospiraceae	0.109039327	0.009427901	11.5655995
OTU_1279	0.113851688	Lachnospiracea_incertae_sedis	0.0324798	0.062852673	0.516760829
OTU_128	0.154895808	Blautia	0.151461922	0.163766132	0.924867189
OTU_1283	0.00021391	Anaerostipes	0.043085448	0.986088608	0.043693283
OTU_129	0.545147231	Lachnospiracea_incertae_sedis	0.049713979	0.024093525	2.063375092
OTU_1295	0.459749128	Lachnospiracea_incertae_sedis	0.006959957	0.002444271	2.847457627
OTU_1296	0.436504592	Faecalibacterium	0.491836965	0.441016258	1.11523545
OTU_13	0.010479591	Gemmiger	0.582979259	1.324096318	0.440284631
OTU_1303	7.84E-05	Coprococcus	0.022205577	0.084851109	0.261700495
OTU_1306	0.476448025	unclassified.Lachnospiraceae	0.011931355	0.011872172	1.004985045
OTU_1309	0.161932083	Lachnospiracea_incertae_sedis	0.00762281	0.012221353	0.623728814
OTU_131	0.0374029	Erysipelotrichaceae_incertae_sedis	0.02386271	0.109642997	0.217640073
OTU_1312	0.927833881	Lachnospiracea_incertae_sedis	0.004971398	0.003840997	1.294298921
OTU_1317	0.297539791	Clostridium_XlVa	0.126273506	0.015363987	8.218798151
OTU_132	0.019421857	Pseudomonas	0.592922055	0.004888541	121.2881356
OTU_1320	0.012011198	Clostridium_XlVa	0.145827671	0.257346779	0.566658234
OTU_1322	0.028155674	Clostridium_XlVa	0.000662853	0.005586904	0.118644068
OTU_1324	1.02E-05	unclassified.Lachnospiraceae	0.003314265	0.03456897	0.095873994
OTU_1326	0.160906853	unclassified.Lachnospiraceae	0.001988559	0.005586904	0.355932203
OTU_133	0.328484941	unclassified.Clostridiales	0.025851269	0.01152299	2.243451464
OTU_1331	0.014467411	Blautia	0.03910833	0.062852673	0.622222222
OTU_1337	0.110726956	unclassified.Lachnospiraceae	0.006297104	0.011173809	0.563559322
OTU_134	0.515478979	unclassified.Ruminococcaceae	0.055016803	0.045742779	1.202742916
OTU_1349	0.038825727	Lachnospiracea_incertae_sedis	0.003314265	0.01152299	0.287621983
OTU_135	0.95309488	Ruminococcus	0.115336431	0.052726409	2.187450892
OTU_1357	8.81E-08	unclassified.Lachnospiraceae	0.001325706	0.102310185	0.012957714
OTU_1358	0.556462562	Clostridium_sensu_stricto	0.304912404	0.24826806	1.228158001
OTU_136	0.954227606	Turicibacter	0.072913836	0.086597017	0.841990159
OTU_1366	0.079986924	Coprococcus	0.029165534	0.003491815	8.352542373
OTU_1370	0.695055522	Blautia	0.019222739	0.007332812	2.621468927
OTU_1380	0.745547732	unclassified.Lachnospiraceae	0.009279943	0.008031175	1.155490052
OTU_1388	0.005421359	Anaerostipes	0.00099428	0.008729538	0.113898305
OTU_139	0.015104323	unclassified.Bacteroidetes	0.087828029	0.008729538	10.06101695
OTU_1395	2.08E-06	unclassified.Lachnospiraceae	0.042754022	0.298550198	0.143205471
OTU_1396	0.065081894	Blautia	0.05534823	0.106849545	0.518001551
OTU_14	0.294047262	Bacteroides	3.316585246	1.067098721	3.108039755
OTU_140	0.14198875	Howardella	0.051039685	0.036314878	1.40547588
OTU_141	0.294047262	Gemella	0.238958525	0.008031175	29.75386883
OTU_1415	0.150479457	Clostridium_XlVa	0.367883444	0.421462093	0.872874335
OTU_142	0.925661912	Gemmiger	1.17059849	0.588370859	1.98955892
OTU_1421	0.010107096	Gemmiger	0.002982839	0.01152299	0.258859784
OTU_143	0.00393219	Alistipes	0.05534823	0.007332812	7.548022599
OTU_1439	0.832665623	Clostridium_XI	0.004308545	0.037362422	0.115317599
OTU_144	0.011168065	Dialister	0.232329995	0.001047545	221.7853107
OTU_1446	0.065081894	Lachnospiracea_incertae_sedis	0.005302824	0.000698363	7.593220339
OTU_145	0.038428828	Lachnospiracea_incertae_sedis	0.091142295	0.025490251	3.575574646
OTU_1451	0.013127854	Lachnospiracea_incertae_sedis	0.00099428	0.007332812	0.13559322
OTU_1454	0.748248316	Lachnospiracea_incertae_sedis	0.006628531	0.005586904	1.186440678
OTU_1459	0.953203085	Clostridium_XlVa	0.005634251	0.006285267	0.896421846
OTU_1461	0.002518263	Roseburia	0.000331427	0.006285267	0.052730697
OTU_1465	0.636840189	Coprococcus	0.001657133	0.003491815	0.474576271
OTU_147	0.777906425	unclassified.Lachnospiraceae	0.029828387	0.04609196	0.647149461
OTU_1475	0.005421359	Blautia	0.152456202	0.176336667	0.864574593
OTU_1476	0.323820647	Lachnospiracea_incertae_sedis	0.065622452	0.065646125	0.99963938
OTU_148	0.194969323	Porphyromonas	0.571047904	0.002095089	272.5649718
OTU_149	0.341398084	Lachnospiracea_incertae_sedis	0.081530925	0.05971004	1.365447517
OTU_15	0.051933057	Coprococcus	0.725161239	1.1128415	0.651630299
OTU_152	0.13703951	Alistipes	0.267461207	0.154687413	1.729043119
OTU_1523	0.562114035	Bacteroides	0.034468359	0.018157439	1.898305085

OTU_1524	0.161932083	Bacteroides	0.025519843	0.00453936	5.62190352
OTU_154	0.529924142	Clostridium_IV	0.036788344	0.01606235	2.290346352
OTU_1548	0.56590834	unclassified.Ruminococcaceae	0.021542724	0.019903347	1.082366934
OTU_158	0.079673266	Solobacterium	0.242604217	0.002095089	115.7966102
OTU_16	0.978949846	Alistipes	0.512385409	0.599893849	0.854126793
OTU_161	0.023773336	unclassified.Ruminococcaceae	0.055016803	0.016760713	3.282485876
OTU_162	0.89315126	unclassified.Sutterellaceae	0.042754022	0.010126264	4.222092344
OTU_163	0.065081894	unclassified.Clostridiales	0.061313907	0.025141069	2.438794727
OTU_165	0.919473453	unclassified.Alphaproteobacteria	0.040434036	0.023744343	1.702891326
OTU_166	0.70625834	unclassified.Clostridiales	0.038776904	0.007681993	5.047765794
OTU_1663	0.959978504	Barnesiella	0.004971398	0.003840997	1.294298921
OTU_167	0.966426158	Flavonifractor	0.037451197	0.118372535	0.316384181
OTU_17	0.959978504	Bacteroides	1.321066133	0.901935862	1.464700749
OTU_1705	0.005421359	Coprococcus	0.004308545	0.024442706	0.176271186
OTU_1707	0.002118349	Blautia	0.213438683	0.447301525	0.477169584
OTU_171	0.019398065	Phascolarctobacterium	0.25851269	0.06669367	3.87612033
OTU_1712	0.435187741	Lachnospiracea_incertae_sedis	0.017565606	0.025839432	0.679798443
OTU_1718	4.83E-07	Dorea	0.100753664	0.318453545	0.316384181
OTU_1719	4.83E-07	unclassified.Lachnospiraceae	0.004971398	0.239887703	0.020723855
OTU_1725	0.787588656	Clostridium_XlVa	0.124284947	0.074375663	1.671043208
OTU_1726	0.073331236	Lachnospiracea_incertae_sedis	0.005302824	0.001047545	5.062146893
OTU_173	0.661368107	unclassified.Clostridiales	0.019885592	0.032823063	0.605842048
OTU_1732	0.039014721	Lachnospiracea_incertae_sedis	0.007291384	0.015363987	0.474576271
OTU_1738	0.962374853	Lachnospiracea_incertae_sedis	0.002651412	0.002444271	1.084745763
OTU_1749	0.992113276	Clostridium_XlVa	0.03910833	0.034219789	1.142857143
OTU_1756	0.547151909	Blautia	0.030822667	0.0321247	0.959469418
OTU_1759	0.538992457	unclassified.Lachnospiraceae	0.007291384	0.012919716	0.564360971
OTU_1760	0.495313887	Lachnospiracea_incertae_sedis	0.006297104	0.009427901	0.667922159
OTU_1762	3.57E-05	Lachnospiracea_incertae_sedis	0.011931355	0.04609196	0.258859784
OTU_177	0.017108822	Clostridium_XlVb	0.014582767	0.035616515	0.409438352
OTU_1772	0.927833881	unclassified.Lachnospiraceae	0.060319628	0.046790323	1.289147483
OTU_1774	0.155679266	unclassified.Lachnospiraceae	0.013257061	0.002793452	4.745762712
OTU_1776	0.485091316	unclassified.Lachnospiraceae	0.169027528	0.165162858	1.023399147
OTU_178	0.360588226	Paraprevotella	0.048056846	0.042250964	1.137414204
OTU_1781	0.294047262	Clostridium_XlVa	0.026514122	0.106849545	0.248144456
OTU_179	0.019508503	unclassified.Ruminococcaceae	0.047062567	0.013967261	3.369491525
OTU_18	0.548225618	Parabacteroides	0.647607432	0.801720767	0.807771807
OTU_181	0.547151909	unclassified.Lachnospiraceae	0.020879871	0.010126264	2.061952075
OTU_182	0.565577418	unclassified.Ruminococcaceae	0.016571326	0.100564277	0.164783427
OTU_183	0.152876312	Eubacterium	0.037782624	0.014316442	2.639107069
OTU_186	0.556462562	unclassified.Ruminococcaceae	0.02286843	0.008380356	2.728813559
OTU_187	0.14198875	unclassified.Ruminococcaceae	0.028502681	0.00453936	6.279009126
OTU_1877	0.538992457	Blautia	0.06297104	0.058313314	1.07987415
OTU_189	0.922394179	Clostridium_XlVb	0.013919914	0.010824627	1.285948606
OTU_19	0.000183075	Coprococcus	0.262489809	0.6669367	0.393575295
OTU_1925	0.927833881	Clostridium_XlVb	0.019554165	0.010475446	1.866666667
OTU_1936	0.46476316	unclassified.Ruminococcaceae	0.009611369	0.003491815	2.752542373
OTU_196	0.04603444	Alistipes	0.031154093	0.010824627	2.878075451
OTU_197	0.01136457	Bacteroides	0.05534823	0.000349182	158.5084746
OTU_1977	0.475401734	Ruminococcus	0.084182338	0.029680429	2.836291127
OTU_199	0.904651614	unclassified.Clostridiales	0.027839828	0.005586904	4.983050847
OTU_2	0.000410803	Faecalibacterium	3.505829793	6.31215431	0.555409393
OTU_20	0.46476316	Clostridium_XI	0.393734713	0.566721605	0.694758608
OTU_200	0.000353459	unclassified.Lachnospiraceae	0.013257061	0.049234594	0.269263133
OTU_201	0.508242748	Bacteroides	0.019222739	0.012570535	1.529190207
OTU_2018	0.294047262	unclassified.Clostridiales	0.011599928	0.005237723	2.214689266
OTU_203	0.422208912	Clostridium_IV	0.035131212	0.002444271	14.37288136
OTU_205	0.041807028	Mogibacterium	0.019222739	0.005237723	3.670056497
OTU_206	0.297539791	unclassified.Ruminococcaceae	0.065622452	0.002095089	31.3220339

OTU_2064	0.695055522	Coprococcus	0.003645692	0.004888541	0.745762712
OTU_207	0.514574132	Flavonifractor	0.010937075	0.01606235	0.68091378
OTU_208	0.177661508	unclassified.Clostridiales	0.021542724	0.009078719	2.372881356
OTU_21	4.50E-07	Clostridium_XlVa	0.216090095	1.016118219	0.212662357
OTU_212	0.649276719	Butyricimonas	0.028834108	0.025141069	1.146892655
OTU_213	0.994744106	Veillonella	0.06297104	0.023395162	2.691626613
OTU_214	0.690690748	Lachnospiracea_incertae_sedis	0.015908473	0.024791888	0.641680592
OTU_216	0.128440456	unclassified.Clostridiales	0.023531283	0.001745908	13.4779661
OTU_217	0.345729249	unclassified.Clostridiales	0.025188416	0.002793452	9.016949153
OTU_218	0.194725803	Alistipes	0.021211298	0.008729538	2.429830508
OTU_22	0.069568678	Dorea	0.549173754	0.685792502	0.800787048
OTU_222	0.383167839	Peptococcus	0.007291384	0.013268898	0.549509367
OTU_223	0.003787254	Anaerorhabdus	0.004308545	0.024442706	0.176271186
OTU_226	0.037902419	Clostridium_IV	0.016571326	0.003840997	4.314329738
OTU_228	0.182427766	Faecalibacterium	0.033805506	0.022347617	1.512711864
OTU_229	0.722977154	unclassified.Clostridiales	0.036456918	0.009078719	4.015645372
OTU_23	0.205568427	unclassified.Ruminococcaceae	0.582647833	0.307978099	1.891848265
OTU_230	0.211753521	unclassified.Ruminococcaceae	0.049713979	0.016411531	3.029210242
OTU_231	0.383167839	unclassified.Lachnospiraceae	0.011599928	0.031426337	0.369114878
OTU_234	0.019421857	Bacteroides	0.376169107	0.364894687	1.030897737
OTU_235	0.556462562	Barnesiella	0.006959957	0.026188614	0.265762712
OTU_237	0.725833259	Clostridium_XlVb	0.023531283	0.013268898	1.773416592
OTU_239	0.000794525	Streptococcus	0.616121912	0.212651545	2.897330996
OTU_24	0.077961722	Lachnospiracea_incertae_sedis	0.66782445	0.8691128	0.7683979
OTU_240	0.919473453	unclassified.Coriobacteriaceae	0.019554165	0.024791888	0.788732394
OTU_241	0.71286991	Clostridium_XlVa	0.009279943	0.019554165	0.474576271
OTU_242	0.904651614	Lachnospiracea_incertae_sedis	0.067942438	0.043298508	1.569163477
OTU_246	0.297539791	Pseudoflavonifractor	0.02386271	0.01850662	1.289414775
OTU_247	0.341398084	Alistipes	0.0162399	0.003840997	4.228043143
OTU_249	0.7194228	Peptoniphilus	0.024194136	0.002095089	11.5480226
OTU_25	0.011354549	Bifidobacterium	1.064542002	0.161321862	6.598870056
OTU_251	0.927833881	Bacteroides	0.91109152	0.629923459	1.446352738
OTU_259	0.090601344	Clostridium_IV	0.018228459	0.003491815	5.220338983
OTU_26	0.767137005	Prevotella	3.459430079	1.138680932	3.038103109
OTU_261	0.297539791	unclassified.Clostridiales	0.005302824	0.005936086	0.89332004
OTU_262	0.935373635	Eggerthella	0.01524562	0.008380356	1.81920904
OTU_263	0.340518332	unclassified.Ruminococcaceae	0.00762281	0.00453936	1.679269883
OTU_269	0.422208912	unclassified.Clostridiales	0.018891312	0.002095089	9.016949153
OTU_27	0.436798389	Clostridium_sensu_stricto	0.354626383	0.265377954	1.336306869
OTU_274	0.514574132	Butyricicoccus	0.015577047	0.014316442	1.088052914
OTU_275	0.63723983	Methanobrevibacter	0.008948516	0.003491815	2.562711864
OTU_277	0.426186695	Gemmiger	0.015577047	0.002793452	5.576271186
OTU_278	0.95309488	Coprococcus	0.010937075	0.010824627	1.01038819
OTU_279	0.381103779	unclassified.Ruminococcaceae	0.014582767	0.003840997	3.796610169
OTU_28	0.705185622	Haemophilus	0.997593843	0.18401866	5.421155887
OTU_283	0.014339044	Holdemania	0.005302824	0.02060171	0.2573973
OTU_288	0.418782178	Clostridium_XlVa	0.023531283	0.024791888	0.949152542
OTU_29	0.160906853	Bacteroides	0.217747228	1.48087882	0.147039194
OTU_290	0.944721266	Paraprevotella	0.023199857	0.055519861	0.417865899
OTU_291	0.890936508	Oscillibacter	0.009942796	0.00698363	1.423728814
OTU_293	0.565577418	unclassified.Ruminococcaceae	0.009611369	0.002444271	3.93220339
OTU_297	0.360588226	unclassified.Coriobacteriaceae	0.014582767	0.003142634	4.640301318
OTU_3	0.00249251	Bacteroides	4.700290992	7.930610649	0.592677059
OTU_30	0.002523096	Oscillibacter	0.84149195	0.348483155	2.414727761
OTU_300	0.131986409	Sporobacter	0.015908473	0.008031175	1.980840088
OTU_305	0.182427766	unclassified.Ruminococcaceae	0.011599928	0.004190178	2.768361582
OTU_306	0.19319445	Clostridium_IV	0.024194136	0.004190178	5.774011299
OTU_31	0.904651614	Bacteroides	0.51039685	0.701505671	0.727573377
OTU_314	0.033762753	unclassified.Clostridiales	0.017565606	0.003491815	5.030508475

OTU_32	0.548225618	Bacteroides	0.493162671	0.219984357	2.24180791
OTU_321	0.002523096	Lachnospiracea_incertae_sedis	0.033474079	0.091485558	0.365894682
OTU_322	0.041807028	Staphylococcus	0.034468359	0.003840997	8.973805855
OTU_324	0.962740958	Anaerotruncus	0.015577047	0.023395162	0.665823425
OTU_325	0.426186695	Clostridium_XlVa	0.008948516	0.003840997	2.329738059
OTU_327	0.547151909	Slackia	0.003977118	0.008380356	0.474576271
OTU_33	0.613375389	Sutterella	0.799400781	0.496186938	1.611087919
OTU_330	0.865062012	unclassified.Clostridiales	0.002982839	0.003142634	0.949152542
OTU_331	0.565577418	unclassified.Clostridiales	0.026182696	0.016411531	1.595384061
OTU_34	0.722977154	Halomonas	2.080032878	0.16795631	12.38436872
OTU_342	0.297539791	unclassified.Clostridiales	0.010937075	0.005936086	1.842472582
OTU_347	0.035057962	Victivallis	0.009942796	0.001396726	7.118644068
OTU_35	0.723998384	Bacteroides	0.629378973	0.077518297	8.119102153
OTU_351	0.001552279	unclassified.Clostridiales	0.028834108	0.002095089	13.76271186
OTU_354	0.312820235	Lachnospiracea_incertae_sedis	0.002982839	0.012221353	0.244067797
OTU_355	0.418782178	unclassified.Coriobacteriaceae	0.009611369	0.007681993	1.251155624
OTU_357	0.46476316	Lachnospiracea_incertae_sedis	0.017234179	0.008031175	2.145910096
OTU_36	0.014483359	Streptococcus	0.591264922	0.029331248	20.15819209
OTU_360	0.547151909	Lachnospiracea_incertae_sedis	0.004308545	0.008031175	0.536477524
OTU_361	0.238711852	unclassified.Ruminococcaceae	0.006959957	0.003491815	1.993220339
OTU_366	0.693056851	unclassified.Ruminococcaceae	0.003645692	0.005936086	0.614157527
OTU_368	0.150479457	Anaerotruncus	0.011931355	0.004190178	2.847457627
OTU_37	0.001506745	Lachnospiracea_incertae_sedis	0.126936359	0.459522878	0.276235124
OTU_370	0.104954818	Alistipes	0.012262781	0.001745908	7.023728814
OTU_371	0.297539791	unclassified.Desulfovibrionaceae	0.006297104	0.001396726	4.508474576
OTU_373	0.329777332	Clostridium_IV	0.005302824	0.001396726	3.796610169
OTU_375	0.241844331	unclassified.Porphyromonadaceae	0.06959957	0.009427901	7.382297552
OTU_378	0.760229166	Oscillibacter	0.007954237	0.010126264	0.785505552
OTU_38	0.389887042	Alistipes	0.237964246	0.368386502	0.645963531
OTU_380	0.556462562	Clostridium_IV	0.003314265	0.003840997	0.862865948
OTU_382	0.011907591	unclassified.Ruminococcaceae	0.000331427	0.005586904	0.059322034
OTU_385	0.563586446	Rothia	0.010937075	0.001745908	6.26440678
OTU_387	0.513889206	unclassified.Clostridiales	0.005965677	0.002444271	2.440677966
OTU_39	0.418782178	Lachnospiracea_incertae_sedis	0.313198067	0.37257668	0.840627135
OTU_397	0.282648511	Butyricimonas	0.030159814	0.006634449	4.545941124
OTU_4	4.83E-07	Anaerostipes	0.632030385	7.594698028	0.083219949
OTU_40	0.360588226	Clostridium_XlVa	0.198524489	0.596402034	0.332870242
OTU_41	0.192912064	Clostridium_sensu_stricto	0.228684303	0.053773954	4.252696456
OTU_412	0.150479457	Butyricimonas	0.036788344	0.018157439	2.026075619
OTU_415	0.221477398	Prevotella	0.562430815	0.327881446	1.715348098
OTU_42	0.953203085	Clostridium_XI	0.46366571	0.557293704	0.831995242
OTU_43	0.927833881	Shewanella	1.181866992	0.074026482	15.9654621
OTU_430	0.160455593	Acetanaerobacterium	0.064296746	0.082406838	0.780235564
OTU_436	0.011700792	Actinomyces	0.015908473	0.000349182	45.55932203
OTU_438	0.96882041	Enterorhabdus	0.003314265	0.003142634	1.054613936
OTU_44	0.995835855	Lachnospiracea_incertae_sedis	0.293975329	0.245823789	1.195878274
OTU_444	0.686650982	Pseudoflavonifractor	0.004308545	0.005936086	0.725822532
OTU_45	0.069568678	unclassified.Lachnospiraceae	0.462340004	0.78635678	0.587951952
OTU_456	0.044918474	Allisonella	0.024194136	0.002444271	9.898305085
OTU_457	0.919473453	Lachnospiracea_incertae_sedis	0.096445119	0.065995307	1.461393597
OTU_458	0.258288526	unclassified.Clostridiales	0.004971398	0.001745908	2.847457627
OTU_46	0.059407972	Klebsiella	0.480568463	0.690331862	0.696141217
OTU_468	0.155679266	unclassified.Ruminococcaceae	0.004639971	0.001745908	2.657627119
OTU_47	0.012306178	Clostridium_XVIII	0.142844833	0.308676462	0.46276555
OTU_470	0.007541917	unclassified.Oxalobacteraceae	0.010274222	0.001396726	7.355932203
OTU_48	0.14198875	Clostridium_XlVb	0.173998926	0.291217386	0.597488111
OTU_49	0.01136457	Fusobacterium	1.382048614	0.002444271	565.4237288
OTU_5	8.81E-08	Lachnospiracea_incertae_sedis	1.255443681	4.310296665	0.291266188
OTU_502	0.495313887	unclassified.Clostridiales	0.005634251	0.002444271	2.305084746

OTU_507	0.748372876	Bacteroides	0.053691097	0.053075591	1.011596789
OTU_51	0.570237581	Sporobacter	0.19554165	0.122213531	1.6
OTU_52	0.556462562	Fusobacterium	1.024107966	0.003142634	325.8757062
OTU_53	0.767137005	Phascolarctobacterium	0.256524131	0.098469188	2.605120808
OTU_534	0.914207535	Desulfovibrio	0.012925635	0.002793452	4.627118644
OTU_535	0.14198875	Clostridium_XlVa	0.009942796	0.021998436	0.451977401
OTU_536	0.748372876	Bacteroides	0.092799427	0.119070898	0.779362791
OTU_54	0.065231393	Clostridium_XlVa	0.050045405	0.099516733	0.502884329
OTU_545	0.436504592	Erysipelotrichaceae_incertae_sedis	0.005965677	0.001745908	3.416949153
OTU_55	0.086384702	Bifidobacterium	0.256524131	0.076121571	3.369926916
OTU_555	0.565577418	Alistipes	0.029828387	0.009777083	3.050847458
OTU_56	0.418782178	Sutterella	0.220730066	0.272710766	0.809392565
OTU_57	0.705185622	unclassified.Clostridiales	0.364569179	0.093580647	3.89577536
OTU_58	0.896228729	Desulfovibrio	0.239621378	0.270964858	0.884326402
OTU_580	0.960629947	Oscillibacter	0.002651412	0.002793452	0.949152542
OTU_586	0.054480201	Clostridium_XlVa	0.039439757	0.00453936	8.688396349
OTU_59	0.011354549	Ruminococcus	0.829229168	0.146656238	5.654237288
OTU_593	0.308880027	Clostridium_XVIII	0.03148552	0.015713168	2.003766478
OTU_6	0.038430616	Escherichia_Shigella	4.35991595	1.041259288	4.187156839
OTU_60	0.896228729	Oscillibacter	0.140193421	0.113833175	1.231569096
OTU_603	0.103517994	Lachnospiracea_incertae_sedis	0.082525205	0.025490251	3.237520316
OTU_61	0.041807028	Streptococcus	0.81663496	0.115579083	7.065594757
OTU_62	0.547151909	Bacteroides	0.553813725	0.061805129	8.960643493
OTU_627	0.953203085	unclassified.Bacteroidetes	0.025519843	0.039457512	0.646767662
OTU_63	0.001024345	Lachnospiracea_incertae_sedis	0.072250983	0.203572825	0.354914673
OTU_639	0.012011198	Clostridium_XlVa	0.076228101	0.00453936	16.79269883
OTU_64	0.048557952	Ruminococcus	0.319163745	0.019554165	16.3220339
OTU_65	0.959978504	Flavonifractor	0.099427958	0.075074026	1.324398896
OTU_66	0.478243142	Coprococcus	0.420248835	0.092533102	4.541605373
OTU_673	0.047509788	Lachnospiracea_incertae_sedis	0.050708258	0.160274317	0.316384181
OTU_678	0.060806133	Clostridium_XlVa	0.005302824	0.010475446	0.506214689
OTU_68	0.038825727	Dialister	0.146159098	0.16795631	0.870220938
OTU_681	0.954227606	Veillonella	0.011599928	0.015363987	0.755007704
OTU_689	0.150479457	Clostridium_sensu_stricto	0.06297104	0.130593888	0.482189794
OTU_69	0.169743041	unclassified.Ruminococcaceae	0.19554165	0.053773954	3.636363636
OTU_7	0.177661508	Akkermansia	2.567892724	2.016523269	1.273425783
OTU_70	0.013382933	Clostridium_IV	0.25950697	0.034219789	7.583535109
OTU_702	0.827789517	Clostridium_XlVa	0.155439041	0.132688977	1.171454059
OTU_71	0.297539791	Bacteroides	0.265472647	0.222777809	1.191647628
OTU_72	0.649276719	Odoribacter	0.288341078	0.175289122	1.644945641
OTU_721	0.910905799	Clostridium_XlVa	0.011931355	0.004190178	2.847457627
OTU_727	3.40E-05	unclassified.Lachnospiraceae	0.001325706	0.092882284	0.014272971
OTU_731	0.001636757	Blautia	0.53425956	0.932314654	0.573046404
OTU_738	0.028602208	Lachnospiracea_incertae_sedis	0.057668216	0.099167551	0.581523037
OTU_74	0.019421857	Parvimonas	0.498465495	0.008380356	59.48022599
OTU_745	0.978949846	Erysipelotrichaceae_incertae_sedis	0.11831927	0.30343874	0.389928029
OTU_75	0.556462562	Barnesiella	0.522991058	0.707441757	0.739270835
OTU_751	0.12705133	Lachnospiracea_incertae_sedis	0.0162399	0.028283703	0.574178698
OTU_755	0.311413316	Lachnospiracea_incertae_sedis	0.021874151	0.041901782	0.522033898
OTU_76	0.047509788	Clostridium_IV	0.155439041	0.020252528	7.675043834
OTU_761	0.748372876	Lachnospiracea_incertae_sedis	0.036456918	0.080311749	0.45394252
OTU_77	0.607496467	Bilophila	0.12594208	0.144561149	0.871202817
OTU_78	0.011456598	Enterococcus	0.19653593	0.001047545	187.6158192
OTU_782	0.958093686	Alistipes	0.01524562	0.015014805	1.015372487
OTU_784	0.110969965	unclassified.Clostridiales	0.011931355	0.002793452	4.271186441
OTU_788	0.150479457	Lachnospiracea_incertae_sedis	0.241941364	0.311120733	0.777644619
OTU_79	6.77E-07	Clostridium_XlVa	0.145496245	0.385496396	0.377425694
OTU_790	0.954227606	Akkermansia	0.003977118	0.007681993	0.517719569
OTU_8	8.81E-08	Roseburia	0.429860204	2.846178557	0.151030652

OTU_802	0.043894263	Faecalibacterium	1.590515899	2.579753059	0.616538042
OTU_809	0.5870286	Lachnospiracea_incertae_sedis	0.013257061	0.015014805	0.882932598
OTU_81	0.208330798	unclassified.Ruminococcaceae	0.094125133	0.070883848	1.327878434
OTU_82	0.283007085	Prevotella	0.438477294	0.131292251	3.339704291
OTU_822	0.182427766	Flavonifractor	0.003314265	0.008729538	0.379661017
OTU_83	0.152876312	Lachnospiracea_incertae_sedis	0.325129422	0.240586066	1.351405869
OTU_830	0.150479457	Lachnospiracea_incertae_sedis	0.009279943	0.018855802	0.49215317
OTU_837	0.459749128	unclassified.Lachnospiraceae	0.057668216	0.029331248	1.966101695
OTU_84	0.896228729	unclassified.Clostridiales	0.147816231	0.037013241	3.993604093
OTU_843	0.922394179	Prevotella	0.029496961	0.020950891	1.407909605
OTU_856	0.16607073	Bacteroides	0.184604575	0.716171294	0.257765951
OTU_86	0.8706345	unclassified.Rhodospirillaceae	0.017234179	0.140021789	0.123082125
OTU_869	0.710957295	Actinomyces	0.010274222	0.010475446	0.98079096
OTU_87	0.71286991	Alistipes	0.094125133	0.052028046	1.809122967
OTU_877	0.548225618	Lachnospiracea_incertae_sedis	0.025851269	0.009777083	2.644067797
OTU_88	0.664254338	Barnesiella	0.04772542	0.156084139	0.305767262
OTU_884	0.547151909	unclassified.Ruminococcaceae	0.042091169	0.026886977	1.565485362
OTU_888	0.649899516	Lachnospiracea_incertae_sedis	0.010274222	0.014316442	0.717651922
OTU_89	0.363091678	Streptococcus	0.289335357	0.078565842	3.682711864
OTU_9	0.495313887	Bacteroides	1.975633522	1.770350299	1.115956273
OTU_92	0.859921771	unclassified.Ruminococcaceae	0.111027886	0.129197162	0.859367842
OTU_922	0.565577418	Lachnospiracea_incertae_sedis	0.00762281	0.009427901	0.808537351
OTU_930	1.38E-06	unclassified.Lachnospiraceae	0.012262781	0.062852673	0.195103578
OTU_94	0.662746781	Collinsella	0.142513406	0.126054528	1.13056951
OTU_949	0.919473453	Bacteroides	0.012594208	0.015713168	0.801506591
OTU_96	0.080508	Acetanaerobacterium	0.115336431	0.058662495	1.966101695
OTU_960	0.884256598	unclassified.Lachnospiraceae	0.40931176	0.299946924	1.364613958
OTU_962	0.63723983	Lachnospiracea_incertae_sedis	0.038776904	0.01606235	2.414148858
OTU_968	0.547151909	Clostridium_XlVa	0.113679298	0.117674172	0.966051401
OTU_969	0.297539791	Clostridium_IV	0.0162399	0.004190178	3.875706215
OTU_97	0.150479457	Flavonifractor	0.114010725	0.053424772	2.134042317
OTU_972	0.000803733	Coprococcus	0.003314265	0.013967261	0.237288136
OTU_98	0.759229927	Ruminococcus	0.109370754	0.035267333	3.101191475
OTU_988	0.363091678	Dorea	0.040434036	0.047488687	0.851445663
OTU_989	0.927833881	Lachnospiracea_incertae_sedis	0.003977118	0.002793452	1.423728814
OTU_99	0.002118349	unclassified.Lachnospiraceae	0.043085448	0.097072462	0.443848311
OTU_997	0.099602111	Oscillibacter	0.009942796	0.003491815	2.847457627
OTU_998	0.62088587	Oscillibacter	0.022205577	0.019554165	1.13559322