Design and validation of a DNA-microarray for phylogenetic analysis of bacterial communities in different oral samples and dental implants

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Supplementary Table S1: Probe sets included in the OralArray. Nucleotide sequences, lengths (Len), melting temperature (Tm) and number of degenerated bases (#Deg bases) of discriminating (DP) and common probes (CP).

Probe set	Discriminating probe (DP)	Common probe (CP)	Len DP	Len CP	Tm DP	Tm CP	#Deg bases DP	#Deg bases CP
***Streptococcus oralis* and rel**	GTGGCTTAACCATAGTACGCTTTGGAAACTGTTTAACTTGAGTGCAA	GAGGGGAGAGTGGAATTCCATGTGTAGCGGTGAAATG	47	37	67.2	67.8	0	0
Streptococcus mutans	CTAGTAGATGGACCTGCGTTGTATTAGCTAGTTGGTAAGGTAAGA	GCTTACCAAGGCGACGATACATAGCCGACCTGAG	45	34	67.3	68.0	0	0
Gemella	CAAGTCTTGACATACTGTGAGGACACAAGAGATTGTGTTGTTCTG	ACCTTTGGTTAGACACAGATACAGGTGGTGCATGGTTGTC	45	40	67.3	67.6	0	0

Parvimonas micra	GCGAAGAAGGTTTTCGAATCG TAAAGCTCTGTCCTATGAGAA GAT	AATGACGGTATCATAGGAGGA AGCCCCGGCTAAATACG	45	38	67.3	67.7	0	0
Selenomonas	GGSCTTGACATTGASTGAAAGA GCTAGAGATAGCTCCC	TCTCTTCGGAGACASGAAAAC AGGTGGTGCATGGC	38	35	67.7	67.9	2	1
Veillonella	GACCTGGGCTACACACGTACT ACAATGGGAGTTAATAGAC	GGAAGCGARAYCGCGAGRTGG AGCAAACCC	40	30	67.6	67.8	0	3
Propionibacterium	CTTGAGGAAGGTAGGGGAGAA TGGAATTCCTGGTGG	AGCGGTGGAATGCGCAGATAT CAGGAGGAACACC	36	34	67.9	68.0	0	0
Actynomices	CTGGCTTAACTGGGGGCKTGC GGTGGGT	ACGGGCNGGCTTGAGTGCGGT AGGGG	28	26	68.0	68.2	1	1
Treponema denticola **and rel**	GTCCAGGGCTACACACGTGCT ACAATGGTTGCTACAAAT	CGAAGCGACACCGCGAGGTCA AGCAAAACG	39	30	67.6	67.1	0	0
Eikenella	CGCAAGACCTCGCGTTATTCGA GCGGCCGATAA	CTGATTAGCTAGTTGGTGGGGT AAAGGCCTACCAAGG	33	37	68.1	67.8	0	0
Haemophilus parainfluenzae **and rel**	GTTGGTGAGGTAAAGGCTCAC CAAGCCGACGATCT	CTAGCTGGTCTGAGAGGATGA CCAGCCACACTG	35	33	67.9	68.1	0	0

Aggregatibacter actinomycetemcomitans	GGCTTAACCTGGGAATTGCATT TCATACTGGGGGTCTG	GAGTACTTTAGGGAGGGGTAG AATTCCACGTGTAGCG	38	37	67.7	67.8	0	0
Capnocytophaga	GAGGCAGCAGTGAGGAATATT GGACAATGGTCGGAAGA	CTGATCCAGCCATGCCGCGTGC AGGATG	38	28	67.7	67.2	0	0
Porphyromonas gingivalis	GGTGCGTAGGTTGTTCGGTAA GTCAGCGGTGAAAC	CTGAGCGCTCAACGTTCAGCCT GCCGTTGAAAC	35	33	67.9	68.1	0	0
Prevotella denticola **and rel**	CGTCGTGTAGCGGTGAAATGC TTAGATATGACGAAGAACC	CCGATTGCGAAGGCAGCCGGC GGGA	40	25	67.6	67.5	0	0
Prevotella intermedia **and rel**	CGCGTATCCAACCTTCCCTYYA CTYGGGGATAC	CCCGTTGAAAGACGGCCTAAT ACCCGATGTTGTYC	33	35	67.5	67.4	3	1
Prevotella melaninogenica **and rel**	GCAGCGCATACTGGTTTCCTTG AGTACGCACAACGTT	GGCGGAATTCGTCGTGTAGCG GTGAAATGCTTAGATATG	37	39	67.8	67.6	0	0

Supplementary Table S2: List of 16S sequences used to build the phylogenetic tree reported in Figure 1. Sequence name, Genbank ID and Length (bp) of 383 nucleotide sequences included in the phylogenetic analysis. Sequences have an average length of 1454.2±65.5 bp.

Sequence name	Genbank ID	Length (bp)
Actinomyces bovis NCTC11535	X81061	1434
Actinomyces bowdenii M1956/95/1	AJ234039	1513
Actinomyces canis CCUG41706	AJ243891	1428
Actinomyces cardiffensis CCUG44997	AJ421779	1522
Actinomyces catuli CCUG41709	AJ276805	1400
Actinomyces coleocanis CCUG41708	AJ249326	1437
Actinomyces dentalis R18165	AJ697609	1517
Actinomyces denticolens NCTC11490	X80412	1422
Actinomyces europaeus CCUG32789A	Y08828	1410
Actinomyces funkei CCUG42773	AJ404889	1366
Actinomyces georgiae DSM6843	X80413	1422
Actinomyces gerencseriae DSM6844	X80414	1415
Actinomyces graevenitzii CCUG27294	AJ540309	1413
Actinomyces hominis 7894GR	FJ617539	1502
Actinomyces hongkongensis HKU8	AF433168	1425
Actinomyces hordeovulneris C.I.P.103149T	X82448	1426
Actinomyces howellii NCTC11636	X80411	1415
Actinomyces hyovaginalis NCFB2983	X69616	1496
Actinomyces israelii C.I.P.103259T	X82450	1441
Actinomyces marimammalium CCUG41710	AJ276405	1416
Actinomyces massiliensis 4401292	EF558367	1481
Actinomyces meyeri C.I.P.103148T	X82451	1441
Actinomyces naeslundii NCTC10301	X81062	1450

Actinomyces nasicola CCUG46092	AJ508455	1475
Actinomyces neuii DSM8576	AM084228	1495
Actinomyces neuii DSM8577T	AM084229	1497
Actinomyces odontolyticus CCUG20536T	AJ234040	1412
Actinomyces oricola CCUG46090	AJ507295	1508
Actinomyces radicidentis CCUG36733T	AJ251986	1401
Actinomyces radingae APL1	X78719	1429
Actinomyces ruminicola B71	DQ072005	1526
Actinomyces slackii CCUG32792	AJ234066	1435
Actinomyces suimastitidis CCUG39276	AJ277385	1416
Actinomyces timonensis 7400942	EU484334	1465
Actinomyces turicensis APL10	X78720	1453
Actinomyces urogenitalis	AJ243791	1423
Actinomyces vaccimaxillae R10176T	AJ427451	1493
Actinomyces viscosus NCTC10951	X82453	1417
Aggregatibacter actinomycetemcomitans ATCC33384	M75039	1484
Aggregatibacter actinomycetemcomitans ANH9381	CP003099	1541
Aggregatibacter actinomycetemcomitans BM043	GU413972	1513
Aggregatibacter actinomycetemcomitans ChDCPV-A110	KF933761	1504
Aggregatibacter actinomycetemcomitans D11S-1	CP001733	1485
Aggregatibacter actinomycetemcomitans D7S-1	CP003496	1540
Aggregatibacter actinomycetemcomitans HG2864/104084	FN547963	1201
Aggregatibacter actinomycetemcomitans IDH392	AB512011	1504
Aggregatibacter actinomycetemcomitans JCM12985	AB548673	1501
Aggregatibacter actinomycetemcomitans JCM2434	AB594758	1462
Aggregatibacter actinomycetemcomitans JCM8578	AB595137	1501
Aggregatibacter actinomycetemcomitans NUM4039	AB512007	1508
Aggregatibacter actinomycetemcomitans NUM-Aa5014	AB579013	1533
Aggregatibacter actinomycetemcomitans OMZ534	AB512009	1534
Campylobacter avium 86/06	EU623473	1354

Campylobacter canadensis L266	EF621894	1361
Campylobacter coli LMG6440	AF372092	1341
Campylobacter concisus ATCC33237	DQ174166	1340
Campylobacter cuniculorum 150B	DQ400345	1390
Campylobacter curvus ATCC35224	DQ174165	1479
Campylobacter fetus ATCC27374	DQ174127	1343
Campylobacter fetus NCTC10354	DQ174131	1343
Campylobacter gracilis ATCC33236	DQ174168	1341
Campylobacter helveticus NCTC12470	U03022	1439
Campylobacter hominis NCTC13146	AJ251584	1414
Campylobacter hyointestinalis CHY5	AF097685	1419
Campylobacter hyointestinalis NCTC11608	AF097689	1423
Campylobacter insulaenigrae NCTC12927	DQ174183	1341
Campylobacter jejuni LMG8843	DQ174144	1341
Campylobacter jejuni NCTC11351	AF372091	1341
Campylobacter lanienae NCTC13004	AF043425	1467
Campylobacter lari ATCC35221	AY621114	1441
Campylobacter lari LMG21009	AM922330	1501
Campylobacter mucosalis ATCC43264	DQ174173	1339
Campylobacter peloridis LMG23910	AM922331	1497
Campylobacter rectus CCUG20446B	DQ174169	1339
Campylobacter showae CCUG30254	DQ174155	1339
Campylobacter sputorum biovar sputorum LMG7795	X67775	1695
Campylobacter sputorum NCTC11367	DQ174151	1570
Campylobacter subantarcticus LMG24377	AM933371	1485
Campylobacter upsaliensis CCUG14913	DQ174157	1341
Campylobacter ureolyticus ATCC33387	L04321	1453
Campylobacter volucris LMG24380	FM883694	1483
Capnocytophaga canimorsus ATCC35979	X97246	1423
Capnocytophaga cynodegmi ATCC49044	X97245	1427

Capnocytophaga genomosp. C1 C2MKM106	AY278613	1440
Capnocytophaga gingivalis ATCC33624	X67608	1453
Capnocytophaga granulosa ATCC51502	X97248	1407
Capnocytophaga haemolytica ATCC51501	X97247	1379
Capnocytophaga leadbetteri AHN8855	DQ009623	1487
Capnocytophaga ochracea ATCC33596	X67610	1489
Capnocytophaga sputigena ATCC33612	X67609	1489
Eikenella corrodens 1664276	AF320620	1476
Eikenella corrodens ATCC23834	M22512	1481
Eikenella corrodens FDC1073	M22515	1476
Eikenella corrodens GHG7	GU561426	1433
Eikenella corrodens JCM12952	AB525415	1503
Eikenella corrodens MooreD25	GQ422740	1516
Eikenella corrodens OI061	JN713283	1534
Eikenella sp.	L06165	1489
Eikenella sp. canine oral taxon 049 OB066	JN713218	1532
Eikenella sp. MDA2346-4	AY286546	1492
Fusobacterium canifelinum RMA1036	AY162221	1458
Fusobacterium equinum VPB4027	AJ295750	1472
Fusobacterium gonidiaformans ATCC25563T	X55410	1333
Fusobacterium mortiferum ATCC25557	AJ867032	1495
Fusobacterium necrogenes ATCC25556	AJ867034	1456
Fusobacterium necrophorum ATCC25286	AJ867039	1455
Fusobacterium necrophorum DSM19678	AM905356	1487
Fusobacterium nucleatum ATCC10953	AF287812	1442
Fusobacterium nucleatum ATCC25586	AE009951	1520
Fusobacterium nucleatum NCTC11326T	X55403	1331
Fusobacterium nucleatum NCTC12276T	X55404	1331
Fusobacterium nucleatum subsp. animalis RMA6247	HM347076	1396
Fusobacterium nucleatum subsp. fusiforme ATCC51190	HM347073	1400

Fusobacterium nucleatum subsp. nucleatum ATCC25586	GQ301038	1442
Fusobacterium nucleatum subsp. nucleatum ATCC25586T	X55401	1331
Fusobacterium nucleatum subsp. polymorphum ATCC10953	GQ301039	1428
Fusobacterium nucleatum subsp. polymorphum WAL10113	HM347056	1372
Fusobacterium nucleatum subsp. polymorphum WAL10141	HM347055	1357
Fusobacterium nucleatum subsp. vincentii ATCC49256	GQ301040	1415
Fusobacterium nucleatum YWH7388	KF444254	1394
Fusobacterium perfoetens ATCC29250	M58684	1458
Fusobacterium periodonticum ATCC33693T	X55405	1331
Fusobacterium russii ATCC25533	M58681	1453
Fusobacterium simiae ATCC33568	M58685	1468
Fusobacterium ulcerans NCTC12111T	X55412	1333
Fusobacterium varium ATCC8501	AJ867036	1493
Gemella asaccharolytica WAL1945J	EU427463	1404
Gemella bergeri 617-93	Y13365	1508
Gemella cuniculi M60449/99/1 T	AJ251987	1451
Gemella haemolysans ATCC10379	L14326	1537
Gemella morbillorum	L14327	1536
Gemella palaticanis M663-98-1	Y17280	1375
Gemella sanguinis 2045-94	Y13364	1510
Haemophilus parainfluenzae 212335	AY365452	1275
Haemophilus parainfluenzae 225322	AY365450	1322
Haemophilus parainfluenzae ATCC33392	M75081	1483
Haemophilus parainfluenzae B160041	FJ685628	1531
Haemophilus parainfluenzae CCUG12836	AY362908	1362
Haemophilus parainfluenzae CIP102513	EU083530	1505
Haemophilus parainfluenzae GRG10	GU561422	1420
Haemophilus parainfluenzae HK102	JF506650	1362
Haemophilus parainfluenzae NCTC10672	JF506651	1363
Haemophilus parainfluenzae PN116	FJ939586	1362

Lactobacillus acidophilus	M58802	1569
Lactobacillus acidophilus ATCC4356	AB008203	1553
Lactobacillus acidophilus BCRC10695	AY773947	1478
Lactobacillus acidophilus BMF6Lb6	M99704	1568
Lactobacillus acidophilus CH-2	EU483105	1478
Lactobacillus acidophilus IDCC3301	EF533992	1521
Lactobacillus acidophilus KLDS1.0732	EU626017	1469
Lactobacillus acidophilus LH4	AY763429	1462
Lactobacillus acidophilus NCDO1748	X61138	1379
Lactobacillus acidophilus NX2-6	EU878007	1481
Leptotrichia buccalis	L37788	1468
Leptotrichia buccalis DSM1135	CP001685	1512
Leptotrichia buccalis GEJ9	GU561361	1396
Leptotrichia buccalis HKU27	GU086178	1311
Leptotrichia buccalis JCM12969	AB818949	1473
Leptotrichia buccalis NCTC10429	X90831	1327
Leptotrichia goodfellowii LB57	AY029807	1485
Leptotrichia hofstadii LB23	AY029803	1486
Leptotrichia hongkongensis HKU24	EU919515	1268
Leptotrichia shahii LB37	AY029806	1485
Leptotrichia sp. oral isolate A39FD	AF287816	1449
Leptotrichia sp. oral strain FAC5	AF287813	1447
Leptotrichia sp. oral taxon 223 F138	GU408547	1432
Leptotrichia sp. oral taxon 847 F0260	FJ577250	1485
Leptotrichia trevisanii	AF206305	1461
Leptotrichia wadei LB16	AY029802	1486
Parvimonas micra ATCC33270	AY323523	1481
Parvimonas micra ATCC33270	AF542231	1414
Parvimonas micra HG1259	AY435495	1310
Parvimonas micra JCM12970	AB729072	1488

Parvimonas micra OC026	JN713239	1517
Porphyromonas gingivalis	AF287987	1450
Porphyromonas gingivalis 1-PGI	AF414810	1363
Porphyromonas gingivalis 40-PGI	AF414813	1363
Porphyromonas gingivalis ATCC33277	L16492	1474
Porphyromonas gingivalis ATCC33277	AP009380	1533
Porphyromonas gingivalis ATCC33277	AB035459	1472
Porphyromonas gingivalis ATCC33277	AF285870	1462
Porphyromonas gingivalis ATCC33277	AF414809	1363
Porphyromonas gingivalis DSM20709	X73964	1453
Porphyromonas gingivalis FDC381	AB035455	1472
Porphyromonas gingivalis JCM12257	AB547660	1493
Porphyromonas gingivalis JCM8525	AB547661	1481
Porphyromonas gingivalis SUNY1021	AB035457	1472
Porphyromonas gingivalis TDC60	AP012203	1532
Porphyromonas gingivalis W83	AB035456	1472
Porphyromonas gingivalis W83	AE015924	1532
Prevotella denticola ATCC33185	L16466	1479
Prevotella denticola ATCC35308	L16467	1474
Prevotella denticola ATCC35308	AY323524	1506
Prevotella denticola ChDCB698	KF933799	1492
Prevotella denticola F0289	GU470898	1505
Prevotella denticola F0289	CP002589	1532
Prevotella denticola JCM13449	AB547679	1492
Prevotella denticola JCM8528	AB547680	1479
Prevotella denticola SEQ063	JN867232	1456
Prevotella denticola SEQ076	JN867242	1225
Prevotella denticola SEQ188	JN867263	1434
Prevotella denticola SEQ197	JN867272	1439
Prevotella denticola SEQ202	JN867277	1439

Prevotella denticola SEQ210	JN867285	1440
Prevotella denticola SEQ247	JN867320	1433
Prevotella denticola ST27	GU561351	1255
Prevotella intermedia 10-PIN	AF414827	1364
Prevotella intermedia 15-PIN	AF414828	1364
Prevotella intermedia 16-PIN	AF414829	1364
Prevotella intermedia 22-PIN	AF414830	1364
Prevotella intermedia 23-PIN	AF414831	1364
Prevotella intermedia 24-PIN	AF414832	1364
Prevotella intermedia 32-PIN	AF414824	1364
Prevotella intermedia 35-PIN	AF414825	1364
Prevotella intermedia 36-PIN	AF414826	1364
Prevotella intermedia 5-PIN	AF414822	1364
Prevotella intermedia 6-PIN	AF414823	1364
Prevotella intermedia ATCC25611	L16468	1473
Prevotella intermedia ATCC25611	X73965	1459
Prevotella intermedia ATCC25611	AF414821	1364
Prevotella intermedia ChDC KB14	AY689222	1495
Prevotella intermedia ChDC KB18	AY689223	1494
Prevotella intermedia ChDC KB2	AY689220	1494
Prevotella intermedia ChDC KB29	AY689225	1494
Prevotella intermedia ChDC KB3	AY689221	1494
Prevotella intermedia ChDC KB53	AY689226	1495
Prevotella melaninogenica ATCC25845	CP002122	1531
Prevotella melaninogenica ATCC25845	L16469	1478
Prevotella melaninogenica ATCC25845	CP002123	1532
Prevotella melaninogenica ATCC25845	AY323525	1506
Prevotella melaninogenica ATCC43982	L16470	1473
Prevotella melaninogenica ATCC43982	FJ792538	1372
Prevotella melaninogenica C561	JF803512	1479

Prevotella melaninogenica H2_18	GU561346	1411
Prevotella melaninogenica JCM6321	AB547694	1479
Prevotella melaninogenica JCM6324	AB686661	1492
Prevotella melaninogenica JCM6325	AB547693	1480
Prevotella melaninogenica SEQ074	JN867240	1436
Prevotella melaninogenica SEQ115	JN867245	1366
Prevotella melaninogenica SEQ117	JN867247	1440
Prevotella melaninogenica SEQ182	JN867258	1326
Prevotella melaninogenica SEQ189	JN867264	1424
Prevotella melaninogenica SEQ220	JN867295	1432
Prevotella melaninogenica SEQ236	JN867309	1431
Prevotella melaninogenica SEQ244	JN867317	1430
Prevotella melaninogenica SG14	GU561347	1280
*Prevotella melaninogenica*DNF00666	KF280298	1286
Propionibacterium acidifaciens C3M_31	EU979537	1443
Propionibacterium acidipropionici NCFB570	AJ704570	1440
Propionibacterium acnes ATCC6919	AB042288	1486
Propionibacterium australiense LCDC-98A072	AF225962	1469
Propionibacterium avidum DSM4901	AJ003055	1504
Propionibacterium cyclohexanicum	D82046	1471
Propionibacterium freudenreichii DSM20271	X53217	1462
Propionibacterium freudenreichii DSM4902	Y10819	1510
Propionibacterium granulosum DSM20700	AJ003057	1514
Propionibacterium jensenii DSM20535	AJ704571	1487
Propionibacterium microaerophilum M5	AF234623	1524
Propionibacterium propionicum DSM43307	AJ003058	1506
Propionibacterium thoenii NCFB568	AJ704572	1467
Selenomonas artemidis ATCC43528	GQ422716	1521
Selenomonas bovis WG	EF139191	1525
Selenomonas dianae ATCC43527	AF287801	1494

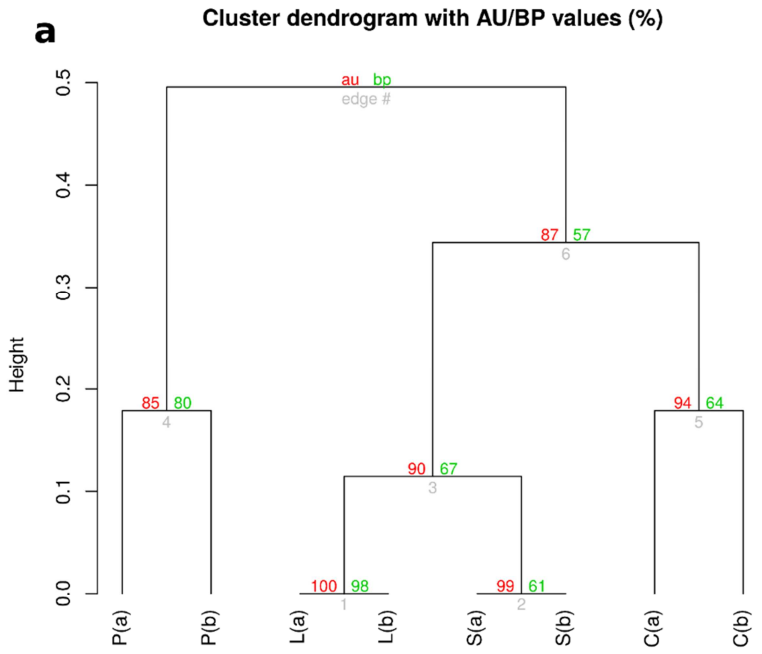
Selenomonas flueggei ATCC43531	AF287803	1488
Selenomonas infelix ATCC43532	AF287802	1524
Selenomonas noxia ATCC43541	AF287799	1491
Selenomonas ruminantium GA192	M62702	1486
Selenomonas ruminantium JCM6582	AB003379	1455
Selenomonas sputigena ATCC35185	AF287793	1497
Staphylococcus arlettae ATCC43957	AB009933	1494
Staphylococcus aureus ATCC12600	L36472	1555
Staphylococcus aureus 007.5	EU515208	1479
Staphylococcus aureus ATCC14458	DQ997837	1516
Staphylococcus aureus ATCC29740	AF015929	1442
Staphylococcus aureus ATCC35844	D83355	1476
Staphylococcus aureus ATCC43300	AM980864	1519
Staphylococcus aureus EHFS1_S02Ha	EU071602	1416
Staphylococcus aureus F41	DQ997832	1473
Staphylococcus aureus MPU99	AB353073	1500
Staphylococcus aureus OA1	D83356	1476
Staphylococcus aureus RKA4	EF463058	1415
Staphylococcus aureus S2	FJ434467	1417
Staphylococcus aureus SGC801	GQ919290	1461
Staphylococcus aureus SMKV-1	DQ306890	1507
Staphylococcus auricularis ATCC33753	D83358	1475
Staphylococcus capitis	L37599	1469
Staphylococcus capitis ATCC49326	AB009937	1492
Staphylococcus caprae ATCC35538	AB009935	1492
Staphylococcus carnosus GTC1232	AB233329	1454
Staphylococcus carnosus ATCC51365	AB009934	1493
Staphylococcus chromogenes ATCC43764	D83360	1475
Staphylococcus cohnii ATCC29974	D83361	1477
Staphylococcus cohnii ATCC49330	AB009936	1494

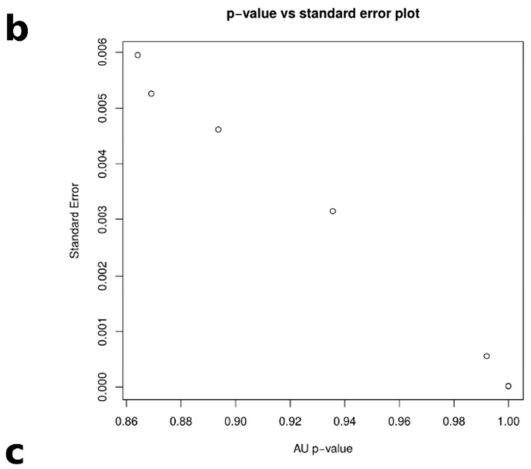
Staphylococcus condimenti DSM11674T	Y15750	1545
Staphylococcus delphini ATCC49171	AB009938	1493
Staphylococcus devriesei KS-SP_60	FJ389206	1537
Staphylococcus epidermidis ATCC14990	D83363	1475
Staphylococcus equorum ATCC43958	AB009939	1494
Staphylococcus equorum RP29	AF527483	1535
Staphylococcus felis ATCC 49168	D83364	1475
Staphylococcus fleurettii GTC1999	AB233330	1454
Staphylococcus gallinarum ATCC35539	D83366	1477
Staphylococcus haemolyticus CCM2737	X66100	1544
Staphylococcus hominis DSM20328	X66101	1544
Staphylococcus hominis GTC1228	AB233326	1454
Staphylococcus hyicus ATCC11249	D83368	1476
Staphylococcus intermedius ATCC29663	D83369	1476
Staphylococcus kloosii ATCC43959	AB009940	1494
Staphylococcus lentus ATCC29070	D83370	1480
Staphylococcus lugdunensis ATCC43809	AB009941	1492
Staphylococcus lutrae	X84731	1511
Staphylococcus massiliensis CCUG55927	EU707796	1477
Staphylococcus microti CCM4903	EU888120	1477
Staphylococcus nepalensis CW1	AJ517414	1470
Staphylococcus pasteuri ATCC51129	AB009944	1494
Staphylococcus pettenkoferi B3117	AF322002	1547
Staphylococcus piscifermentans SK03 T	Y15754	1544
Staphylococcus pseudintermedius LMG22219	AJ780976	1512
Staphylococcus rostri ARI262	FM242137	1413
Staphylococcus saccharolyticus	L37602	1527
Staphylococcus saprophyticus GTC843	AB233327	1454
Staphylococcus saprophyticus ATCC15305	AP008934	1555
Staphylococcus schleiferi	S83568	1554

Staphylococcus schleiferi ATCC49545	AB009945	1492
Staphylococcus sciuri DSM20345T	AJ421446	1528
Staphylococcus sciuri GTC1227	AB233331	1454
Staphylococcus sciuri GTC844	AB233332	1454
Staphylococcus simiae CCM7213	AY727530	1478
Staphylococcus simulans ATCC27848	D83373	1476
Staphylococcus succinus SB72	AJ320272	1535
Staphylococcus succinus AMG-D1	AF004220	1548
Staphylococcus vitulinus ATCC51145	AB009946	1497
Staphylococcus warneri	L37603	1470
Staphylococcus xylosus ATCC29971	D83374	1477
Streptococcus equinus ATCC9812	AJ301607	1433
Streptococcus henryi 126	EF364097	1430
Streptococcus infantarius HDP90246	AF429763	1473
Streptococcus infantarius HDP90104	AF177729	1493
Streptococcus infantis ATCC700779	AY485603	1468
Streptococcus lactarius MV1	GU045364	1453
Streptococcus lutetiensis NEM782	AJ297215	1461
Streptococcus macacae ATCC35911	AY188351	1547
Streptococcus mitis ATCC49456	AF003929	1520
Streptococcus mitis ATCC15914	AY281076	1430
Streptococcus mitis ATCC49456	AY485601	1469
Streptococcus mitis ATCC6249	AY281077	1428
Streptococcus mitis ATCC903	AY281078	1430
Streptococcus mutans 669	AF139603	1551
Streptococcus mutans AF199	AF139602	1551
Streptococcus mutans LM7	AF139601	1551
Streptococcus mutans NCTC10449	AJ243965	1512
Streptococcus mutans UA140	AF139599	1551
Streptococcus oralis ATCC35037	AY485602	1471

Streptococcus oralis ATCC35037	AF003932	1460
Streptococcus oralis ATCC700233	AY281080	1428
Streptococcus oralis ATCC9811	AY281079	1428
Streptococcus oralis CCUG24891	DQ303190	1473
Streptococcus peroris GTC848	AB008314	1339
Streptococcus pneumoniae ATCC33400	AF003930	1515
Streptococcus pseudopneumoniae ATCC BAA-960	AY612844	1468
Streptococcus ursoris NUM1615	AB501126	1550
Treponema denticola ATCC35405	AE017226	1546
Treponema denticola ATCC33520	D85438	1376
Treponema denticola ATCC35404	AF139204	1450
Treponema denticola ATCC35405	AF139203	1518
Treponema denticola C057	GU416568	1457
Treponema denticola D011	GU416610	1458
Treponema denticola GF012	GU416600	1479
Treponema denticola GM-1	AY119692	1365
Treponema denticola PY004	JN713361	1496
Treponema denticola T009	GU416613	1453
Treponema denticola U061A	GU416572	1459
Veillonella atypica ATCC17744	AF439641	1400
Veillonella caviae DSM20738	AY355140	1402
Veillonella criceti ATCC17747	AF186072	1492
Veillonella denticariosi RBV106	EF185167	1497
Veillonella dispar ATCC17748	AF439639	1375
Veillonella magna lac18	EU096495	1449
Veillonella montpellierensis ADV281.99	AF473836	1409
Veillonella parvula ATCC10790	AY995767	1497
Veillonella ratti DSM20736	AY355138	1396
Veillonella rodentium ATCC17743	AY514996	1307
Veillonella rogosae CF100	EF108443	1344

Supplementary Figure S1: Cluster analysis of OralArray reproducibility on oral clinical samples. (a) Cluster analysis of the samples reported in Figure 3 and stability values as calculated by pvclust. Red values ("AU" values) were used to determine cluster stability; (b) pvclust-computed standard error associated to cluster stability measures; (c) Full table of pvclust bootstrapping analysis on the samples. "AU" (approximately unbiased) is computed by multiscale bootstrap resampling of data, whereas "BP" (bootstrap probability) is computed by normal bootstrap resampling. AU values are generally considered as a better approximation to unbiased stability than BP. For a full description of table columns, please refer to pvclust documentation (https://cran.r-project.org/web/packages/pvclust/pvclust.pdf).

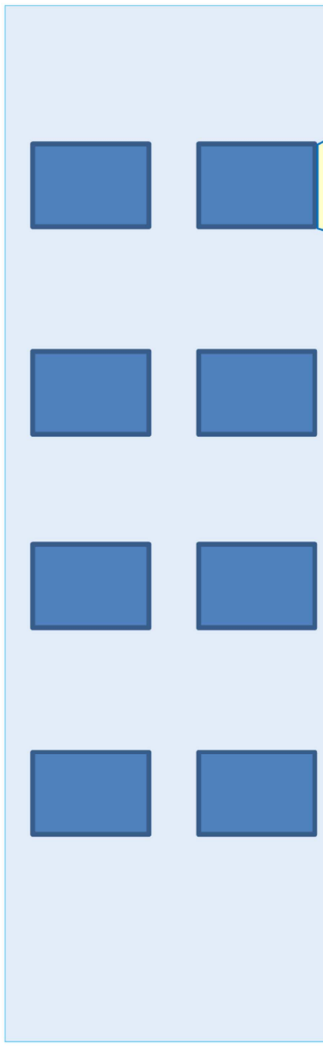




c

Cluster node	au	bp	se.au	se.bp	v	c	pchi
1	1	0.984	0	0.001	-2.999	0.851	0.668
2	0.992	0.611	0.001	0.002	-1.346	1.063	0.107
3	0.894	0.665	0.005	0.002	-0.837	0.41	0.01
4	0.864	0.8	0.006	0.001	-0.971	0.128	0.109
5	0.936	0.638	0.003	0.002	-0.937	0.582	0.012
6	0.869	0.569	0.005	0.002	-0.648	0.475	0.032
7	1	0.996	0	0	-3.271	0.613	0.613

Supplementary Figure S2: Schematic representation of the Universal Array (UA) layout. Each slide contains 8 UAs, each constituted by 208 spots, arranged in a 13 × 16 matrix. On the right, a magnification of the location of Zip Codes and controls is reported, together with the nucleotidic sequence of the Zip Codes



66	63	Blank	1	2	3	4	5	1	2	3	4	5	Blank	63	66
6	7	8	9	10	12	14	15	6	7	8	9	10	12	14	15
16	17	18	19	20	21	22	23	16	17	18	19	20	21	22	23
24	27	28	29	31	32	33	34	24	27	28	29	31	32	33	34
35	36	37	38	39	40	41	42	35	36	37	38	39	40	41	42
44	1B	3B	5B	11B	13B	15B	21B	44	1B	3B	5B	11B	13B	15B	21B
66	63	Blank	1	2	3	23B	25B	23B	25B	1	2	3	Blank	63	66
4	5	6	7	8	9	10	12	4	5	6	7	8	9	10	12
14	15	16	17	18	19	20	21	14	15	16	17	18	19	20	21
22	23	24	27	28	29	31	32	22	23	24	27	28	29	31	32
33	34	35	36	37	38	39	40	33	34	35	36	37	38	39	40
41	42	44	1B	3B	5B	11B	13B	41	42	44	1B	3B	5B	11B	13B
66	63	Blank	66	15B	21B	23B	25B	15B	21B	23B	25B	66	Blank	63	66

ZipCode	Sequence 5' -> 3'	ZipCode	Sequence 5' -> 3'
1	GATGATCGACGAGACACTCTCGCCA	31	GAGACAAAGGTCTGCGCCAGCACCA
2	CGGTCGACGAGCTGCCGCGCAAGAT	32	TGGCCACACTGTCCATTTGCGCGGT
3	GACATTCGCGATCGCCGCCCGCTTT	33	CCTTGCGACGTGTCAAGTTGGGGTC
4	CGGTATCGCGACCGCATCCCAATCT	34	AGGTTAGGGTCGCGCCAAACTCTCC
5	GCTCGAAGAGGCGCTACAGATCCTC	35	ACGACTGCGAGGTGCGGTAAGCACA
6	CACCGCCAGCTCGGCTTCGAGTTCG	36	GCGATCGCCGGGAGATATACCCAAC
7	CGACTCCCTGTTTGTGATGGACCAC	37	TCGTGCCGGACTCGAGCACCAATAC
8	CTTTTCCCGTCCGTCATCGCTCAAG	38	GCTTTAGCACCGCGATGGCGTAGAC
9	GGCTGGGTCTACAGATCCCCAACTT	39	CAGCCGCGGTACTGAATGCGATGCT
10	GAACCTTTCGCTTCACCGGCCGATC	40	CCCCGGATAGCTGACGAGGCTTACG
12	TTTCGGCACGCGCGGGATCACCATC	41	TCCGGACAGGTTGGGGTGCGTTTGG
14	CTCGGTGGTGCTGACGGTGCAATCC	42	CGTAGAGCAACGCGATACCCCCGAC
15	TCAACGTGCCAGCGCCGTCCTGGGA	44	AGCAGCAGTGACAATGCCACCGCCG
16	GCGAAGGAACTCGACGTGGACGCCG	1B	TGCGACCTCAGCATCGACCTCAGC
17	CGGGGATACCGATCTCGGGCGCACA	3B	CAGCACCTGACCATCGATCGCAGC
18	GGAGCTTACGCCATCACGATGCGAT	5B	GACCACCTTGCGATCGGGTACAGC
19	CGTGGCGGTGCGGAGTTTCCCCGAA	11B	TGCGGGTACAGCACCTACCTTGCG
20	CGATCCAACGCACTGGCCAAACCTA	13B	CAGCGGTAGACCACCTATCGTGCG
21	CTGAATCCTCCAACCGGGTTGTCGA	15B	GACCGGTATGCGACCTGGTATGCG
22	TTCGGCGCTGGCGTAAAGCTTTTGG	21B	TGCGATCGCAGCGGTAACCTGACC
23	GTAAATCTCCAGCGGAAGGGTACGG	23B	CAGCATCGGACCGGTAATCGGACC
24	CCGGCTTTGAACTGCTCACCGATCT	25B	GACCATCGTGCGGGTAGGTAGACC
27	ACTACGCAACACCGAACGGATACCC	63	TGGCACCGACGGCTGGCACACCAC
28	GGACCAATGGTCCCATTGACCAGGT	66	TACCGGCGGCAGCACCAGCGGTAAC
29	CAACGCTGAGCGCGTCACTGACATA		