

Supplementary Data

Figure S1. Species-tree built using a consensus of 75 core MCL gene clusters.
(PDF)

Figure S2. Result of gene gain/loss analysis showing complete breakdown of all evolutionary events.
(PDF)

Table S1. Annotation for 159 core genes.
(XLSX)

Table S2. Results of enrichment test for biological process (P), molecular function (F), and cellular component (C) GO terms.
(XLSX)

Table S3. Results of enrichment test for all GO terms reduced to the most specific term.
(XLSX)

Table S4. LGT counts for each strain and group.
(PDF)

Table S5. For pyogenic species: annotation, GO terms, and MCL clustering results for genes annotated with the pathogenesis GO term.
(XLSX)

Table S6. For bovis species: annotation, GO terms, and MCL clustering results for genes annotated with the following GO terms: (i) regulation of transcription (DNA-dependent) and (ii) sequence-specific DNA binding transcription factor activity.
(XLSX)

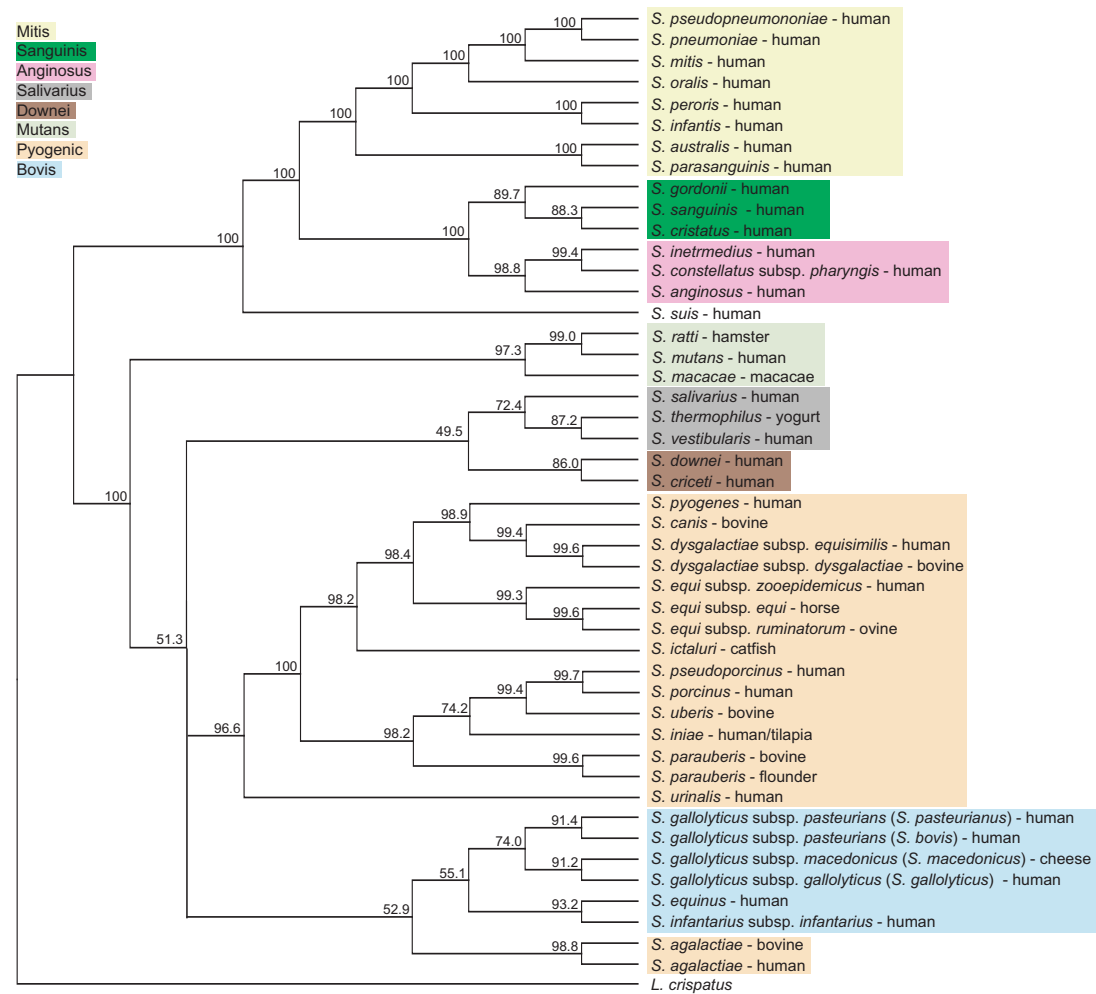


Fig. S1. Species-tree built using a consensus of 75 core MCL gene clusters. Core clusters showing evidence for recombination for any three of the four recombination detection methods were removed.

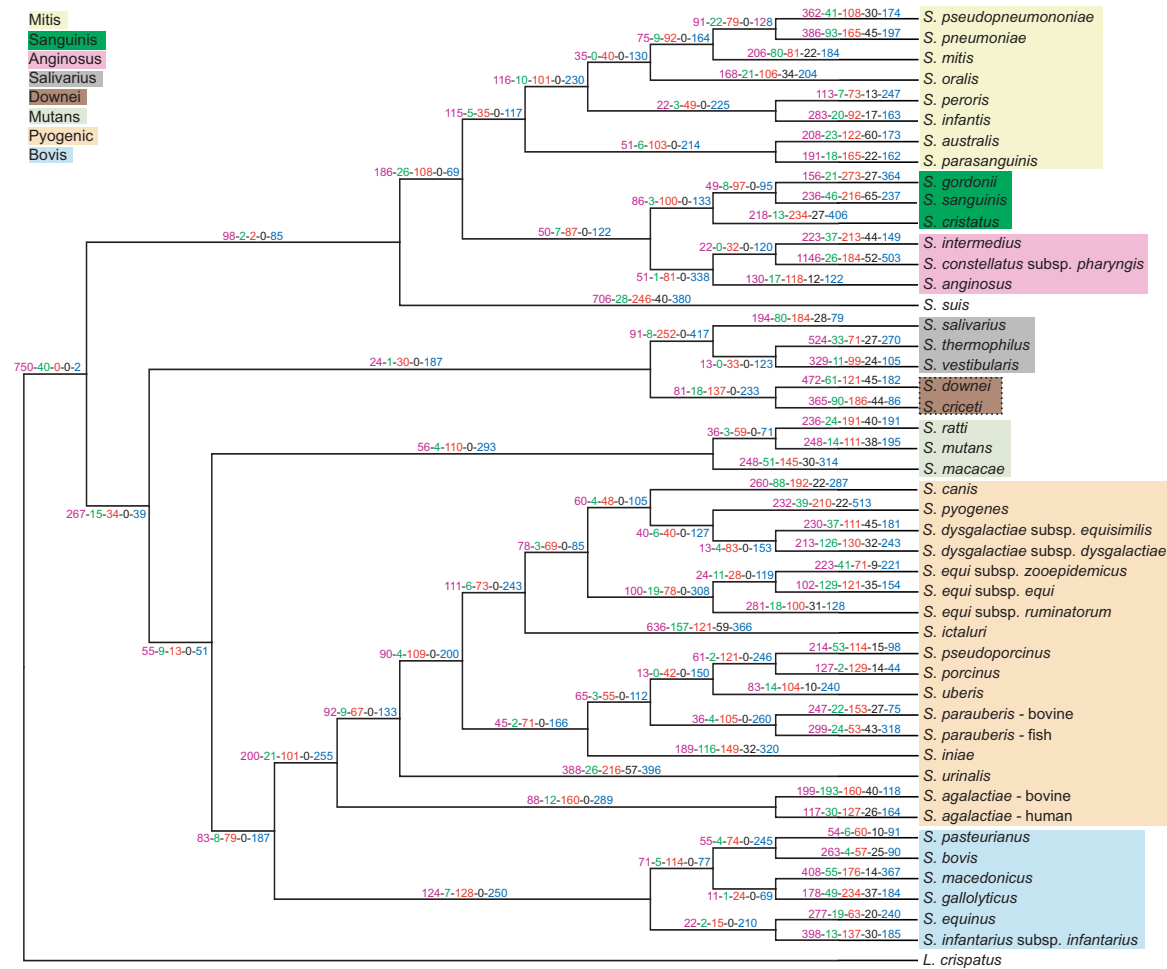


Fig. S2. Result of gene gain/loss analysis showing complete breakdown of all evolutionary events. Numbers on branches show the number of events as follows: births (purple), duplications (green), LGTs (red), birth or LGT (black), and losses (blue).

Table S4. LGT counts for each strain and group

Species/group	Total genes exchanged via LGT	Total genes exchanged via LGT/#taxa
<i>S. sanguinis</i> (SK36)	380	
<i>S. canis</i> (FSL Z3-227)	372	
<i>S. urinalis</i> (2285-97)	372	
<i>S. agalactiae</i> (FSL S3-026)	347	
<i>S. gallolyticus</i> (UCN34)	309	
<i>S. suis</i> (05ZYH33)	300	
<i>S. parasanguinis</i> (ATCC 15912)	286	
<i>S. macedonicus</i> (ACA-DC 198)	284	
<i>S. cristatus</i> ATCC 51100	280	
<i>S. intermedius</i> (F0413)	276	
<i>S. ratti</i> (FA-1)	272	
<i>S. constellatus</i> subsp. <i>pharyngis</i> (SK1060)	268	
<i>S. gordonii</i> (Challis substr CH1 ATCC 35105)	253	
<i>S. ictaluri</i> (707-05)	253	
<i>S. pneumoniae</i> (670 6B)	252	
<i>S. dysgalactiae</i> subsp. <i>dysgalactiae</i> (ATCC 27957)	251	
<i>S. salivarius</i> (JIM8780)	251	
<i>S. equi</i> subsp. <i>ruminatorum</i> (CECT 5772)	247	
<i>S. australis</i> (ATCC 700641)	239	
<i>S. macacae</i> (NCTC 11558)	238	
<i>S. pyogenes</i> (MGAS10394)	231	
<i>S. criceti</i> (HS-6)	223	
<i>S. anginosus</i> (1 2 62CV)	222	
<i>S. agalactiae</i> (A909)	220	
<i>S. pseudoporcinus</i> (LQ 940-04)	219	
<i>S. iniae</i> (9117)	218	
<i>S. mutans</i> (UA159)	217	
<i>S. oralis</i> (Uo5)	212	
<i>S. dysgalactiae</i> subsp. <i>equisimilis</i> (GGS 124)	211	
<i>S. infantarius</i> subsp. <i>infantarius</i> (ATCC BAA-102)	211	
<i>S. mitis</i> (B6)	194	
<i>S. downei</i> (F0415)	192	
<i>S. parauberis</i> (NCFD 2020)	190	
<i>S. porcinus</i> (Jelinkova 176)	188	
<i>S. vestibularis</i> (ATCC 49124)	171	

<i>S. uberis</i> (0140J)	166	
<i>S. infantis</i> (ATCC 700779)	165	
<i>S. equi</i> subsp. <i>equi</i> (4047)	157	
<i>S. pseudopneumoniae</i> (IS7493)	149	
<i>S. peroris</i> (ATCC 700780)	132	
<i>S. thermophilus</i> (CNRZ1066)	128	
<i>S. equinus</i> (ATCC 9812)	103	
<i>S. bovis</i> (ATCC 700338)	102	
<i>S. parauberis</i> (KCTC 11537)	94	
<i>S. equi</i> subsp. <i>zooepidemicus</i> (MGCS10565)	93	
<i>S. pasteurinus</i> (ATCC 43144)	92	
sanguinis	913	304
anginosus	766	255
mutans	727	242
pyogenic	3829	225
downnei	415	208
mitis	1629	204
bovis	1101	184
salivarius	550	183
