Figure s1

A

![Graph showing OTU number versus sequence number]

- NC
- CSD

B

![Graph showing observed species vs number of samples]

- Observed species
- Number of samples
### Figure s2

#### A

| Legend | Taxonomy       | Total | NC | CSD | NC/VS CSD | P value |
|--------|----------------|-------|----|-----|-----------|---------|
|        |                | Count | %  | %   | %         |         |
|        | *c_Clostridia* | 19442 | 49.29% | 52.80% | 45.78% | *       |
|        | *c_Bacteroidia* | 15552 | 39.43% | 37.20% | 41.66% | ns      |
|        | *c_Gammaproteobacteria* | 2387 | 6.05% | 3.94% | 8.16% | *       |
|        | *c_Negativicutes* | 961 | 2.44% | 2.85% | 2.02% | ns      |
|        | *c_Fusobacteria* | 263 | 0.67% | 0.62% | 0.71% | *       |
|        | *c_Alphaproteobacteria* | 105 | 0.27% | 0.49% | 0.04% | ****    |
|        | *c_un_Actinobacteria* | 200 | 0.51% | 0.62% | 0.39% | ns      |
|        | *c_Bacilli* | 105 | 0.27% | 0.15% | 0.38% | ns      |
|        | *c_Erysipelotrichia* | 225 | 0.57% | 0.77% | 0.37% | ns      |
|        | *c_Verrucomicrobiae* | 35 | 0.09% | 0.10% | 0.08% | ns      |
|        | *c_Coriobacteria* | 105 | 0.27% | 0.25% | 0.28% | ns      |
|        | *c_Deltaproteobacteria* | 52 | 0.13% | 0.15% | 0.11% | *       |

#### B

| Legend | Taxonomy       | Total | NC | CSD | NC/VS CSD | P value |
|--------|----------------|-------|----|-----|-----------|---------|
|        |                | Count | %  | %   | %         |         |
|        | *o_Clostridales* | 19442 | 49.29% | 52.80% | 45.77% | *       |
|        | *o_Bacteroidales* | 15552 | 39.43% | 37.20% | 41.66% | ns      |
|        | *o_Enterobacteriales* | 1624 | 4.12% | 1.84% | 6.40% | *       |
|        | *o_Selenomonadales* | 961 | 2.44% | 2.85% | 2.02% | ns      |
|        | *o_Fusobacteriales* | 263 | 0.67% | 0.62% | 0.71% | *       |
|        | *o_un_Gammaproteobacteria* | 714 | 1.81% | 1.95% | 1.67% | ns      |
|        | *o_Bifidobacteriales* | 194 | 0.49% | 0.61% | 0.38% | ns      |
|        | *o_Rhodospirillales* | 62 | 0.16% | 0.31% | 0.00% | *       |
|        | *o_Lactobacillales* | 101 | 0.26% | 0.14% | 0.38% | ns      |
|        | *o_Erysipelotrichiales* | 225 | 0.57% | 0.77% | 0.37% | ns      |
|        | *o_Verrucomicrobiae* | 35 | 0.09% | 0.10% | 0.08% | ns      |
|        | *o_Coriobacteriales* | 105 | 0.27% | 0.25% | 0.28% | ns      |
|        | *o_Pasteurellales* | 40 | 0.10% | 0.12% | 0.08% | ns      |
|        | *o_Caulobacteriales* | 24 | 0.06% | 0.12% | 0.00% | ****    |
|        | *o_Desulfovibrionales* | 52 | 0.13% | 0.15% | 0.11% | *       |
### Legend

| Taxonomy                  | Total Count | NC % | CSD % | P value |
|---------------------------|-------------|------|-------|---------|
| f_Bacteroidaceae          | 12553       | 31.82% | 31.58% | ns      |
| f_Lachnospiraceae         | 11791       | 29.89% | 29.95% | ns      |
| f_Prevotellaceae          | 2043        | 5.18%  | 2.85%  | ns      |
| f_Ruminococcaceae         | 7026        | 17.81% | 21.64% | ***     |
| f_Enterobacteriaceae      | 1634        | 4.12%  | 1.84%  | *       |
| f_Veillonellaceae         | 785         | 1.99%  | 2.42%  | ns      |
| f_Fusobacteriaceae        | 263         | 0.67%  | 0.62%  | *       |
| f_Tannerellaceae          | 470         | 1.19%  | 1.10%  | ns      |
| f_Rikenellaceae           | 287         | 0.73%  | 0.85%  | **      |
| f_Muribaculaceae          | 121         | 0.31%  | 0.58%  | ***     |
| f_Burkholderiaceae        | 711         | 1.80%  | 1.94%  | 1.66%   |
| f_Bifidobacteriaceae      | 194         | 0.49%  | 0.61%  | ns      |
| f_Christensenellaceae     | 115         | 0.29%  | 0.45%  | **      |
| f_Peptostreptococcaceae   | 289         | 0.73%  | 0.35%  | 1.11%   |
| f_Streptococcaceae        | 365         | 0.93%  | 0.11%  | 0.27%   |
| f_Erysipelotrichaceae     | 225         | 0.57%  | 0.77%  | 0.37%   |
| f_Acidaminococcaceae      | 176         | 0.45%  | 0.43%  | 0.46%   |
| f_Akkermansiaceae         | 35          | 0.09%  | 0.10%  | 0.06%   |
| f_un_Clostridiales        | 201         | 0.51%  | 0.37%  | 0.65%   |
| f_Coriobacteriaceae       | 90          | 0.23%  | 0.21%  | 0.25%   |
| f_Pasteurellaceae         | 40          | 0.10%  | 0.12%  | 0.06%   |
| f_Caulobacteraceae        | 22          | 0.06%  | 0.11%  | 0.00%   |

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**Figure s3: Legend Taxonomy**

- f_Bacteroidaceae
- f_Lachnospiraceae
- f_Prevotellaceae
- f_Ruminococcaceae
- f_Enterobacteriaceae
- f_Veillonellaceae
- f_Fusobacteriaceae
- f_Tannerellaceae
- f_Rikenellaceae
- f_Muribaculaceae
- f_Burkholderiaceae
- f_Bifidobacteriaceae
- f_Christensenellaceae
- f_Peptostreptococcaceae
- f_Streptococcaceae
- f_Erysipelotrichaceae
- f_Acidaminococcaceae
- f_Akkermansiaceae
- f_un_Clostridiales
- f_Coriobacteriaceae
- f_Pasteurellaceae
- f_Caulobacteraceae

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**Count vs CSD:**

- NC: 0.05
- CSD: 0.10
