HMP 2 IBD notes:

Metagenomes by Samples:

Crohn's Disease Healthy control Other Ulcerative colitis

160 67 1 88

Metagenomes by Participant:

Crohn's Disease Healthy control Other Ulcerative colitis

62 24 1 35

HMP2-IBD clusters mapped to smNRPS:

**C3008\_\_NODE\_58\_length\_80320\_cov\_9.89467\_\_38512\_\_nrps\_\_ANTISMASH\_\_41808\_80320** **smNRPS-CB** 38512 5945 100 97.898 0.0 1 5945

C3017\_\_NODE\_742\_length\_38583\_cov\_142.623\_\_25546\_\_nrps\_\_ANTISMASH\_\_13037\_38583 smNRPS-CB 25546 5945 92 97.943 0.0 1 5491

**C4004\_\_NODE\_591\_length\_10305\_cov\_3.58927\_\_10305\_\_nrps\_\_ANTISMASH\_\_0\_10305 smNRPS-CC** 10305 5875 96 99.304 0.0 1564 5875

C4004\_\_NODE\_591\_length\_10305\_cov\_3.58927\_\_10305\_\_nrps\_\_ANTISMASH\_\_0\_10305 smNRPS-CC 10305 5875 96 99.164 0.0 1 1315

HitRatio by Samples:

|  |  |  |  |
| --- | --- | --- | --- |
| bgcName | GroupAttribute | n | hitRatio |
| C3008\_\_NODE\_58\_length\_80320\_cov\_9.89467\_\_38512\_\_nrps\_\_ANTISMASH\_\_41808\_80320  **smNRPS-CB** | Crohn's Disease | 40 | 25% |
| C3008\_\_NODE\_58\_length\_80320\_cov\_9.89467\_\_38512\_\_nrps\_\_ANTISMASH\_\_41808\_80320  **smNRPS-CB** | Healthy control | 5 | 7.46% |
| C3008\_\_NODE\_58\_length\_80320\_cov\_9.89467\_\_38512\_\_nrps\_\_ANTISMASH\_\_41808\_80320  **smNRPS-CB** | Ulcerative colitis | 6 | 6.82% |
| C4004\_\_NODE\_591\_length\_10305\_cov\_3.58927\_\_10305\_\_nrps\_\_ANTISMASH\_\_0\_10305  **smNRPS-CC** | Crohn's Disease | 24 | 15% |
| C4004\_\_NODE\_591\_length\_10305\_cov\_3.58927\_\_10305\_\_nrps\_\_ANTISMASH\_\_0\_10305  **smNRPS-CC** | Healthy control | 1 | 1.49% |
| C4004\_\_NODE\_591\_length\_10305\_cov\_3.58927\_\_10305\_\_nrps\_\_ANTISMASH\_\_0\_10305  **smNRPS-CC** | Ulcerative colitis | 1 | 1.14% |

HitRatio by Participants:

|  |  |  |  |
| --- | --- | --- | --- |
| bgcName | GroupAttribute | n | hitRatio |
| C3008\_\_NODE\_58\_length\_80320\_cov\_9.89467\_\_38512\_\_nrps\_\_ANTISMASH\_\_41808\_80320  **smNRPS-CB** | Crohn's Disease | 18 | 29% |
| C3008\_\_NODE\_58\_length\_80320\_cov\_9.89467\_\_38512\_\_nrps\_\_ANTISMASH\_\_41808\_80320  **smNRPS-CB** | Healthy control | 3 | 12.5% |
| C3008\_\_NODE\_58\_length\_80320\_cov\_9.89467\_\_38512\_\_nrps\_\_ANTISMASH\_\_41808\_80320  **smNRPS-CB** | Ulcerative colitis | 4 | 11.4% |
| ¡  **smNRPS-CC** | Crohn's Disease | 7 | 11.3% |
| C4004\_\_NODE\_591\_length\_10305\_cov\_3.58927\_\_10305\_\_nrps\_\_ANTISMASH\_\_0\_10305  **smNRPS-CC** | Healthy control | 1 | 4.17% |
| C4004\_\_NODE\_591\_length\_10305\_cov\_3.58927\_\_10305\_\_nrps\_\_ANTISMASH\_\_0\_10305  **smNRPS-CC** | Ulcerative colitis | 1 | 2.86% |

LEfSe analysis (p-value <.01 & LDA>2):

CD vs C:

Enriched CD: 8

Enriched C: 31

UC vs C:

Enriched UC: 5

Enriched C: 23

UC vs CD:

Enriched UC: 17

Enriched CD: 14

Compare enriched LEfSe clusters:

1. UC enriched clusters (UC\_C and UC\_CD):

Unique UC\_CD BGCs: 14

Common BGCs = 3

Unique UC\_C BGCs: 2

1. UC & CD enriched clusters (UC\_C & CD\_C):

Unique UC BGCs: 17

Common BGCs: 0

Unique CD BGCs: 8

1. C enriched clusters (C\_CD & C\_UC):

Unique C\_UC BGCs: 5

Common BGCs: 18

Unique C\_CD: 13

1. CD enriched clusters (CD\_C & CD\_UC):

Unique CD\_C BGCs: 4

Common BGCs: 4

Unique CD\_UC BGCs: 10