

| Adverse Events | |
|-------------------------|-----------|
| Serious Adverse Events | 0 (0%) |
| Grade1: Fever | 1 (5.0%) |
| Grade1: Chills | 1 (5.0%) |
| Grade1: Fatigue/malaise | 4 (20.0%) |
| Grade1: Abdominal pain | 3 (15.0%) |
| Grade1: Anorexia | 1 (5.0%) |
| Grade1: Diarrhea | 2 (10.0%) |
| Grade1: Constipation | 1 (5.0%) |

Table S1. Adverse events reported post-FMT

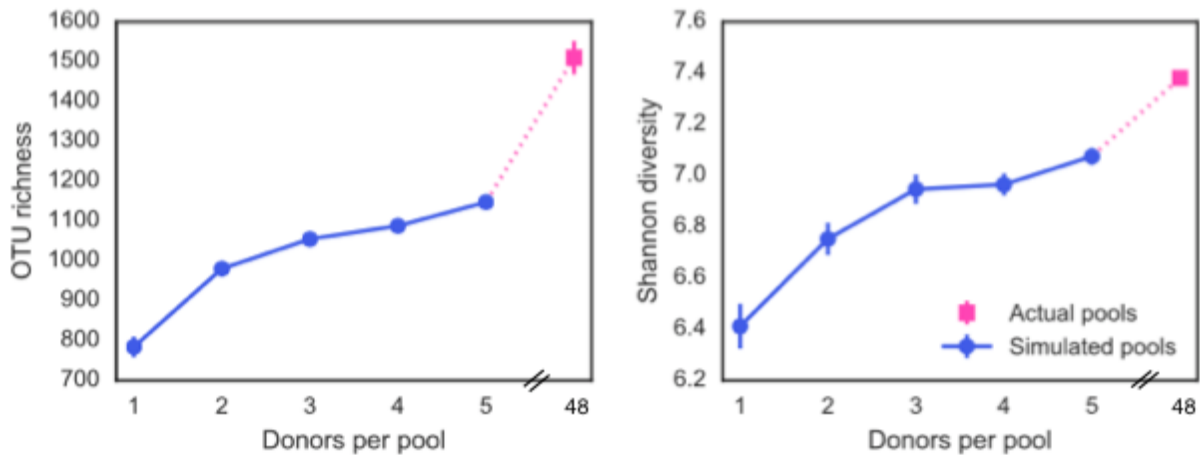


Figure S1. Larger donor pools increase within-FMP diversity. Plots show microbial community diversity, as measured by three separate metrics, of FMP consisting of pooled whole stool bacterial communities. Simulated pooled-donor FMP (blue) and sequenced 12 aliquots of 'poostew' samples (pink). To create the poostew, 49 FMP 250ml samples from 48 donors were homogenized then aliquoted into 1ml tubes. To simulate pooling, x donors were randomly selected and their OTU counts summed for ($1 \leq x \leq 48$). The resulting pooled community was then down-sampled with replacement (cutoff=25,000 counts). Donors with total OTU counts below the cutoff were excluded from analysis ($n=47$ donors). Error bars show s.e.m. calculated from 20 random pools for each pool size. Samples were sequenced by amplifying the V4 region of the 16S rRNA gene followed by Illumina paired end sequencing, and clustered into OTUs using a UPARSE-based pipeline and the greengenes database.

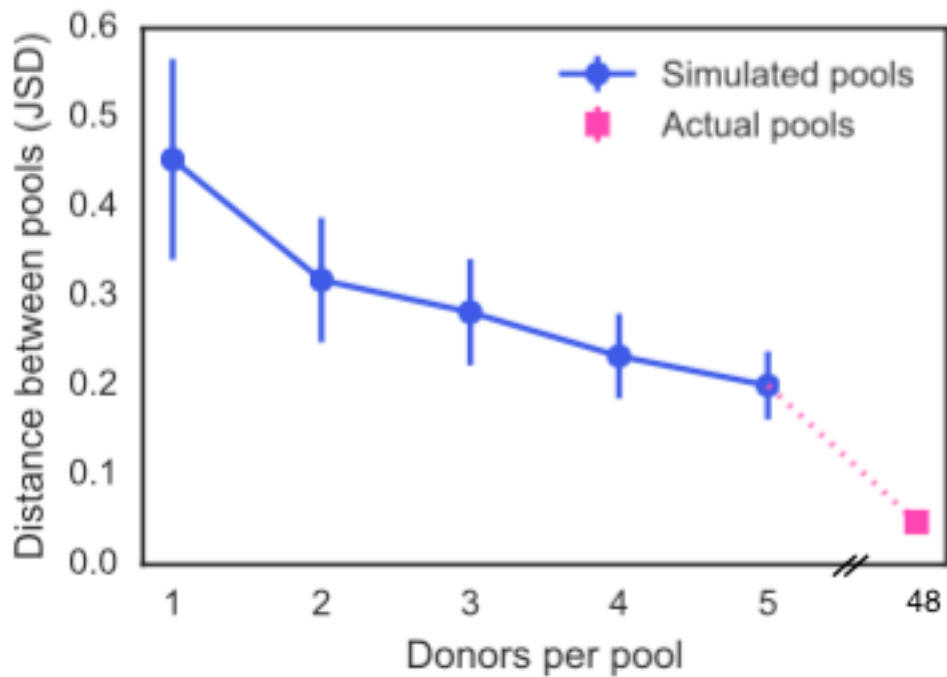


Figure S2. Smaller pools preserve FMP heterogeneity. Plot shows community distance, as measured by the Jensen-Shannon Divergence (JSD), between simulated pooled-donor drugs (blue), and between sequenced aliquots of 'poostew' samples (pink). For each pool size, 20 pooled communities were created as described in Figure 1. Community distance was calculated as the mean JSD between every pair of pools of a given size; error bars show standard deviation.

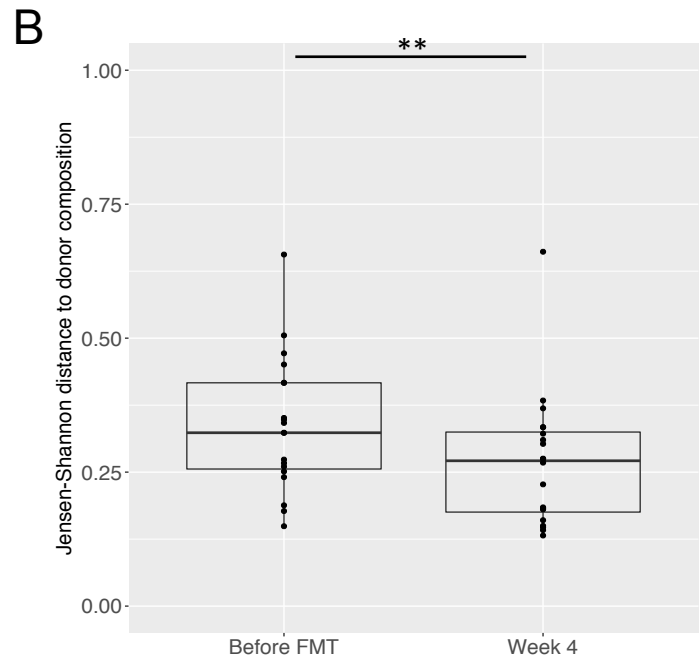
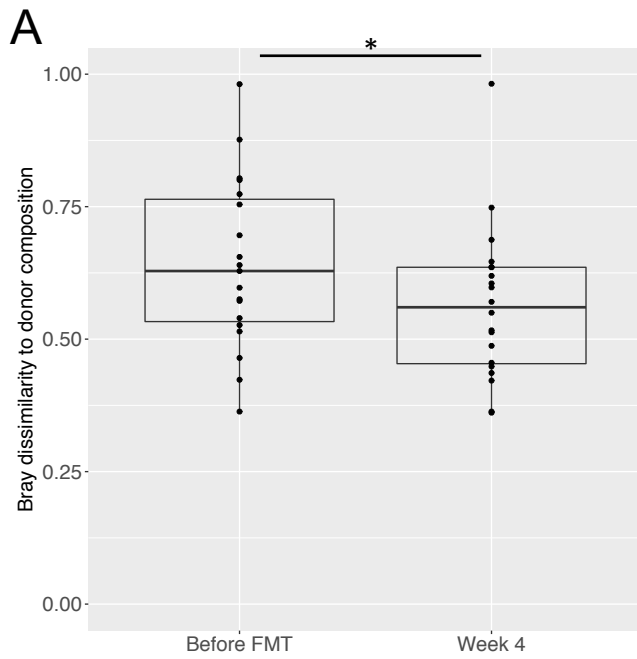


Figure S3. Recipient microbiota 4 weeks post-FMT is more similar to donor. Bray-Curtis (A) and Jensen-Shannon (B) distance to donor is shown for the recipient before FMT and at 4 weeks post-FMT. P-values are indicated, Wilcoxon signed rank.

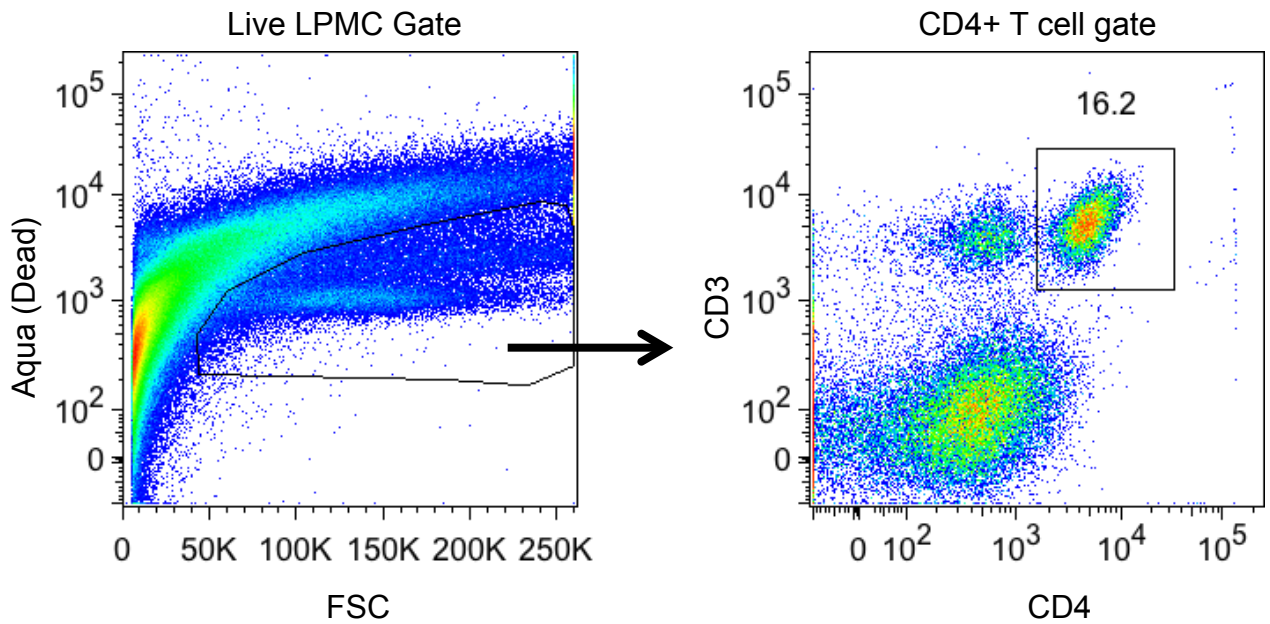


Figure S4. Gating strategy for mucosal CD4⁺ T cells. Endoscopic biopsies were digested and lamina propria mononuclear phagocytes were extracted for flow cytometry analysis. Live cells were electronic gated based on Aqua exclusion and CD4⁺ T cells gated based on surface expression of CD3 and CD4.