

Supplementary Materials

Study of the Adhesion of the Human Gut Microbiota on Electrospun Structures

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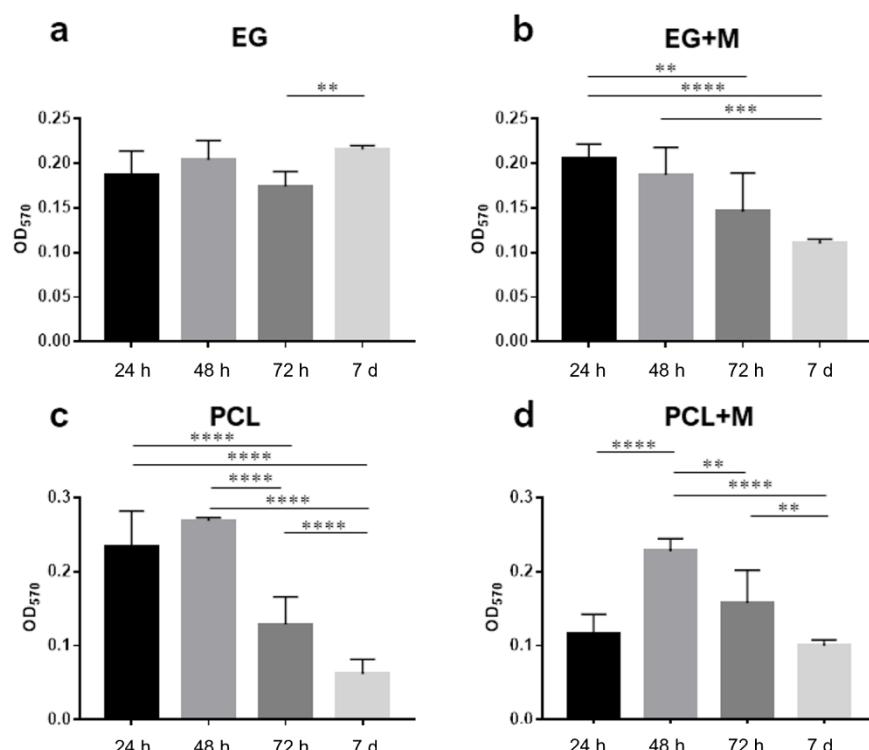


Figure S1. Analysis of the microbial biofilm formation using crystal violet quantification of the fecal microbiota for (a) EG, (b) EG+M, (c) PCL, and (d) PCL+M at different time points (electrospun gelatin structures, EG; electrospun PCL structures, PCL; electrospun gelatin structures with mucins, EG+M; electrospun PCL structures with mucins, PCL+M). * p < 0.05, ** p < 0.01, *** p < 0.001, **** p < 0.0001.

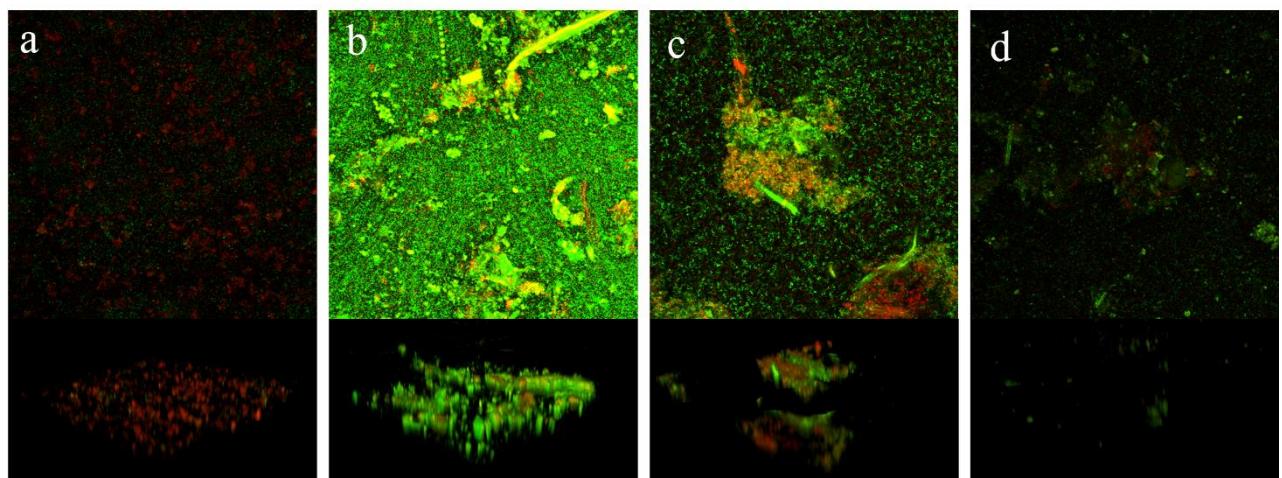


Figure S2. Live (green)/dead (red) imaging of the fecal microbiota cultured on the electrospun structures at 24 hours (z-stack images and 3D reconstruction). (a) Electrospun gelatin structure; (b) electrospun gelatin structure with mucin; (c) electrospun PCL structure; (d) electrospun PCL structure with mucin.

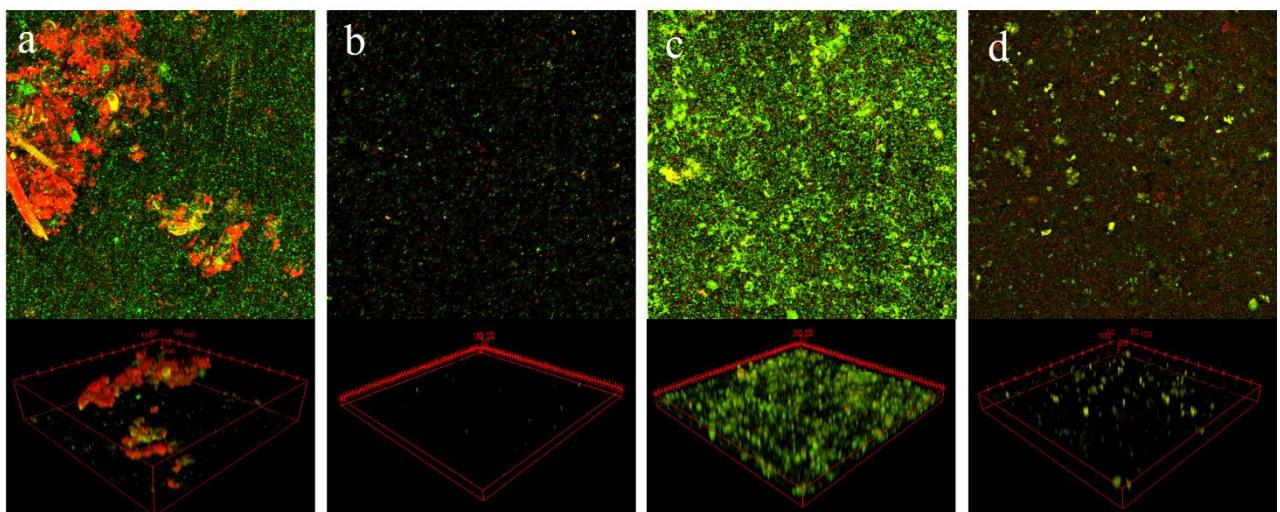


Figure S3. Live (green)/dead (red) imaging of the fecal microbiota cultured on the electrospun structures at 48 hours (z-stack images and 3D reconstruction). (a) Electrospun gelatin structure; (b) electrospun gelatin structure with mucin; (c) electrospun PCL structure; (d) electrospun PCL structure with mucin.

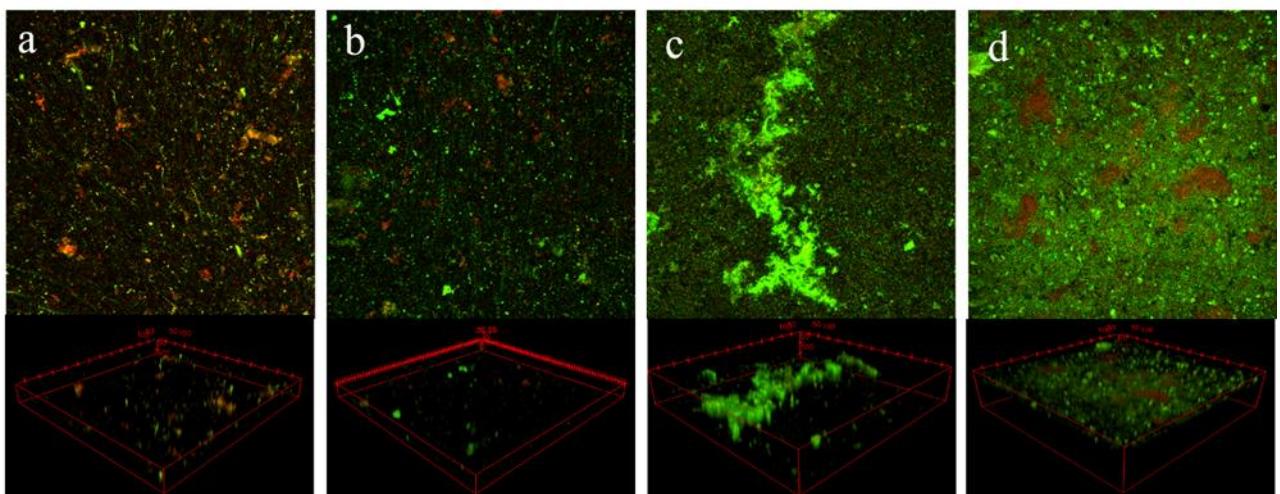


Figure S4. Live (green)/dead (red) imaging of the fecal microbiota cultured on the electrospun structures at 72 hours (z-stack images and 3D reconstruction). (a) Electrospun gelatin structure; (b) electrospun gelatin structure with mucin; (c) electrospun PCL structure; (d) electrospun PCL structure with mucin.

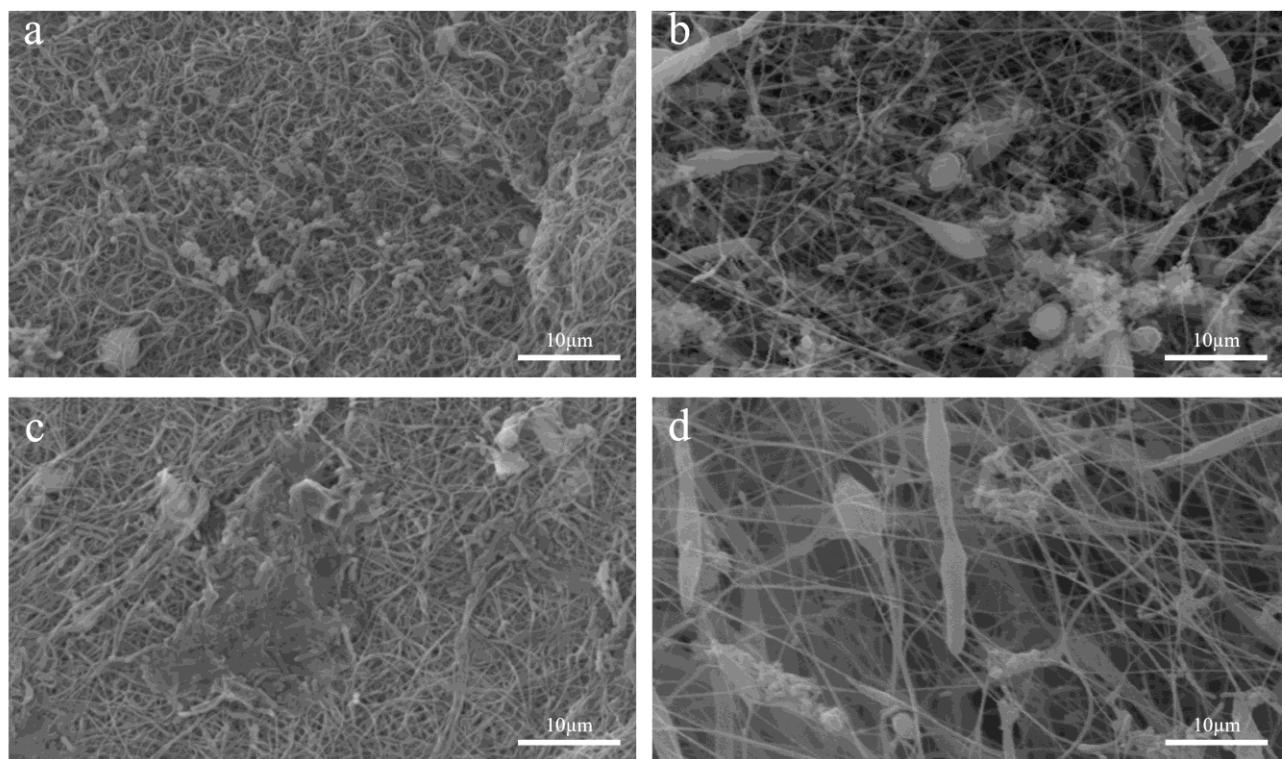


Figure S5. SEM imaging of the fecal microbiota cultured on the electrospun structures at 24 hours.
(a) Electrospun gelatin structure; **(b)** electrospun PCL structure; **(c)** electrospun gelatin structure with mucins; **(d)** electrospun PCL structure with mucins.

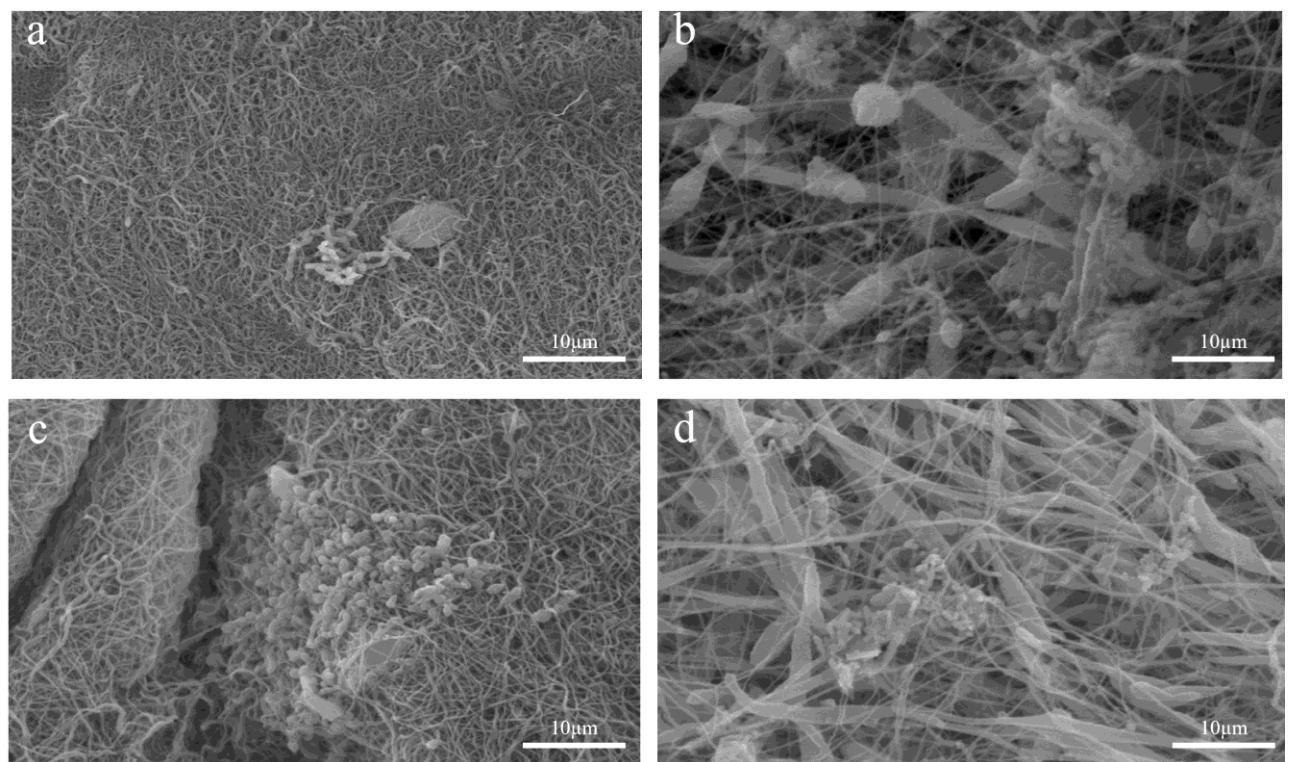


Figure S6. SEM imaging of the fecal microbiota cultured on the electrospun structures at 48 hours.
(a) Electrospun gelatin structure; **(b)** electrospun PCL structure; **(c)** electrospun gelatin structure with mucins; **(d)** electrospun PCL structure with mucins.

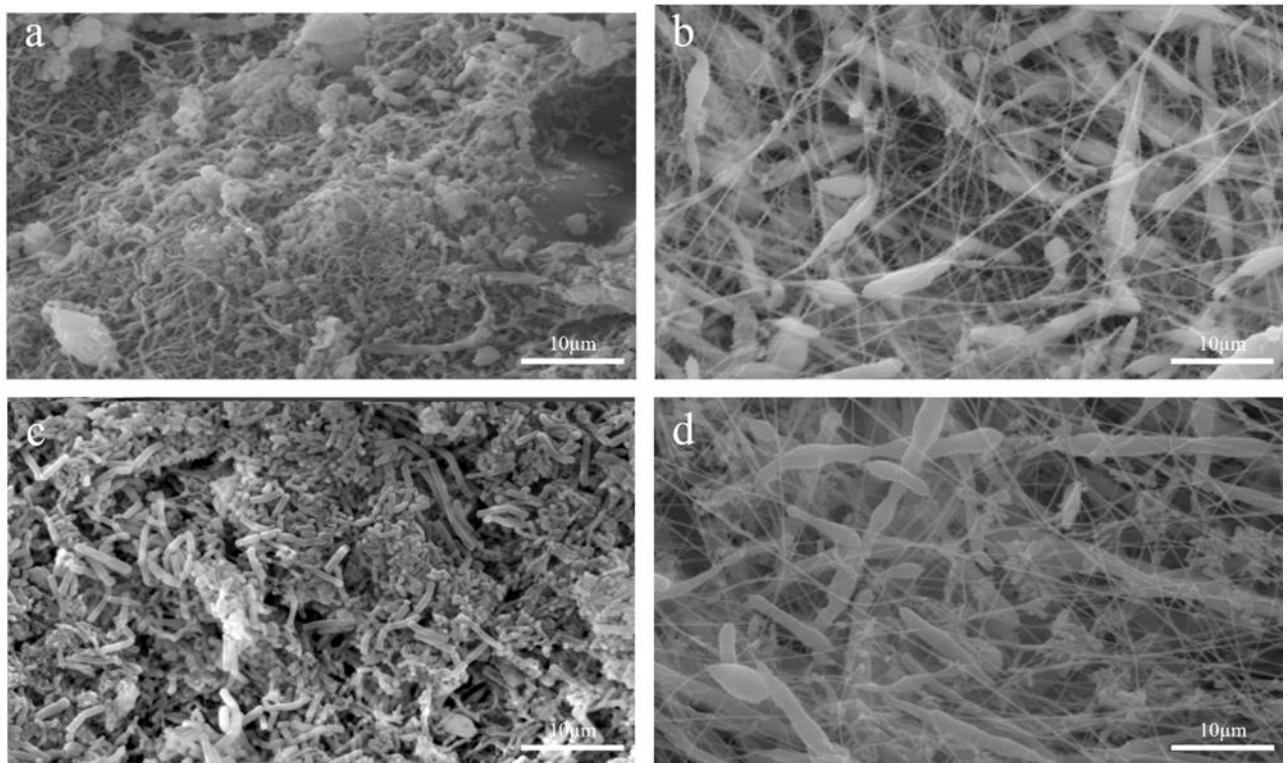


Figure S7. SEM imaging of the fecal microbiota cultured on the electrospun structures at 72 hours.
(a) Electrospun gelatin structure; **(b)** electrospun PCL structure; **(c)** electrospun gelatin structure with mucins; **(d)** electrospun PCL structure with mucins.