



**S3 Fig.** PCoA plot of weighted UniFrac distances generated from mouse cecum content in the control group and *L. casei* 32G groups;  $10^6$  CFU/ mouse (low),  $10^7$  CFU/ mouse (medium) and  $10^8$  CFU/ mouse (high), at 0.5, 3.5, 12, and 24 h after the last administration. Symbols represent data from individual mice, color-coded by the indicated metadata.