

Title:

Sex-specific difference on IL-10^{-/-} mice colitis phenotype and microbiota

Authors:

Maite Casado-Bedmar, Maryline Roy and Emilie Viennois *

Affiliations:

INSERM, U1149, Center of Research on Inflammation, Université de Paris, Paris, 75018, France

***Correspondence:** emilie.viennois@inserm.fr (E.V.)

ORCID iD:

M.C-B. 0000-0003-0569-6361

E.V. 0000-0002-3104-620X

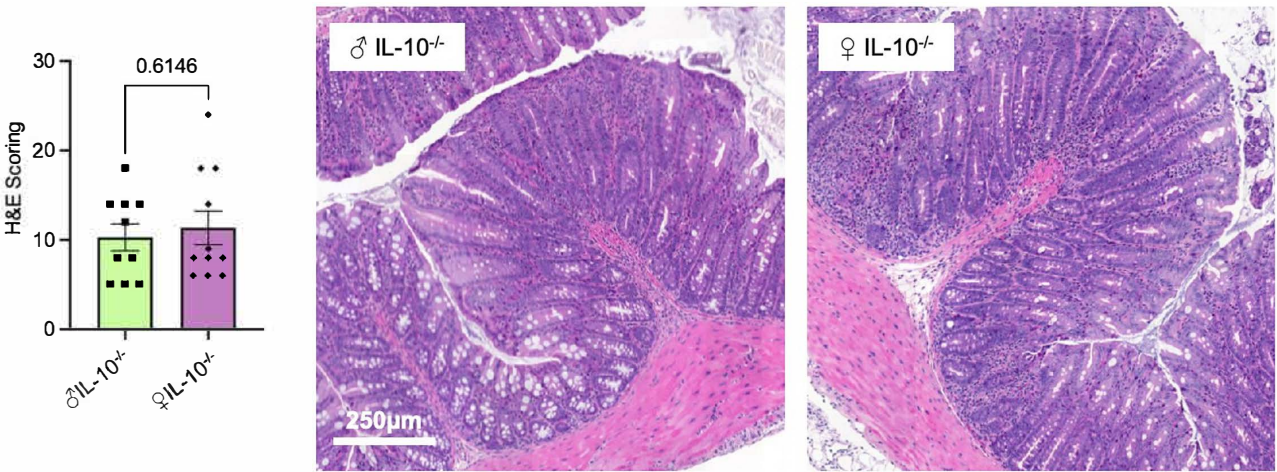
Supplementary Figure S1. Histological analysis of colonic samples of IL-10^{-/-} mice.

Representative images of the histopathological score of H&E stained colonic samples of male (♂) and female (♀) IL-10^{-/-} mice during severe colitis at 17 weeks of age. Scale bar = 250 μm.

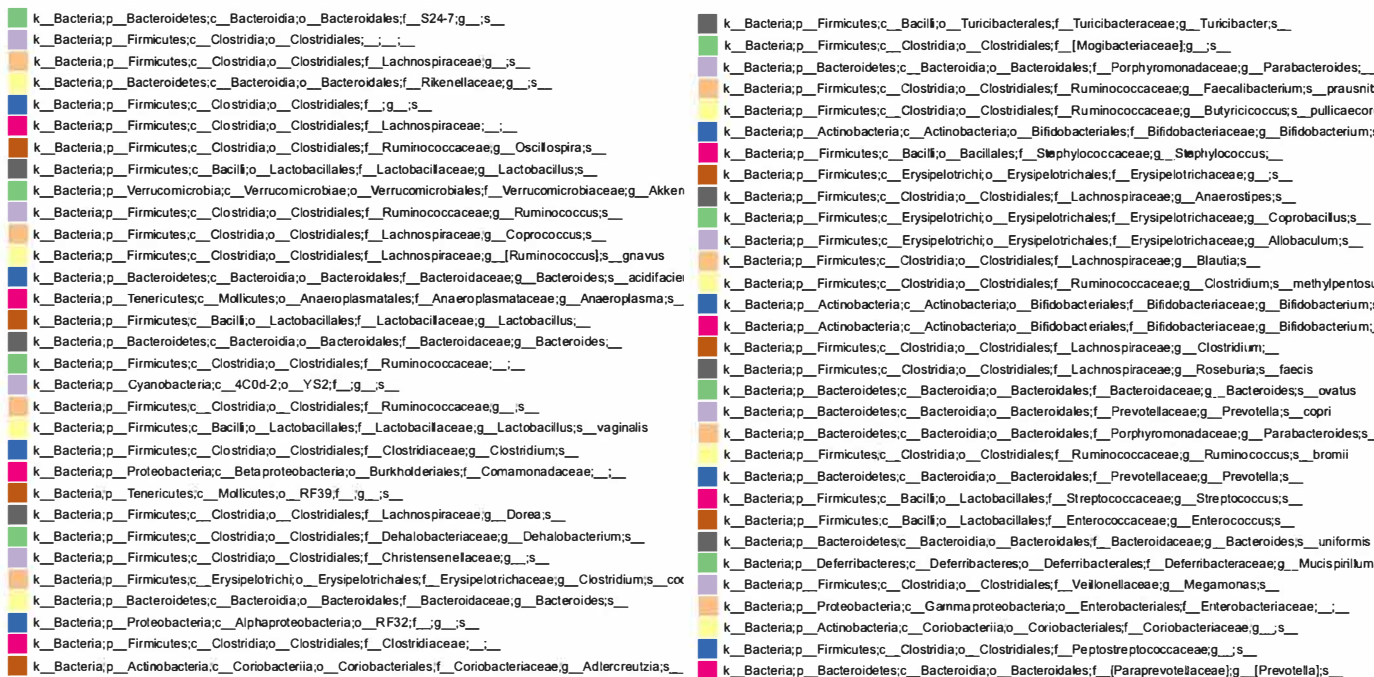
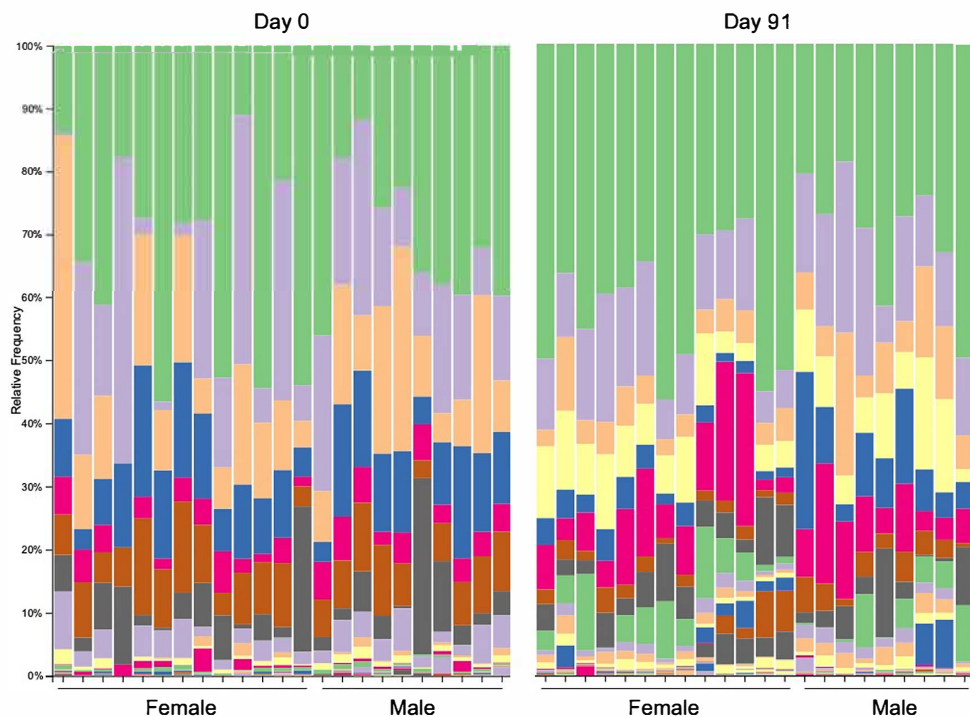
Supplementary Figure S2. Taxonomy showing the dysbiosis associated with colitis in IL-10^{-/-} mice. Taxonomic relative abundance at specie level (level 7) for both females and males before colitis (day 0) and during severe colitis (day 91) from fecal samples of IL-10^{-/-} mice.

Supplementary Figure S3. Correlation matrix summarizing all the most relevant variables tested in IL-10^{-/-} mice after 91 days of follow-up, 17 weeks of age. Analysis performed per sex using the Spearman correlation coefficient R, with R = 1 (positive correlation) and R = -1 (negative correlation) displayed with blue or orange, respectively. W/L: weight/length ratio; W/BW: weight/body weight ratio; LPCN-2: fecal lipocalin-2; MPO: colonic myeloperoxidase; TNF: tumor necrosis factor; IL: interleukin; FLGN: flagellin, LPS: lipopolysaccharides; Akkermansia mun.: fecal *Akkermansia muciniphila* at day 91.

Supplementary Figure S1.



Supplementary Figure S2.



Supplementary Figure S3.

