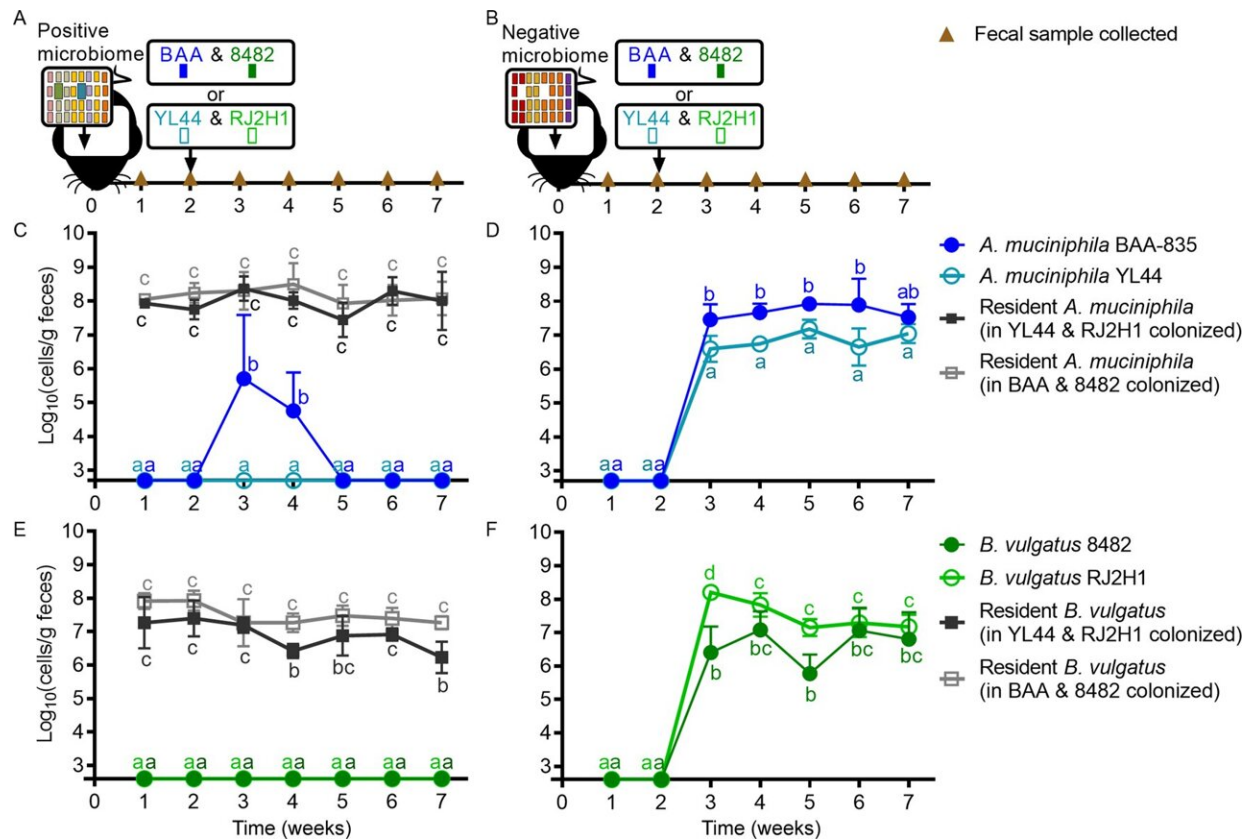


# Ecological principles at play in gut microbiome

August 3 2022, by Scott Schrage



*A. muciniphila* and *B. vulgatus* strains only colonized gnotobiotic mice harboring complex microbiomes devoid of these species. Experimental design to test colonization of strains in mice harboring a microbiome with (positive; A) and without (negative; B) *A. muciniphila* and *B. vulgatus*. Brown triangles represent timepoints for fecal sample collections. Black arrows represent colonization events with microbiomes or *A. muciniphila* and *B. vulgatus* strains. Week 2 fecal samples were collected prior to inoculating with test strains. Abundance of *A. muciniphila* species (gray), strain BAA-835 (dark blue), and strain YL44 (light

blue) in mice harboring either a positive (C) or a negative (D) microbiome. Abundance of *B. vulgatus* species (gray), strain 8482 (dark green), and strain RJ2H1 (light green) in mice harboring either a positive (E) or a negative (F) microbiome. Values are presented as mean  $\pm$  the standard deviation. Time points with different letters are significantly (p

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