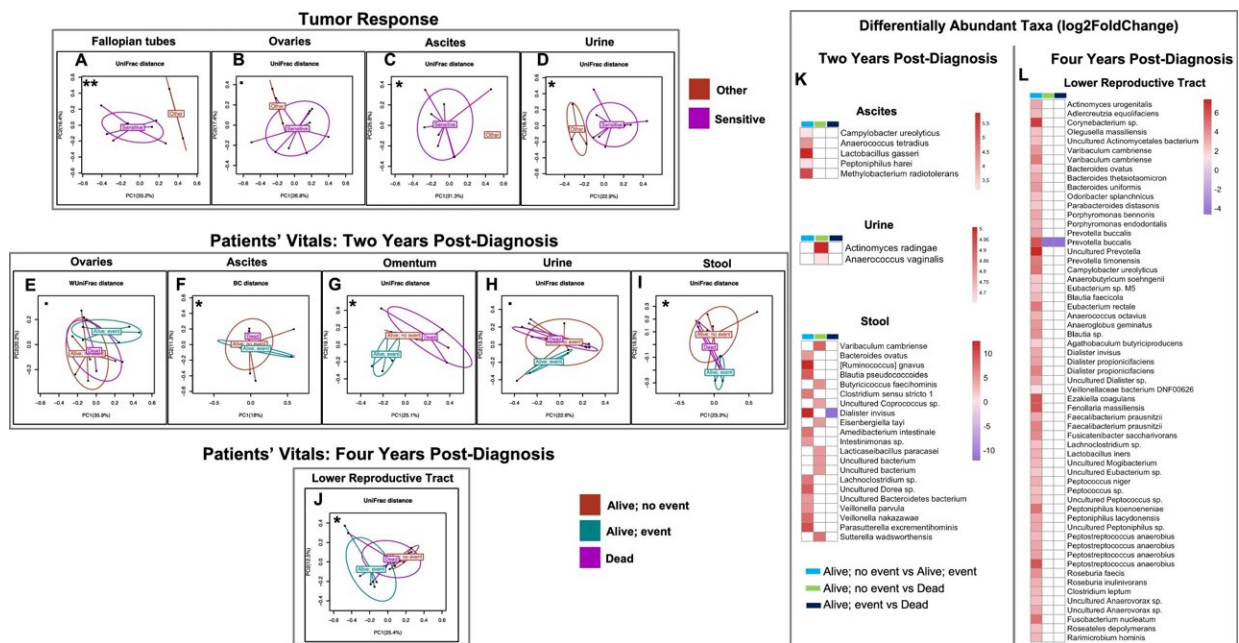


# Researchers link ovarian cancer to bacteria colonization in microbiome

January 17 2023, by Susan Murphy



$\beta$ -diversities measures were compared. For  $\beta$ -diversity, Bray–Curtis (BC), unweighted, and weighted, UniFrac distance metrics were reported. The most significant metric is shown in each ordination plot. (A–D) Bacterial community  $\beta$ -diversity between OC patients with sensitive vs other (resistant/refractory) tumor response. Fallopian tube, (A)  $\beta$ -diversity: sensitive vs other ( $p = 0.003$ ). Ovaries, (B)  $\beta$ -diversity: sensitive vs other ( $p = 0.073$ ). Ascites, (C)  $\beta$ -diversity: sensitive vs other ( $p = 0.021$ ). Urine, (D)  $\beta$ -diversity: sensitive vs other ( $p = 0.015$ ). (E–I) Bacterial community  $\beta$ -diversity among OC patients with different status two years post-diagnosis. Ovaries, (E)  $\beta$ -diversity: Alive, no event vs alive, event ( $p = 0.073$ ), Alive, no event vs dead ( $p = 0.761$ ), Alive, event vs dead. ( $p = 0.437$ ). Ascites, (F)  $\beta$ -diversity: Alive, no event vs alive, event ( $p = 0.573$ ), Alive, no event vs dead ( $p = 0.029$ ), Alive, event vs dead ( $p = 0.250$ ). Omentum,

(G)  $\beta$ -diversity: Alive, no event vs alive, event ( $p = 0.273$ ), Alive, no event vs dead ( $p = 0.350$ ), Alive, event vs dead ( $p = 0.010$ ). Urine, (H)  $\beta$ -diversity: Alive, no event vs alive, event ( $p = 0.088$ ), Alive, no event vs dead ( $p = 0.347$ ), Alive, event vs dead ( $p = 0.356$ ). Stool, (I)  $\beta$ -diversity: Alive, no event vs alive, event ( $p = 0.063$ ), Alive, no event vs dead ( $p = 0.601$ ), Alive, event vs dead ( $p = 0.050$ ). (J) Bacterial community  $\beta$ -diversity among OC patients with different status four years post-diagnosis. Lower reproductive tract (cervix and vagina), (J)  $\beta$ -diversity: Alive, no event vs alive, event ( $p = 0.017$ ), Alive, no event vs dead ( $p = 0.568$ ), Alive, event vs dead ( $p = 0.058$ ). (K–L) Heatmaps showing the effect size ( $\text{Log}_2$  Fold Change) of the differentially abundant microbial taxa. White boxes reflect no fold change at FDR

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