Supplementary figure legends

Supplementary figure S1. Frequency of aneuploidy and tetraploidy for RKO cells increases at 48 hrs following exposure to *E. faecalis* and the increase is attenuated by MnSOD (**$P < 0.01$).

Supplementary figure S2. FACS analysis for DNA in parent HCT116 cells (*left*) and representative clones derived from HCT116 cells following exposure to *E. faecalis*: all clones show diploid histograms (*middle*, clone 1) except clone 5 (*right*) with tetraploidy.

Supplementary figure S3. *A* and *B*, Mitotic index analysis of HCT116 (*A*) and RKO (*B*) cells. Cells were synchronized by double thymidine block and treated with nocodazole (1 μg/ml), *E. faecalis* OG1RF (1×10^9 cfu/ml), and OG1RF with caffeine (2.5 mM). Nocodazole induced a remarkable increase of the proportion for p-H3 (Ser^{10}) positive cells at 24 hrs. This increase, however, was not found in cells exposed to *E. faecalis* at all time points. *C*, Caffeine significantly decreased G2 arrest for HCT116 (*left*) and RKO (*right*) cells at 24 hrs following exposure to *E. faecalis*.

Supplementary figure S4. Laser scanning confocal microscopy of RKO cells exposed to *E. faecalis* at an MOI of 1,000 shows DSBs as γH2AX foci (green nuclei). DNA was counterstained using DAPI (blue nuclei) with images merged (*right panels*). No γH2AX foci were seen in untreated controls (*upper panel*). Two hour treatment with 1 μM of doxorubicin generates numerous γH2AX foci in RKO cells (*lower panel*).

Supplementary figure S5. *E. faecalis* induces aneuploidy, tetraploidy, DNA damage repair response, and G2 arrest in non-transformed YAMC cells. *A*, The proportion of aneuploid and tetraploid cells increase following *E. faecalis* treatment (39.4 ± 1.7, *blue bar*) compared to untreated control (16.4 ± 0.5, *yellow bar*). MnSOD partially protects against aneuploidy and tetraploidy caused by *E. faecalis* (32.3 ± 0.9, *red bar*). *B*, FACS analysis for γH2AX shows that *E. faecalis* induces DSBs in a dose dependent manner for YAMC cells. Red trace: untreated control; black trace: cells exposed to *E. faecalis* at an MOI of 500; green trace: cells exposed to *E. faecalis* at an MOI of 1,000. *C*, MnSOD partially protects against DSB in YAMC cells at 24 hrs after *E. faecalis* treatment. Catalase significantly decreases the proportion of γH2AX-positive cells at 24 hrs and completely eliminates DSBs at 0 hr following exposure to *E. faecalis*. Gray trace: untreated control; red trace: MOI of 1,000; green trace: addition of MnSOD; blue trace: addition of catalase. *D*, *E. faecalis* induces a G2/M cell cycle arrest in YAMC cells. Syn: YAMC cells synchronized by double thymidine block. *E*, Western blots show no change in p-Cdk1 (Tyr^{15}) and a significant increase of cyclin B1 following exposure to *E. faecalis*. *F*, Mitotic index analysis shows a remarkable increase of the proportion for p-H3 (Ser^{10}) positive YAMC cells with nocodazole treatment, but not in cells exposed to *E. faecalis*. *G*, Caffeine significantly decreased G2 arrest for YAMC cells at 24 hrs following exposure to *E. faecalis*.

Supplementary figure S6. Western blots of RKO cells show activation of ATM/ATR DNA damage responses and minimal increase in cyclin B1 at 5 and 24 hrs in co-culture with *E. faecalis*-infected macrophages compared to uninfected controls.

Supplementary figure S7. Laser scanning confocal microscopy shows γH2AX foci (green) in nuclei (blue) of RKO cells treated with supernatants from overnight cultures of *E. faecalis*-infected macrophages at an MOI of 1,000 (*lower panel*). Similar foci were rare for cells treated with supernatants from uninfected macrophages (*upper panel*).