



**Supplementary Figure S1:** Motility and developmental phenotypes of *M. xanthus* strains in which FrzZ was replaced by FrzZ-GFP at the original locus. **A:** Mutants of the Frz pathway. Right panel: wild type (DZ2) expressing untagged FrzZ protein. **B:** Motility mutants. **C:** strains co-expressing FrzZ-GFP and MglA-mCherry or MglB-mCherry, respectively, in a *frzCD<sup>c</sup>* mutant background. Cells were spotted from liquid culture to soft (top) or hard (middle) agar plates, or on fruiting agar (bottom). Shown is the colony edge as documented after 48 h (hard/soft) or 96 h (fruiting) incubation time. Scale bars represent 2 mm for soft and fruiting agar conditions, and 40  $\mu$ m for hard agar.