

Fig. 1. (A) Temporally coordinated events of the Caulobacter cell cycle. Motile, piliated swarmer cells differentiate into stalked cells at the G1-S transition by shedding their polar flagellum, growing a stalk at that site, losing the polar pili, and initiating DNA replication. Circles and "theta" structures in the cells represent quiescent and replicating chromosomes, respectively. CtrA is present in the shaded cells, where it represses DNA replication initiation and is cleared by proteolysis during the swarmer cell-stalked cell (G1-S) transition. Cell division yields distinct progeny, a swarmer cell and a stalked cell. Bars below indicate timing of cell cycle functions (gray indicates a function controlled by CtrA). (B) Clustered expression profiles for