

Success in a Swarm

Rasika M. Harshey, Molecular Biosciences, UT Austin, TX 78712

Flagella propel bacteria during both swimming and swarming, dispersing them widely. However, while swimming bacteria use chemotaxis to find nutrients and avoid toxic environments, swarming bacteria appear to suppress chemotaxis and to use the dynamics of their collective motion to continuously expand and acquire new territory, barrel through lethal chemicals in their path, carry along bacterial and fungal cargo that assists in exploration of new niches, and engage in group warfare for niche dominance. My talk will focus on differences between the two modes of movement.