

## **KEY WORDS AND PHRASES FOR BACTERIAL FLAGELLA CONCEPT MAP**

1. A single flagellum, usually at one pole
2. A rigid, helical structure that extends from the bacterial surface and composed of the protein flagellin
3. A motile response to an environmental stimulus
4. A motile response to light
5. A motile response to oxygen
6. Acts as a rotary molecular motor, enabling the flagellum to rotate and propel the bacterium through the surrounding fluid; powered by proton motive force
7. Bacterial flagellin functions as a pathogen-associated molecular pattern or PAMP that binds to pattern-recognition receptors or PRRs on a variety of defense cells of the body and triggers innate immune defenses.
8. Clockwise rotation pushes the bacterium forward. Every time the bacterium stops, brownian motion and fluid currents cause the bacterium to reorient in a new direction.
9. Clockwise rotation results in a tumbling motion and changes the direction of bacterial movement.
10. Counterclockwise rotation leads to long, straight or curved runs without a change in direction.
11. Flagella over the entire surface
12. If the flagellum is rotating counterclockwise, it pushes the bacterium forward.
13. Internal flagella found only in the spirochetes
14. Motility serves to keep bacteria in an optimum environment via taxis.