MOLECULAR MECHANISM OF *PSEUDOMONAS AERUGINOSA* PATHOGENICITY

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Description:

Pseudomonas aeruginosa is a Gram negative opportunistic pathogen. It is the cause of a multitude of infections such as acute septicemia in immunocompromised patients and chronic pneumonia in cystic fibrosis (CF) patients. *Ps. aeruginosa* also causes frequent infections in patients that have undergone cancer treatment, trauma or burns. The long-term goal of this laboratory is to understand the molecular mechanisms *Ps. aeruginosa* pathogenicity. Hydrogen cyanide is produced by clinical isolates of *Pseudomonas aeruginosa* from cystic fibrosis patients.

Objective:

The goal of this project is the make a deletion of the hydrogen cyanide gene *hcnA* in the laboratory strain of *Pseudomonas aeruginosa* and assay for hydrogen cyanide production from the laboratory strains and clinical isolates of *Pseudomonas aeruginosa*.

Prerequisite:

No experience is required.