OBJECTIVE

**Microtubule Group:** To study the interaction between microtubules and kinesin in a motility assay through the use of fluorescence microscopy.

**Collagen Group:** To study collagen nucleation on muscovite mica through the use of Atomic Force Microscopy (AFM).

**Study of Microtubule Interaction with Kinesin via Microtubule Motility Assay**

**What are microtubules?**
- Provides intracellular structural support
- Serves as highway-like network for cargo transport

**What is kinesin?**
- Molecular motor that travels along microtubules to transport materials around the cell

**Future Research**

**Microtubule Group:** Control spatial organization of microtubules so that in the future, kinesin and microtubules can be utilized as micro-scale mechanical components in bio-integrated devices.

**Collagen Group:** Expand our knowledge and data on collagen nucleation and growth by in vitro methods in hopes that collagen formation may be done for a controlled and specified purpose in the future. Find various factor affecting nucleation and growth of heterotypic collagen fibrils, to understand their assembly and organization in the human body.

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