



The Office of Research for Medical Students

Research Project

Project Title:

Isoform specific roles of a Pol I & III subunit in germline stem cell identity and development

Date of request: 5/15/2025

Contact Information

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Research Project

Project 1: Determine how a Pol I & III subunit contributes to germline stem cell viability and function.

Project 2: Uncover the regulatory mechanisms governing subunit isoform expression in the germline

Project 3: Determine the tissues in which different subunit isoforms are expressed and what their function there is.

Research Location: WSK HALL

Tele-research/remote opportunity? No

Will it require student to be physically present in the research location: Yes

Type of research: Basic

Summer project? Yes

Long-term project: Yes

Availability required to work on your project(s):

Weekdays, occasional weekends

Prior experience or specific skills required to work on your project(s):

- Experience with *Drosophila melanogaster* (or other invertebrate models) preferred but not essential.
- Experience with molecular biology (nucleic acid and protein extraction, PCR, RT-qPCR, SDS-PAGE/Western Blot, cloning) and cell biology techniques (immunostaining, single-molecule fluorescence *in situ* hybridization) strongly desired.