

Sperm Cryopreservation

Core Responsibilities

The core will freeze sperm from two male mice (~3-6 months of age) using the sperm cryopreservation protocol developed at the Jackson Laboratory. Twenty straws of sperm will be frozen per strain. We will perform *in vitro* fertilization with sperm thawed from one straw to determine the viability of the sperm. ***Due to the variability in fertility and sperm quality between mouse lines/strains, the core does not guarantee sperm yield and/or viability.*** Once the cryopreservation has been shown to be successful, the core will notify the investigator that it is safe to remove the line from the shelf. The investigator will receive a Cryopreservation Inventory form indicating the number of straws frozen and their location.

Investigator Responsibilities

- Fill out a Sperm Cryopreservation request form and consult with Andrei Golovko about either doing this in the investigator's room or importing mice into the TIGM quarantine.
- Contact the core to schedule a cryopreservation date.
- Supply the core with 2 proven males that are 3-6 months of age.

Timeline

Day 1: Sperm collection and cryopreservation

Week 1-2: TIGM schedules and performs QC analysis and reports IVF results to the investigator.