Description of Active Research and Development Contract

Title: Sperm count Vaginal Cytology Evaluations (SCVCE)

Contract Number: HHSN291200665557 (NIH-ES-65557)

Summary of Objectives:

1. To evaluate testicular and sperm tissues from the NTP's 90-day toxicology laboratories by homogenization of frozen testes and enumeration of the numbers of homogenization-resistant spermatid nuclei per testis and per gram testis.

- 2. To evaluate the vaginal cytology slides sent from the NTP's 90-day toxicology laboratories by determining the estrous stages present from the 16-day vaginal washes from each female, and determining the numbers of females in each group that are cycling, acyclic, and/or with irregular cycles; the proportion of time spent in each stage of the cycle; the proportion of slides not clear (and therefore not readable), the length of the estrous cycle in days per cycling female; and the mean (+/-SE) length of the estrous cycle per group.
- 3. To provide technical assistance/training for personnel at the NTP-designated laboratories, as requested by the Project Officer, to include procedures/topics such as optimal methods of assessing sperm motility and velocity by computer-assisted semen analysis (CASA), and optimization of methods for preparing vaginal cytology slides. This effort may entail up to three trips per year and up to three days per trip.