

## Rodent Research Technician III

### 1.0 JOB SUMMARY

The Research Technician III (“RT III”) will have a solid understanding of each individual’s roles and responsibilities within the company and within research studies. The RT III will have a clear understanding of and be able to perform a majority of the procedures at TPC within the Rodent Department. The RT III will demonstrate a clear understanding of the complexities of a research trial and be able to efficiently follow study protocols, with continued guidance from the Study Director/Coordinator. The RTIII will have the capabilities of performing, assisting and training on most assigned rodent facility and technical tasks.

Supervisory duties may apply to this role at the discretion of the Rodent Manager. The Supervisor will assist the Rodent Department Manager with rodent-specific facility operations, supervision and training of assigned Research Technicians and oversee scheduling of personnel within the Rodent Department on study procedures.

### 2.0 DUTIES AND RESPONSIBILITIES

#### 2.1 KEY ACTIVITIES

RTIII related:

- Assist and perform assigned *in vivo* study procedures in the Rodent Department.
- Record and documenting experimental details with a high level of integrity, ethics and accuracy.
- Assist in the preparation of data summary reports, study related data entry, Quality Control.
- Excellent time management with proactive ability to recognize inefficiencies or potential challenges
- Develop and revise relevant SOPs as requested.
- Perform study-related husbandry duties to ensure proper animal care practices are adhered to and are according to CCAC guidelines and facility SOPs.
- Work within a team to ensure that projects are successfully conducted and completed to a high level of quality and scientific competence.
- Support/lead in the maintenance of an adequate inventory of supplies.
- Assist the Rodent Department Manager in the maintenance and operation of animal facility and husbandry in accordance with CCAC guidelines and Animals for Research Act.
- Collaborate study needs with Study Coordinators

- Participate in internal working groups (eg. animal care committee, health and safety, etc).
- Explain processes and techniques to new employees and visitors.
- Other duties as assigned

Supervisory Related:

- Carry out performance management (PMR) of assigned research technicians
- Lead matters pertaining to human resources including performance reviews (PMR), corrective actions, accident reports, etc
- Ensure research technician training is scheduled, completed and kept up to date
- Recognize when re-training is due and plan for efficient scheduling of re-training with little to no interruption to department objectives
- Support and collaborate scheduling of research technicians for operational and study tasks, together with Rodent Department Manager and Study Coordinators, in order to carry out most efficient completion of daily expectations

## 2.2 DUTIES ASSOCIATED WITH THE RODENT DEPARTMENT

- General techniques:
  - Operate centrifuges and perform advanced blood separation
  - Drug administrations (SC, IM, IP, IV, oral, interdermal, etc.)
  - Survival blood collection (saphenous, tail snip, submandibular, catheter, etc.)
  - Terminal blood collection, CSF sampling, tissue/organ extraction and weighing
  - Anaesthesia/Analgesia
  - Euthanasia
  - Restrain animals for procedures as needed
  - Training
- Surgeries:  
Perform (or be able to easily train on) surgical procedures in rodents from start to end independently, including but not limited to:
  - SNI Surgery
  - Incision Surgery
  - Amygdala Electrode Implantation
  - Parathyroid Lesion Surgery
  - Wound Healing Surgery
  - Mass Removal Surgery
  - Gastrointestinal Surgical Models (ie. GI catheterization, Bile Duct/Gallbladder catheterization, etc)
  - Vascular catheterization (ie. Jugular, Carotid, Femoral, Portal, etc)

- CNS Surgical models (ie. ICV, EEG, Intrathecal dose administration, serial CSF collection via catheterization, etc)
- Seizure Testing:  
Perform seizure testing from start to end independently, including but not limited to:
  - MES
  - 6Hz
  - Corneal Kindling
  - Amygdala Kindling
- Pain Testing:  
Perform pain testing from start to end independently, including but not limited to:
  - Von Frey
  - Acetone drop
  - Tail flick
  - Formalin
- Behavioral testing:
  - Prepare rooms for testing
  - Ability to operate test apparatus for behavioral and cognitive testing (LMA, rotarod, grip strength, core body temperature, watermaze, EPT, etc.)
  - Daily observations (health observations for safety studies)
- Operant testing:
  - Independently perform operant testing and training in rodents
  - Independently perform operant testing and training with staff
  - Collaborate with colleagues to diagnose and repair box mechanical issues
- Data Management:
  - Ability to create basic graphs from experimental results
  - Understand basic data analysis (means, standard error, median, interquartile)
- Train staff on various procedures as appropriate
- Proficient in mathematical manipulations in order to support QC process of test article and formulation preparation
- Any other duties as deemed necessary

### 2.3 INTERACTION

This position requires coordination of resources (i.e. staff, equipment, space) with other Research Technicians, Animal Care Technicians, Study Coordinators and Scientific

Directors. It also requires the ability to learn new skills and procedures as well as teach skills efficiently.

#### **2.4 COMMUNICATION**

Communications are with the Rodent Department Manager, Study Coordinators and other facility staff and employees within the organization. Collaboration, execution, and reporting of the quality assurance program. Verbal communication is required to request and receive instructions for work, to report on activities, results, problems, and to participate in planning and scheduling of work and equipment use. Written communication is required for accurate and detailed recording of procedures, for reporting results and for completing documentation. Reading and comprehension of written protocols and manuals is essential.

### **3.0 WORKING CONDITIONS**

#### **3.1 ENVIRONMENT**

Generally working indoors. Occasional periods of several hours per day exposed to noxious odours from diagnostic materials and/or samples. There will also be the occasional need to work with chemicals in a controlled environment.

#### **3.2 RISK TO HEALTH**

There will be the occasional exposure to small quantities of toxic irritant or corrosive chemicals as well as exposure to freezers (-80C) and liquid nitrogen (-200C) while storing, retrieving, shipping, and receiving materials. There will be exposure to zoonotic diseases. There will also be repetitive physical activities.

### **4.0 PHYSICAL REQUIREMENTS**

#### **4.1 PHYSICAL DEMANDS**

The demands of this position include: standing, bending, twisting, lifting, carrying liquid containers, carrying boxes weighing up to 20 kg and daily periods of keyboarding.

#### **4.2 PHYSICAL DEXTERITY**

Agility, accuracy and consistency will be required while handling precision instruments such as, pipettes, balances, pH meters, surgical instruments. Strong fine motor skills in fingers, hands, and arms required.

### **5.0 QUALIFICATIONS**

#### **5.1 EDUCATION**

- Veterinary diploma or B.Sc. degree in a relevant field (e.g., Pharmacology, Pharmacokinetics, Veterinary Sciences, Biochemistry) with at least 5 years of direct experience
- RLAT (Registered Laboratory Animal Technician) and asset and encouraged once in role

## **5.2 EXPERIENCE**

- Experience as a Research Technician II for at least 1 year or equivalent experience
- Experience in rodent dose administration, specimen collection, euthanasia and aseptic surgery
- Experience within a laboratory environment
- Experience handling confidential laboratory and scientific data
- Experience executing administrative strategies
- Experience handling controlled substances
- Experience compounding drugs and mathematical manipulation
- Proven organizational skills and attention to details
- Demonstrated ability to communicate effectively orally and in writing

## **5.3 KNOWLEDGE**

- Knowledge of the basic principles of biology, immunology and chemistry
- Knowledge of the principles of safe handling of potentially pathogenic substances and contaminated materials
- Knowledge of CCAC and OMAFRA regulations
- Familiar with the following acts and regulations: ISO Guide 17025 (1990) and GLP (both Code of Federal Regulations and OECD guidelines).
- Knowledge of occupational health and safety practices
- Knowledge of the basic principles of scientific research
- Knowledge and understanding of TPC's Standard Operating Procedures
- Knowledge of computers, including word processing, spreadsheets and databases