

JOB DESCRIPTION

Position: Veterinary Technician – Humanized Immune System Mouse Program
Job code/grade:
Supervisor: Vladimir Vrbanac, DVM

GENERAL SUMMARY/ OVERVIEW STATEMENT: Summarize the nature and level of work performed.

Despite several decades of focused efforts, an ideal animal model in which to study HIV infection and basic immunology, as well as immuno-oncology remains elusive. Mouse models have been extremely useful in investigations of many areas of immunology and infectious diseases, but the ability of mice to provide a model of HIV infection has been limited. Our core program has developed an improved humanized mouse model of HIV infection, which will make possible for the first time many important and exciting studies of immunology and HIV biology *in vivo* as well as expanding the knowledge of immunology, in general. We will be using this model in investigations of HIV pathogenesis, basic immunological biology experiments and human immune system mouse model development.

Applicant will be working closely with the Program Director Dr. Vladimir Vrbanac. The individual hired will be involved in the daily operations of this new Humanized Immune System Mouse Model Program. She or he will have some administrative responsibilities but will predominantly have technical responsibilities for surgical generation the humanized mice, performing experiments using them and being involved in the bench related experiments.

PRINCIPAL DUTIES AND RESPONSIBILITIES: Indicate key areas of responsibility, major job duties, special projects and key objectives for this position. These items should be evaluated throughout the year and included in the written annual evaluation.

Technical responsibilities will include:

1. Generation of humanized mice for various experimental projects supported by the program.
2. Fluorescence-based flow cytometry of peripheral blood leukocytes of these humanized mice to characterize their human immune reconstitution prior to use in experiments.
3. Contributing ideas and suggestions for improvements in existing experimental protocols and techniques and participating in the development and investigation of new procedures, assays, and/or instrumentation.
4. Participating in the preparation of data from our studies for presentation and publication.
5. Helping in the bench related part of the experiments – PCR, cell culture, etc...
6. Surveying animal's clinical condition

Administrative responsibilities will include:

1. Computerized record keeping for the humanized mice generated and used for various experimental projects supported by the program.
2. Ordering mice and supplies required for the programs operations, and record keeping of mouse and supply inventories and expenses.

QUALIFICATIONS: (MUST be realistic, neither overstated nor understated, and related to the essential functions of the job.)

B.S or B.A in Biology, with a focus on Microbiology, Immunology, Molecular Biology, or Animal Biology, or equivalent coursework required.

Perfect candidate would be a person who has ambition to go to Veterinary school or continue career in the research lab and would like to acquire surgical and bench skills.

Administrative responsibilities will require knowledge of Microsoft Excel and Word applications. For the technical responsibilities, familiarity with small animal work, cellular biology laboratory techniques and flow cytometry will be extremely helpful, but training in these and other techniques will be provided, including procedures for the safe handling of HIV and HIV-infected mice.

SKILLS/ ABILITIES/ COMPETENCIES REQUIRED: (MUST be realistic, neither overstated nor understated, and related to the essential functions of the job.)

1. Excellent laboratory procedure skills. Manual dexterity skills for surgical part would be helpful, but training will be provided.
2. Excellent oral and written skills.
3. Ability to work in both independently and in team-effort situations.
4. Demonstrated organizational skills.
5. Dependability and excellent work habits.
6. Excellent personal computer and database skills.

WORKING CONDITIONS: Describe the conditions in which the work is performed.

Work will be performed in the laboratory space of the Ragon Institute, 400 Technology Sq, Cambridge, MA. There will be extensive work with mice, which will involve exposure, despite cutting edge animal facility, to mouse dander, wastes, bodily fluids and dust in working with the humanized mice. Position will include work with HIV-infected mice, for which training for safe handling will be provided.

SUPERVISORY RESPONSIBILITY: List the number of FTEs supervised.

None.

FISCAL RESPONSIBILITY: Indicate financial "scope" information, i.e.: size of budget, volume, revenue, etc.

(NAME)

Department Mgr. Vladimir Vrbanc _____ Title: __Program Director__ Date:

(NAME)

Veterinary technician

Title: Surgery assistant Date:

The above is intended to describe the general contents and requirements of work being performed by people assigned to this classification. It is not intended to be construed as an exhaustive statement of all duties, responsibilities or skills of personnel so classified.