

RESEARCH TECHICIAN

Schematic Code 12501 (30005042)

I. DESCRIPTION OF WORK

Positions in this banded class support experimental processes in a laboratory, clinic, field and /or teaching environment (hereafter referred to as "laboratory"). Work requires knowledge of applicable laboratory procedures, tests, techniques and terminology. The range of duties includes, but is not limited to: conducting experiments, collecting and summarizing data, and providing proper laboratory/study subject care. Employees at the journey and advanced levels may serve as a lead worker.

II. ROLE DESCRIPTIONS BY COMPETENCY LEVEL

Contributing	Journey	Advanced
<p>Positions at this level perform a variety of routine tasks in preparing and maintaining the research subjects and the research environment. They maintain routine recordkeeping and are responsible for observing conditions and changes, if any, in the research subject(s) and/or research environment. Work is performed under close supervision of research specialists or the primary investigator of the research project.</p>	<p>Positions at this level perform standardized procedures and techniques as outlined in detail by the research protocol. They perform skilled work in assigned area of research. Positions observe and record results and variations in behaviors and/or conditions of research subjects. Positions may require specific knowledge to prepare and care for the research subjects and the research environment. Positions may be responsible for general maintenance and/or design and construction of equipment and the research environment. Positions at this level may assign and review the work of others. Positions may function as lead worker.</p>	<p>Positions at this level conduct experiments using standardized physical, chemical, or biological tests as defined in the research protocols. Positions assist in planning methods, altering the physical aspects of the research laboratory and applying appropriate techniques and procedures. Positions at this level perform a variety of specialized techniques and/or procedures. Positions at this level may assign and review work of others. Positions may function as lead worker.</p>

III. COMPETENCIES

Competency	Definition
Knowledge - Technical	Knowledge in a specific technical area(s) and ability to stay current with developments and trends in areas of expertise. Technical knowledge of standardized or specialized procedures and the ability to safely operate instruments and equipment.
Operations - Research Support	Ability to follow instructions through a standard work process; ability to perform routine or repetitious tasks; ability to check work for accuracy before completion of tasks. Ability to support scientific research by assisting in experiments, procedures, and/or tests; ability to perform work that requires mental concentration, visual attention and extensive manipulative skills to comply with research protocol.
Data Collection	Ability to observe, monitor, collect, and record data in order to assess accuracy, validity and integrity of data.
Laboratory/Subject Care	Ability to provide care for study subject (i.e. patient, animal, crop) within research protocol, including maintaining optimal conditions to prevent disease and contamination; ability to work with study subjects in an ethical manner.

Definitions:

Test – A procedure in which the outcome is measured under various conditions.

Procedure – A sequence of actions that collectively accomplishes some desired task.

Experiment –The test of an hypothesis under controlled conditions.

Note: Not all competencies apply to every position/employee; evaluate only those that apply. Competency statements are progressive.

IV. COMPETENCY STATEMENTS BY LEVEL

Knowledge – Technical

Knowledge in a specific technical area(s) and ability to stay current with developments and trends in areas of expertise. Technical knowledge of standardized or specialized procedures and the ability to safely operate instruments and equipment.

Contributing	Journey	Advanced
<p>Basic knowledge, skill and general understanding to perform standard duties related to the research.</p> <p>Knowledge and skills to use instrumentation and equipment.</p>	<p>General knowledge of applicable area of science to perform laboratory procedures and tests in support of research protocol.</p> <p>Knowledge and skills to adjust and calibrate instrumentation and equipment as needed with limited supervision.</p>	<p>Specific knowledge in area of science related to the research project(s) essential to perform a variety of procedures.</p> <p>Knowledge and ability to independently operate instrumentation, equipment and/or software used for research objectives.</p>

Definitions:

Basic – Fundamental

General – Common or usual; not specific

Specific – Precise, definite; of a special or particular sort

Operations - Research Support

Ability to follow instructions through a standard work process; ability to perform routine or repetitious tasks; ability to check work for accuracy before completion of tasks. Ability to support scientific research by assisting in experiments, procedures, and/or tests; ability to perform work that requires mental concentration, visual attention and extensive manipulative skills to comply with research protocol.

Contributing	Journey	Advanced
<p>Ability to prepare standard media, reagents, and chemical solutions used for testing purposes, and the physical processing of specimens prior to testing.</p> <p>Ability to observe, measure and prepare subjects (patients, animals or crops) and test variables as specified in the research protocol.</p>	<p>Ability to conduct routine tests and procedures dictated by the research protocol. For example, ability to prepare tissue samples for immunochemical analyses, make pregnancy checks, assist in calving or farrowing, inoculate animals, select pairs for routine breeding, and perform euthanasia.</p> <p>Ability to assist in the layout and maintenance of subject environment. For example, field plots, subject housing arrangements and benchwork</p> <p>Ability to mix and/or apply chemicals and/or other materials.</p>	<p>Ability to perform and/or assist in specialized research procedures, tests, minor animal surgery and/or agricultural practices. For example, ability to perform molecular and biochemical procedures, protein purification, in vitro enzyme analyses, artificial insemination procedures, and care of gnotobiotic animals.</p> <p>Ability to independently prepare and maintain the layout of subject environment.</p> <p>Ability to calculate appropriate quantities of chemical(s) to ensure they are properly mixed and applied.</p>

Data Collection

Ability to observe, monitor, collect, and record data in order to assess accuracy, validity and integrity of data.

Contributing	Journey	Advanced
<p>Ability to observe, collect and record a variety of data.</p>	<p>Ability to organize and tabulate data; ability to ensure quality control of data collection.</p>	<p>Ability to identify and report variations or discrepancies in the data; ability to organize and prepare data for analyses.</p> <p>Ability to provide preliminary summary of experiments, procedures and tests.</p>

Laboratory/Subject Care

Ability to provide care for study subject (i.e. patient, animal, crop) within research protocol, including maintaining optimal conditions to prevent disease and contamination; ability to work with study subjects in an ethical manner.

Contributing	Journey	Advanced
<p>Ability to provide routine care, maintenance and/or animal husbandry.</p> <p>Ability to prepare study subject for experimental procedures.</p> <p>Ability to apply and maintain sanitation and safety procedures.</p>	<p>Ability to administer routine medications and prepare experimental and maintenance diets for research subjects according to established protocols and instructions; ability to observe study subject reactions.</p> <p>Ability to perform minor repairs and operate equipment and instruments in support of research laboratory, field, or clinical programs with limited supervision.</p> <p>Ability to maintain inventory of equipment, supplies, and related research materials.</p>	<p>Ability to administer specialized medications or chemical treatments according to established protocols; ability to monitor and report study subject reactions.</p> <p>Ability to ensure compliance with sanitation and safety procedures by others.</p> <p>Ability to independently perform minor repairs and operates equipment and instruments in support of research laboratory, field, or clinical programs.</p> <p>Ability to identify, track and report variations or discrepancies in inventory used in laboratory; may require ability to distribute supplies.</p> <p>Ability to coordinate tests, procedures and experiments with ancillary units.</p>

V. MINIMUM TRAINING & EXPERIENCE

Demonstrated possession of the competencies necessary to perform the work.

Optional Guidelines:

Journey: High school and one year of directly related experience required to perform the assigned duties.

Advanced: High school and two years of directly related experience required to perform the assigned duties.

Note: This is a generalized representation of positions in this class and is not intended to identify essential work functions per ADA. Examples of competencies are primarily those of the majority of positions in this class, but may not be applicable to all positions.