

## DRAFT – December 21, 2017

### RESEARCH JOB FAMILY – RESEARCH TECHNICIAN

**JOB FAMILY CONCEPT:** The Research job family is responsible for all aspects of research related activities by facilitating the dissemination of information through the discovery of new knowledge, techniques, and concepts. The Research job family designs, implements, conducts, interprets research, and performs statistical analysis of data using theoretical, applied, clinical, and translational methods. Research roles serve to perform all aspects of research including but not limited to clinical, operational and technical support, safety, compliance, data collection, lab management, literature review, grant writing and submission, protocol design, writing for publication and dissemination, mentoring students, and design and fabrication of equipment used in research experimentation.

#### **RESEARCH TECHNICIAN**

The Research Technician role provides direct technical and non-technical support to researchers by performing a variety of tasks including but not limited to maintaining and operating research equipment; collecting specimens and samples; gathering and recording data; and analyzing and reporting data. The Research Technician role supports researchers and assists with experiments or procedures in a field, greenhouse, farm, shop, social or laboratory setting.

The **Research Technician** role is distinguished from the **Researcher** role in that it is responsible for performing technical research related tasks in support of research projects under the direction of researchers, management or faculty.

The **Research Technician** is distinguished from the **Laboratory** job family in that it is responsible for research support, which may be performed in a laboratory setting, and they may perform laboratory tests but not as the primary function of the job.

#### **RESEARCH TECHNICIAN 1**

##### Typical Functions

Supports research function under close supervision by performing basic tasks in the operation and maintenance of research instrumentation and equipment. Cleans and maintains field, greenhouse and/or laboratory research equipment and instruments. Performs structured care and feeding to animals, plants and crops. Mixes and applies basic agents. Maintains logs. Observes conditions and identifies and reports concerns or changes to senior personnel. Carries out simple tests, measurements, and records data. Maintains inventories and requisitions supplies for assigned areas. Assist with research work including labeling, planting, preliminary sorting, measuring, processing and shipping samples. May assist researchers with routine experiments under close technical supervision. May train students on proper use of equipment and basic procedures. May provide work direction to students or support staff.

##### Complexity and Decision Making Authority

Follows protocols and procedures with no deviation. Performs routine procedures. Solves repetitive problems.

##### Knowledge, Skills, and Abilities

Basic knowledge to perform simple repetitive tasks related to a scientific or engineering field. Basic knowledge of laboratory/research techniques, equipment and terminology preferred. Basic or advanced physical and mental skills and abilities including use of simple hand tools, power tools, heavy machinery or other equipment. Basic to intermediate math, reading and writing skills. May require knowledge of special safety and regulatory procedures including personal protective gear.

##### Education/Experience

High school graduation or equivalent.

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<https://hr.tennessee.edu/pay/compensation-project-2018/>

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### RESEARCH TECHNICIAN 2

#### Typical Functions

Assists researchers by performing routine tests or cultures, processing samples, collecting data, setting up and operating equipment, and maintaining research/lab supplies working under general supervision. Operates field, office, laboratory and/or shop equipment used in support of research projects. Assists with set up of experiments. Collects and logs samples, specimens, measurements and other scientific data collections through observation, experimentation, interviewing, standard procedures or electronic equipment. Maintains and organizes detailed records of studies conducted and enters data into electronic databases. Performs data analysis involving routine procedures. Prepares reports. Troubleshoots system and technical problems. Trains staff and students on proper use of equipment and instrumentation and other technical procedures. Maintains inventories and supplies. May assist research efforts by subject recruitment, coordinating participant consent, screening participants, subject observation, surveys, and data/questionnaire response collection. May supervise students and/or provide work direction to support staff.

#### Complexity and Decision Making Authority

Performs standardized or prescribed assignments involving a sequence of related operations. Solves straightforward problems.

#### Knowledge, Skills, and Abilities

Knowledge of processes, methods, and procedures related to scientific or engineering fields. Knowledge of data collection procedures, data entry procedures and computerized spreadsheets and databases. Ability to take precise measurements and maintain accurate records. Ability to interpret data and manipulate data to produce charts and graphs.

#### Education/Experience

High school graduation or equivalent and 2 years relevant experience, or equivalent combination of training and experience.

### RESEARCH TECHNICIAN 3

#### Typical Functions

Assists researchers by performing a variety of routine and non-routine technical assignments under intermittent supervision. Collects, interprets, describes and documents complex analytical and evaluative data to support research activities. Conducts literature review and research. Sets up and performs technical experiments. Collects samples, specimens and other data. Compiles and enters field data. Evaluates, analyzes, and interprets collected data; prepares reports, analyses, and basic models identifying progress and trends, and makes recommendations or conclusions. Assists with planning and design of experiments and research operations including the writing of protocols. Coordinates the use, care and maintenance of facilities (e.g. laboratory, greenhouse, farm, field, or shop), subjects (e.g. humans, animals, or livestock), equipment, and instruments used in support of research projects. May supervise or coordinate work of designated personnel and students. May coordinate participant recruitment. May provide herd management or supervise sanitation and feeding processes for farm and animal care.

#### Complexity and Decision Making Authority

Performs complex steps of a project or completes critical stages of a project.

#### Knowledge, Skills, and Abilities

Advanced knowledge of survey research techniques. Advanced knowledge of data collection, validation, interpretation,

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statistical analyses, and computerized spreadsheets and databases. Ability to prepare professional reports, charts and graphs. Ability to train and provide work direction.

Education/Experience

High school graduation or equivalent and four years relevant experience, or an equivalent combination of training and experience.