STAFF RESEARCH ASSOCIATE

Staff Research Associate V (9609)  Staff Research Associate V – Supervisor (9608)
Staff Research Associate IV (9610)  Staff Research Associate IV – Supervisor (9614)
Staff Research Associate III (9611)  Staff Research Associate III – Supervisor (9615)
Staff Research Associate II-exempt (9612)  Staff Research Associate II – Supervisor (9616)
Staff Research Associate II-non-exempt (9617)
Staff Research Associate I (9613)

SERIES CONCEPT

Staff Research Associates perform or supervise the performance of laboratory and/or field experimental procedures in support of academically-supervised research and teaching in the natural, physical or social sciences; and perform other related duties as required.

Incumbents perform technical determinations and/or make technical observations in one or more fields of scientific endeavor that usually yield technical data about the phenomena under investigation. The fields may include chemistry, physics, biochemistry, microbiology, botany, zoology, psychology, biology, geology, bacteriology, and other similar fields. The technical determinations include, for example, biochemical, radiochemical, physical, and biological preparation, examination, and analysis of specimen material. Installation, operation, and maintenance of laboratory and field instruments may be an essential part of the duties. The technical data yielded are used primarily for research and teaching, but the data may also relate to public service, such as patient care or agricultural extension.

Incumbents work under academic supervision, although they may report directly to a higher level Staff Research Associate. They may participate or assist in teaching activities by discussing experimental procedures with students, demonstrating procedures, working with faculty in presenting, developing or modifying portions of course material, and by providing technical supervision to students and visitors during assigned periods. However, they do not have formal responsibility for teaching and course content, which is an academic function. Normally, engagement in teaching activities is ancillary to engagement in research activities under academic supervision.

Incumbents participate in research activities at several levels of difficulty and responsibility described in the Class Concepts. Incumbents at the highest level described make significant innovative contributions to research methodology of a degree that typically changes the course of the investigation. However, they are not principal investigators, which is an academic role; and they may participate in but are not assigned final responsibility for determining (a) the general nature and course of investigation, (b) general methodological approaches for investigation, and (c) the scientific validity of research results.

The Staff Research Associate series is a broad series, encompassing disciplines in the natural, physical and social sciences. The examples cited in the Class Concepts are illustrative and do not preclude allocation to the series of positions requiring equivalent technical knowledge and skill.
The Staff Research Associate series specifically recognizes supervisory responsibility in four of its five levels (II-V). Positions allocated to the supervisory titles in this series must meet the criteria for supervision as defined in the Supplemental Guidelines for Supervisor Classes.

CLASS CONCEPTS

Staff Research Associate V
Staff Research Associate V – Supervisor

Under general direction, incumbents direct the work of a large and complex laboratory including the supervision of technical staff consisting of Staff Research Associates I through IV, with at least am positions at the Staff Research Associate II level or higher; and take charge of the development and execution of major or multi-disciplinary research projects, and perform state-of-the-art, complex research projects in collaboration with academic supervisors, making significant, original contributions to research methods; including authorship or co-authorship of published findings.

Incumbents typically consult with academic supervisor and other academics or professional researchers on the nature and overall objectives of the research project; develop, plan, and direct the technical work of several Staff Research Associates, advising them on the more difficult and problematic areas they may encounter; contribute significant original/innovative ideas of major methodological significance to the research; exercise independent judgment and discretion, initiative, and resourcefulness in making decisions about the research; and write articles for publication in scientific journals or for presentations at conferences or symposiums.

Assignments at this level typically involve supervisory responsibilities for other Staff Research Associates.

Staff Research Associate IV
Staff Research Associate IV – Supervisor

Under direction, incumbents (a) direct the work of a large laboratory including the supervision of a group of Staff Research Associate M's, II's, and I's, or (b) take charge of the execution of research projects or major portions of research projects which have been broadly outlined by academic supervisors, or (c) engage in difficult and complex research projects in collaboration with academic supervisors, making important original contributions pertaining to laboratory and/or field experimental procedures. Within a selected methodological approach, the selection of specific methods to achieve the objective is frequently left to the Staff Research Associate, who typically contributes original ideas of major methodological significance to the prosecution of the investigation preceding both by reference to the general body of scientific knowledge and by application of trial and error methods.

Incumbents typically consult with academic supervisors on the nature and general plan of approach to basic research problems; read and abstract scientific articles pertaining to prosecution of broad research problems; proceed without specific direction to organize and work out all techniques involved; plan, assign, and direct the work of several Staff Research Associates, advising them on problems which they are unable to solve; contribute original ideas of major methodological significance to the prosecution of laboratory and/or field phases of research; take complete charge of
the execution of laboratory phases of major research projects over considerable periods of time, such as during prolonged absences of academic supervisors; exercise judgment, initiative, and resourcefulness in making decisions, consulting on occasion with academic supervisors; and prepare complete written reports on all phases of laboratory and/or field experimental work involved in research projects. Such reports usually are used for major portions of articles to be prepared for publication.

Assignments at this level of difficulty may be supervisory or non-supervisory. Supervisory assignments typically carry responsibility for laboratory management and supervision of Staff Research Associates, Laboratory Assistants, and graduate students. Assistance and participation in teaching activities, as described in the Series Concept, may be viewed as similar in supervisory responsibility, for the purpose of evaluating laboratory management responsibility. Non-supervisory assignments at this level typically require sustained, frequent contributions of (a) original ideas of major importance in the prosecution of laboratory and/or field phases of research and/or (b) interpretation of data yielded by new/original method(s) used or developed in the course of laboratory and/or field phases of research. Co-authorship of scientific journal articles may indicate the level of innovational contribution publicly acknowledged at this level, but it is not a necessary requirement for allocation of such positions.

**Staff Research Associate III**

**Staff Research Associate III – Supervisor**

Under general supervision, incumbents (a) direct the work of a medium-sized laboratory having a staff of at least one Staff Research Associate II or two Staff Research Associate I's, or (b) perform laboratory and/or field experimental work that requires a combination of journey level knowledge and skill in two ordinarily distinct occupational fields or scientific disciplines, or (c) undertake research projects in collaboration with academic supervisors, making innovative contributions pertaining to laboratory and/or field experimental procedures which may not change the course of an investigation but do indicate a significant independent contribution beyond the journey level.

Incumbents typically consult with academic supervisors on the nature and general plan of approach to basic research problems; read and abstract articles or value in the prosecution of broad research problems; organize and work out all techniques involved; plan and assign the work of at least one Staff Research Associate II or two Staff Research Associate I's advising them on problems they are unable to solve; contribute original ideas in the prosecution of laboratory and/or field phases of research; standardize new techniques and train other staff personnel and students in their use; perform specialized procedures in two ordinarily distinct occupational field or scientific disciplines; and prepare complete written reports of laboratory and/or field experimental methods.

Assignments at this level of difficulty may be supervisory or non-supervisory. Supervisory assignments typically carry responsibility for laboratory management and supervision of at least one Staff Research Associate II or two Staff Research Associate I's, and may also include the supervision of Laboratory Assistants and graduate students. Assistance in teaching activities, as described in the Series Concept, may be viewed as similar supervisory responsibility, for the purpose of evaluating laboratory management responsibility. Non-supervisory assignments typically require (a) contributions or original ideas of importance in the prosecution of laboratory and/or field phases of research or (b) a combination of journey level knowledge and skill drawn from two ordinarily distinct occupational fields or scientific disciplines.
The Staff Research Associate III class is intended to provide the intermediate class between the Staff Research Associate II and Staff Research Associate IV, in recognition of (a) laboratory management and supervision and/or (b) scientific innovation and/or (c) utilization of an unusual combination of advanced knowledge and skill, each of which separately would support the journey level of the field.

**Staff Research Associate II (exempt and non-exempt)**

**Staff Research Associate II – Supervisor**

Under supervision, incumbents perform (a) a wide variety of standard repetitive laboratory and/or field experimental procedures at the full operational or journey level of skill in one field of specialty; or (b) perform a limited variety of non-standard laboratory and/or field experimental procedures requiring ingenuity, resourcefulness, and adaptability to special and changing needs of research in one specialized field; or (c) perform a limited variety or repetitive but highly specialized laboratory and/or field experimental procedures.

Incumbents typically perform a wide variety of standard repetitive procedures without detailed technical supervision, usually in a well-established occupational field (i.e., chemistry, microbiology, etc.). They may also modify, vary or adapt standard procedures to meet the needs of research projects, or improve tests that are unsatisfactory, and after studying available literature, analyze and alter conditions under which determinations are made. They may also acquire and apply a body of knowledge and skill in a field of comparatively narrow scope where the emphasis is on specialized techniques.

Assignments at this level of difficulty are typically non-supervisory; however, a Staff Research Associate II may also be assigned the management responsibility for a small laboratory unit, with at least one Staff Research Associate I or a group of lower-level laboratory employees such as Laboratory Assistants, Animal Technicians, etc. This type of responsibility typically includes ordering supplies and equipment and insuring proper operation and maintenance of laboratory equipment.

Staff Research Associate II is the full operational level of the series. Examples of assignments at this level of difficulty and responsibility are:

- Chemical analyst, performing a wide variety of chemical analyses, including qualitative and quantitative analyses of unknowns, by using standard methods and by developing modifications of standard methods to meet special needs.

- Entomologist in biological control unit, in charge of rearing of various species of insects and parasites, including responsibility for determining the kind of food host to use, the age and culture of food host best suited, the timing of breeding and rearing operations, and kinds of parasites to rear on insects to best accomplish the experimental purposes involved.

- Plant pathologist, identifying mycological organisms on plant material by microscopic examination and by keying down, using judgment when descriptions in literature are incomplete or inaccurate.
Microbiologist, isolating and purifying cultures of fungus and bacterial organisms from plant or animal materials, varying the method on each specimen to identify the organism and obtain a pure culture.

Histologist, performing a wide variety of standardized, but intricate and delicate procedures for preparing and examining plant materials for optical and/or electron microscopy.

Experimental psychologist, assisting in psychophysiological experiments on man and animals, preparing subjects for experiments, performing psychophysical tests, improving tests as necessary and analyzing and developing statistical data.

Electron microscopist, preparing issue for electron microscopy, maintaining electron microscopes and photographic darkroom and prep room facilities, providing individual and classroom instruction on the use of the electron microscope and related facilities.

The examples cited are typical for the class of the Staff Research Associate II, but are not intended to limit the class to the occupational fields named. All occupational fields suggested by the Series Concept may be found in the class.

SRA II - Non-exempt versus Exempt:
In order to be EXEMPT, both of the following must be true:
1. The incumbent has a relevant college degree and is using the degree in this job, AND
2. The majority of the work requires consistent exercise of discretion and judgment, i.e.:
   a. Comparison and evaluation of possible courses of conduct and making independent decisions after the various possibilities have been considered
   b. Making a decision where there is no obvious right or wrong answer
   c. Not work that merely requires applying knowledge with prescribed procedures or determining which procedure to follow.

Non-exempt is appropriate for:
1. Those with degrees that are not relevant to the position or those without degrees that have comparable “theoretical knowledge”
2. The majority of work does not require the consistent exercise of discretion and judgment.

Staff Research Associate I (9613)

Under supervision, incumbents perform standard repetitive, technical laboratory and/or field experimental procedures and/or receive training in the more difficult procedures usually requiring a theoretical background in one scientific field. The fields of work are generally those indicated in the Series Concept and further illustrated by the examples in the Class Concept for Staff Research Associate II.

Incumbents usually perform standard repetitive procedures of limited variety and/or work under close technical supervision, in their initial assignments. Originality in devising or revising laboratory and/or field experimental procedures is ordinarily not expected nor required at this level. Continuing supervision over other staff personnel is not normally assigned.

Staff Research Associate I is the entry level in the series. Incumbents may perform a limited variety of non-standard repetitive procedures or a wide variety of standard repetitive procedures.
characteristic of the next higher level, but without having reached the level of skill proficiency required at the next higher level.

**MINIMUM QUALIFICATIONS**

Incumbents are expected to possess the skills, knowledge, and abilities essential to the successful performance of the duties assigned to the positions. These skills, knowledge, and abilities are typically acquired through a combination of extensive study and experience.

Positions allocated to the supervisory titles must also meet the criteria for supervision as defined in the Guidelines for Requesting Supervisory Designation for Positions.

**SUPPLEMENTAL GUIDE FOR THE STAFF RESEARCH ASSOCIATE SERIES**

This series includes staff positions that require the observation and measurement of scientific phenomena. Positions allocated to this series typically require some specialized skill or knowledge which is usually, but not necessarily, acquired through formal education in the natural, physical or social sciences at the collegiate level. Most Staff Research Associates are engaged in research to seek new or further information about a subject or substance. However, there are a few positions in this series which are concerned primarily with producing materials for study by others, such as histological technicians.

Generally, Staff Research Associates are not completely free to undertake independent scientific research, since this is typically a faculty function. Staff Research Associate positions are designed primarily to assist the faculty in identifying and selecting problems for investigation, planning experiments, and in evaluating, interpreting, and publishing results. In addition to the actual performance of methods, Staff Research Associates may participate quite substantially in the selection, development, and evaluation of methods.

There are four distinguishable levels within the Staff Research Associate Series and five (5) allocating factors to be used as common denominators in determining the appropriate level within the series for a particular position. The following is a brief summary of the five allocating factors.

1. **Supervision exercised over the position.**

   The nature and degree of supervision exercised over a position ranges from explicit methods with directions as to steps to be taken and the review of results of all operations for accuracy and completeness to giving objectives in very broad terms and allowing the methods of determination to be worked out by the Staff Research Associate.

   The amount of review by a supervisor is pertinent in this factor and in reverse the degree of independence of judgment exercised by the Staff Research Associate is also pertinent. Many laboratory techniques consist of a large number of steps, any of which individually may be relatively simple to perform. However, to connect the steps in sequence to produce an end result requires evaluation of the results at the completion of each step and selection among alternative courses of action, even including in some instances reversing the process to a preceding step and starting again.
(2) Kind and degree of originality of the innovational aspects of the work.

This factor measures original contribution or innovation within the realm of methods and procedure. Original contributions or innovations range from relatively simple suggestions such as substituting one kind of pipette for another or recognizing irregularities and invalid results and calling them to the attention of the supervisor to breaking new ground by attempting something which has not been attempted or achieved before, proceeding both by reference to the general body of scientific knowledge and by application of trial and error methods.

(3) Skill requirements inherent in the performance of a particular method or procedure.

Skill requirements usually refer to manipulative skills. Some techniques are not particularly difficult to understand, but to perform they require unusual finesse with laboratory instruments because of the perishable or fragile nature of the objects being worked with. Skill requirements may also refer to knowledge of scientific principles and procedures and judgment in evaluating results. The knowledge which an incumbent may bring to a job does not in itself affect the level of skill unless it is expressed in the job in some way.

(4) Variety of the work.

Variety within the Staff Research Associate Series means the degree of diversification and utilization of unrelated techniques or the requirement of essentially dissimilar knowledge and skills.

NOTE: The Skill (3) and Variety (4) factors can combine for allocation to the Staff Research Associate III level if the work performed involves duties and responsibilities evaluated at the Staff Research Associate II level of skill (work requiring unusual finesse or knowledge to perform) in each of at least two separate occupational fields or scientific disciplines.

(5) Laboratory management responsibilities, including responsibility for the work of others.

Laboratory management responsibilities may be defined as (1) having responsibility for the work of others including planning and reviewing work assignments and giving assistance in the solution of work problems; (2) having responsibility for ordering and the upkeep of supplies and equipment; (3) personal contact with the public in performing laboratory work in the field; (4) responsibility for instructing through lectures and/or demonstrations, or training in laboratory procedures, or generally overseeing a group of students in laboratory sections of their course work.

All five factors may not be significant or critical in the evaluation of a job in the Staff Research Associate series. The duties and responsibilities present in a position are allocated to an appropriate level (Staff Research Associate I, II, III or IV) for each of the significant factors and the position is classified at the highest level at which the majority of these factors are evaluated for levels I, II and IV. For classification at level III a majority of incumbent's time must be spent performing duties and responsibilities allocable to one of three significant factors.