UNITED STATES OFFICE OF PERSONNEL MANAGEMENT
Washington, DC 20415

Strategic Human
Resources Policy
Division

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MEMORANDUM FOR DIRECTORS OF HUMAN RESOURCES

FROM: MARK E. DOBOGA
DEPUTY ASSOCIATE DIRECTOR
CENTER FOR TALENT AND CAPACITY POLICY

Subject: Final Research Grade Evaluation Guide

The Office of Personnel Management (OPM) is releasing for implementation the final Research Grade Evaluation Guide (RGEG). The RGEG provides grading criteria for nonsupervisory professional research positions in the engineering, biological, medical, agricultural, physical, mathematical, and social sciences occupational groups.

The final RGEG redefines the research environment, updates terminology, expands on qualitative research measures, considers collaborative research, and recognizes the importance of information and technology transfer.

Agencies should apply this updated classification guide to covered positions within 12 months.

If you have questions or would like to discuss the final RGEG, please contact Ira Johnson, Jr. at (202) 606-3600 or by email to **Ira.Johnson@opm.gov**.

Attachment

cc: Agency Classification Chiefs

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INTRODUCTION

The Research Grade Evaluation Guide (RGEG) provides grading criteria for nonsupervisory professional research work in the engineering and biological, medical, agricultural, physical, mathematical, and social sciences occupational groups for General Schedule (GS) and other "white collar" pay plans. In the General Schedule position classification system established under chapter 51 of title 5, United States Code, the positions addressed would be two-grade interval positions.

The RGEG is divided into four parts. Part I describes Federal research work. Part II provides the grading criteria for positions classified in accordance with GS grade definitions. Part III provides information on administrative considerations, including official titling provisions and evaluation procedures. Part IV includes explanatory material about the development of this Guide.

The RGEG does not provide information to determine a position's occupational series. For guidance on selecting the appropriate series for the position see the **Introduction to the Position Classification Standards** or the **Classifier's Handbook**.

Coverage

This Guide applies to work in professional scientific and engineering positions that satisfies both the definition of research and research responsibility as described below. If the definition of either research or research responsibility is not satisfied, use the standard or guide applicable to the position's series to evaluate the position.

Research – Research is systematic, critical, intensive investigation directed toward discovering, disseminating, and applying new or expanded knowledge in a professional discipline. Research includes, but is not limited to, empirical and theoretical investigations with one or more of the following objectives:

- to determine the nature, magnitude, and interrelationships of physical, biological, psychological, social, and other comparable phenomena and processes;
- to create or develop empirical, theoretical, or experimental means of investigating such phenomena and processes; or
- to develop principles, criteria, methods, and data of general applicability.

Research Responsibility – Professionals engaged in research work have one or both of the following responsibilities:

- personally performing professionally responsible research for a substantial portion of time; or
  directly and personally leading and participating in the activities of a research team and/or organizational unit (when the primary basis of selection for the position is competence and

capability in performing professionally responsible research rather than capability in supervising and managing a research organization).

Professionally responsible research meets the following criteria:

- involves applying scientific methods, including exploring and defining problems, planning the approach for study, analyzing data, interpreting results, and documenting or reporting findings;
- requires creativity and critical judgment, which may materially affect the nature of the end product;
- requires research capability attainable through graduate education or demonstrated research experience;
- is performed at a level of responsibility typically associated with independent research investigation; and
- the researcher's contributions, stature, and recognition have a direct and major impact on the level of difficulty and responsibility of the research.

Additionally, when assessing whether the position should be evaluated using the Research Grade Evaluation Guide, consider the purpose of the work as determined by assignments over time, qualifications required, management intent, and the organization's mission.

Superseding the Existing Functional Guide

Issuance of this guide supersedes the Research Grade Evaluation Guide described in the following table:

Existing Guide	Action Taken
Research Grade Evaluation Guide	Supersedes the **Research Grade Evaluation Guide**, last revised January 1976.

PART I – RESEARCH

The Research Environment

In the Federal Government, researchers are typically expected to:

- identify and conceptualize research needs;
- plan and conduct experiments and studies;
- collect, analyze, manage, and document data, results, and findings;
- transfer new information and technology to users;
- publish and disseminate results;
- review, evaluate, and apply research products;
- serve as peer reviewers; and
- keep abreast of and apply new information and technology.

Researchers typically work closely with information users, managers, policy makers, and others to identify information gaps and needs; participate in strategic planning of research programs and projects; organize and lead interdisciplinary research teams; integrate new research findings and technology into policies and programs; and extend and interpret scientific information in terms relevant and useful to the public and society. In conforming to agency mandates and missions, researchers generate findings ranging from new explanations of phenomena to information useful in developing new technologies. These discoveries expand and advance scientific theories and knowledge into new and unexplored frontiers of human experience and perception.

Research Versus Development

Some activities closely resemble the activities covered by this guide, but are more appropriately evaluated with another standard or guide. Of particular relevance is distinguishing between research and development, which is sometimes difficult because they share many common characteristics, standards, and procedures. Researchers often collaborate and perform functions associated with both activities; however, there are key differences between research and development work. Development involves the continuous exploitation of basic scientific and professional knowledge to achieve fairly definable and desired results. In comparison, research is often difficult to define in terms of measurable results and expectations. It is especially difficult to distinguish research from development when application of research is direct and rapid, and development is greatly compressed.

Although research and development share many characteristics, their dissimilarities require different language and criteria for determining grade levels for GS positions. The table below describes some of the critical differences between research and development. Use the criteria in this table to decide whether the Research Grade Evaluation Guide is appropriate for evaluating the grade level of the work of the position. If it is a research position, use this guide to evaluate the grade level of the position. If the work of the position is development more than research, use the **Equipment Development Grade Evaluation Guide** to evaluate the grade of the position.

	Research	Development
Purpose	Extending knowledge and understanding	New or improved products, processes, and techniques
Assignments	Problems to be solved: • entail relative freedom to explore promising areas in relation to organizational programs; • may stem from an intent to close gaps in knowledge in a given field, or to develop new theories or explanations of phenomena; and • are difficult to define in terms of expected outcomes and measurable results.	Problems to be solved: • are defined in advance or assigned; • may stem from an intent to exploit an understanding of phenomena and principles; or • have predictable outcomes or measurable results.
Results	Products are: • papers describing new and modified theories and principles; • explanations of phenomena; and • information to improve the understanding of techniques and processes.	Products are: • papers describing application of theories and principles; • design concepts, models, patents, and inventions; and • equipment, techniques, and processes.

PART II – GRADING INFORMATION

Evaluation System

Part II provides grading information for use in determining the appropriate grade of nonsupervisory two-grade interval professional research positions. These grading criteria are applicable to General Schedule positions classified under chapter 51 of title 5, United States Code. They may also be used as appropriate to determine work levels for other Federal position classification systems.

The Research Grade Evaluation Guide (RGEG) provides criteria for evaluating the grade level of research work for grades 11 through 15. For work that does not meet the minimum criteria for grade 11, use the appropriate occupational or job family position classification standard or guide to determine the grade level of the position.

Factors – The factors used to evaluate research work are:

Factor 1 – Research Assignment,
Factor 2 – Supervisory Controls,
Factor 3 – Guidelines and Originality, and
Factor 4 – Contributions, Impact, and Stature.

Factor Levels – Each factor has five levels, A through E, with increasing point values, respectively. This guide provides specific criteria for factor levels A, C, and E. Assign level B when work falls between levels A and C. Assign level D when work falls between levels C and E. For example, if work exceeds level A criteria, but does not fully satisfy level C criteria, the work is awarded level B.

Factor Relationships – Evaluate and assign factor levels separately for each factor, based on the best match between the factor level criteria and the researcher's work. In making evaluations, carefully consider the balance and relationship among the factors. Sound classification judgment usually precludes more than a 2-level difference between levels assigned to different factors. For example, if work is evaluated under Factor 1 at level A, it is highly unlikely that work would warrant level D or higher under Factors 2, 3, or 4. Keep in mind that the capabilities of the researcher may markedly influence the characteristics of the work.

Point Values – Each factor level has a point value. Factor 4 is double-weighted to reflect the relative importance of the researcher's stature and impact to the grade level determination. When evaluating the work, you may award only the designated point values shown in the chart below. Work that fails to meet level A criteria should be awarded zero points.

The table below shows the point values assigned to each level of the factors.

POINTS BY FACTOR AND LEVEL

Level	Factor 1	Factor 2	Factor 3	Factor 4
A	2	2	2	4
B	4	4	4	8
C	6	6	6	12
D	8	8	8	16
E	10	10	10	20

Grade Level – To determine the grade level of a position, add the point values for all assigned factor levels. Use the Grade Conversion Table below to convert the total points to a grade.

GRADE CONVERSION TABLE

Point Values	Grade
8 – 14	GS-11
16 – 24	GS-12
26 – 34	GS-13
36 – 44	GS-14
46 – 50	GS-15

If the assigned points fall near the top or bottom of a point range, be especially careful to consider all relevant facts before making the final point assignment and grade determination.

Grading Criteria

This guide has four factors for grading the work of researchers. While there is some overlap among the factors, each focuses on a different aspect of the researcher's work and the relationship between the researcher and the research environment.

FACTOR 1 - RESEARCH ASSIGNMENT

This factor deals with the nature, scope, and characteristics of the researcher's current assignment. Award a factor level that reflects the norm of current assignments, rather than atypical projects. Research assignments are directly dependent upon the individual qualities of the researcher and the inherent difficulty of the research problems. Work commonly expands commensurate with the researcher's motivation, capability, and creativity.

Projects and Teams – For project and team members, base the factor level only on the specific projects or portion of projects for which the researcher is responsible. For project managers, base the factor level on the scope and character of the total project.

Primary Considerations – In evaluating this factor consider the following:

- assignment scope and complexity, objectives, and means of accomplishment;
- problem breadth and depth;
- availability of related research studies;
- extent to which objectives can be defined;
- number of unknowns and critical obstacles;
- variety and depth of knowledge and expertise required to solve problems;
- extent and complexity of the required validation process;
- necessity to translate abstract concepts into easily understood statements of theory or models, and to determine how best to disseminate information or transfer research findings;
- utility of the end product in solving the initial problem and in opening new areas of investigation; and
- expected impact of end results, products, or outcomes.

Factor 1 – Level A (2 points)

Research assignments have the following characteristics:

- readily definable objectives;
- limited in scope to investigating specific phenomena or problems, or are segments of related investigations;
- require fairly conventional techniques;
- involve applying existing theory or methods to areas previously investigated, but under different conditions, or involve adapting previous studies in light of changes in theory or improved techniques and instrumentation; and
- result in contributions that add to scientific and professional knowledge or support developing new or improved methods and techniques.

The researcher typically works as a project or team member.

Factor 1 – Level C (6 points)

Research assignments have the following characteristics:

- the scope is broad and complex, requiring a series of comprehensive and conceptually related phases and studies;
- problems are difficult to define;
- require sophisticated research techniques; and
- result in contributions that:
  - answer important questions in the field;
  - account for previously unexplained phenomena;
  - open significant new avenues for further study;
  - confirm or modify a scientific theory or methodology;
  - lead to important changes in existing products, methods, techniques, processes, or practices; or
  - are definitive of a specific topic area.

The researcher typically works as a project member or as a primary investigator.

Factor 1 – Level E (10 points)

Research assignments have the following characteristics:

- the scope and complexity are at a level requiring subdivision into separate phases, some of which are considerably broad and complex;
- problems are exceptionally difficult and unyielding to investigation;
- require unconventional or novel approaches or complex research techniques; and

- results may include:
  - a major advance or opening of the way for extensive related development;
  - progress in areas of exceptional interest to the scientific and professional community;
  - important changes in theories, methods, and techniques;
  - opening significant new avenues for further study; or
  - contributions answering important questions in the field.

The researcher typically works as a primary investigator but may also be a project member.

FACTOR 2 - SUPERVISORY CONTROLS

This factor deals with the researcher's current level of independent performance and the technical and administrative guidance and control the supervisor exercises over research work. Researchers may consult frequently with colleagues and collaborators. Use caution in distinguishing between consultation and supervisory control and guidance.

Primary Considerations – In evaluating this factor, consider the following:

- manner in which the supervisor assigns work;
- researcher's freedom to determine a course of action;
- researcher's opportunity for procedural innovation; and
- degree of the supervisor's acceptance of the researcher's recommendations, decisions, and final products.

Researchers working on complex team projects not divided into smaller components exercise independent performance when they:

- participate fully as a professionally responsible team member in substantive aspects of the work; and
- make contributions equivalent to independently performing more limited research projects.

Factor 2 – Level A (2 points)

The supervisor typically assigns specific problems along with general instructions on the scope and objectives of the study. The supervisor or higher management makes any decisions to discontinue work, change emphasis, or change the research plan. The researcher may suggest studies and undertake them after receiving supervisory approval. The supervisor reviews work for adequacy of method, completeness, and appropriate interpretation of results.

The researcher confers with the supervisor regarding problem definition, the relationship of the problem to the organization's broader research goals, and developing a research plan. Supervisory or managerial direction and guidance help the researcher in the critical problem definition and planning stages, but do not negate the researcher's responsibility for adequately completing these steps.

The researcher is expected to:

- assume responsibility for the study and pursue it to completion;
- solve problems ordinarily encountered in accomplishing the work with only occasional supervisory input;
- interpret results; and
- prepare entire, or sections of, reports and papers.

Factor 2 – Level C (6 points)

The supervisor may either assign a broad problem area to the researcher or allow the researcher to work with substantial freedom within an area of primary interest. The researcher has substantial freedom to identify, define, and select specific projects, and to determine the most promising research strategies and problem approaches.

The supervisor:

- approves plans calling for considerable investments of time or resources;
- makes final decisions concerning the direction of work and changes in or discontinuance of projects involving substantial research investments;
- relies on the researcher's professional judgment to such an extent that the researcher's recommendations are ordinarily followed; and
- reviews final work and reports, principally to evaluate overall results, recommendations, and conclusions.

The researcher is responsible, with little technical direction, for:

- formulating hypotheses;
- developing and carrying out the research plan;
- determining equipment and other resource needs;
- keeping the supervisor informed of general plans and progress;
- addressing novel and difficult problems requiring modification of standard methods;

- analyzing and interpreting results;
- preparing comprehensive reports of findings; and
- working with users to interpret and implement research findings or technologies.

Factor 2 – Level E (10 points)

The supervisor provides broad administrative supervision, which is generally limited to approving staffing, funds, and facilities, and to providing broad guidance on agency policies and mandates. Technical supervision is consultative in nature. Management accepts the researcher's findings as technically authoritative, as a basis for decisions, and as acceptable for review by the scientific community.

The researcher, working within the framework of management objectives and priorities, is responsible for:

- formulating research plans and hypotheses;
- carrying out the project plan;
- interpreting findings and assessing their organizational and professional applicability; and
- locating and exploring the most promising areas of research in relation to agency program needs and the state of the science or discipline.

FACTOR 3 - GUIDELINES AND ORIGINALITY

This factor deals with the creative thinking, analysis, synthesis, evaluation, judgment, resourcefulness, and insight characterizing the work currently performed.

Guidelines usually consist of literature in the field, procedures, instructions, or precedents and may be adapted or modified to meet the requirements of the current assignment. Features to be considered are:

- the extent and nature of available written guides;
- intrinsic difficulty encountered in applying guides in terms of their ready adaptability to the current assignment; and
- the degree of judgment required in selecting, interpreting, and adapting guidelines.

In assessing the impact of creativity in the position, consider the requirement for:

- original and independent creation, analysis, reasoning, evaluation, and judgment; and
- originality in interpreting findings and translating findings into a form usable by others.

Factor 3 – Level A (2 points)

Guidelines include:

- existing theories and methods generally applicable to the research problem; or
- materials that may contain some inconsistencies, be partially defined, or provide several possible approaches to the problem.

Originality is demonstrated by:

- developing a complete and adequate research design by selecting and adapting the most appropriate approach, methods, or techniques for the problem at hand; and
- limited extension or modification of procedures or techniques, as required.

Factor 3 – Level C (6 points)

Guidelines:

- consist of existing literature in the field of limited usefulness due to contradictions, critical gaps, or limited applicability; or
- are largely absent because of the novel nature of the work.

Originality is demonstrated by:

- defining elusive or highly complex problems;
- developing productive hypotheses for testing;

- developing important new approaches, methods, and techniques;
- interpreting and relating significant results to other research findings;
- developing and applying new techniques and original methods of attack to solve important problems presenting unprecedented or novel aspects;
- isolating and defining critical problem features; and
- adapting, extending, and synthesizing theory, principles, and techniques into original or innovative combinations or configurations.

Factor 3 – Degree Level E (10 points)

Guidelines are almost nonexistent in pertinent literature.

Originality and creativity are demonstrated by:

- discovering complex theory or methodology;
- contributing significantly to the development of new theory or methodology to supplant or add new dimensions to a previous framework; and
- solving problems and delivering results that markedly influence the scientific field or society.

FACTOR 4 - CONTRIBUTIONS, IMPACT, AND STATURE

This factor focuses on the researcher's total contributions, impact, and stature as they bear on the current research assignment. It is not restricted to present and immediate past accomplishments and achievements. However, recency of accomplishment is important. Recent research or similar activity is essential to receiving full credit.

Security regulations, proprietary agreements, or other circumstances may prevent publishing research results and make it difficult to evaluate the work based on its impact on the larger professional community. Agencies should develop alternative processes to evaluate the impact of this work. In such cases, the work will have to be evaluated by means of the best possible judgment of its importance and the impact it would have if it could be published.

Contributions – The researcher's contributions reflect the knowledge, skills, and experience the incumbent brings to the position. Professional journal articles are an important product of research results for communicating scientific findings to the broader research community; however, they are not the only outlet for communicating information. Journal articles should be balanced with other forms of communication to ensure broad impact from the results of the work. Indicators of the researcher's contributions may include:

- research publications (for example, journal articles, monographs, books, reviews, agency and customer reports, models, maps, and novel interpretative materials); and
- innovations and technology transfer.

While the quantity of publications, research contributions, and professional activities represent one measurement of impact on a field, do not give undue weight to this metric. Consider primarily the quality, impact, and relevance of the researcher's contributions on the scientific community or field.

Impact – Consider whether the researcher:

- has an impact on scientific and/or societal issues;
- sets new research directions;
- develops new methods, techniques, or tools to be used by other researchers; and
- drives management and policy outcomes.

Stature – Stature is established when the researcher is recognized by the scientific field and/or society, as indicated by:

- requests for expert advice/consultation by other professionals and managers;
- requests to exercise leadership on research teams or projects;
- invitations to serve on advisory boards;
- requests to organize or chair committees, workshops, or symposia;
- invitations to address scientific or professional organizations;
- invitations to write synthesis papers;
- recognition by professional societies and external groups; or

- honors and awards.

A researcher in one field may move into a related field. Such a move does not change Factor 4 credit if, after a reasonably short period, the researcher will perform research work in the new field at substantially the same level of competence as before.

Factor 4 – Level A (4 points)

The researcher defines problems, performs background research, develops and executes a research plan, organizes and evaluates results, and prepares reports of findings. Work is expected to result in, or has resulted in:

- primary authorship of papers or reports filling narrow gaps in an existing framework of knowledge, to corroborate existing theory, or to report findings of limited scope; or co-authorship of a major paper or report of considerable interest to the scientific field;
- providing information and technical support on assigned research projects to collaborators and managers; and
- recognition for contributing to the project and communicating results outside the agency.

Factor 4 – Level C (12 Points)

The researcher has demonstrated competence and productivity as evidenced by conducting rigorous research of marked originality, soundness, and value. Work is expected to result in, or has resulted in:

- primary authorship of publications of considerable interest and value to the field;
- conceiving and formulating research ideas supporting or leading to productive studies by others;
- products that are significant in solving important scientific problems;
- selection to serve on important committees and review panels of technical groups and professional organizations;
- recognition by the scientific community as a significant contributor to the field of study;
- acknowledgement of impact by end users as evidenced by favorable reviews or citation in the work of others;
- invitations to make presentations to professional societies and others outside the organization on technical matters and management practices in the area of specialization; and
- consultation by users and other researchers who are respected in their fields of study.

Factor 4 – Level E (20 points)

The researcher has made outstanding and significant contributions by conducting research in either a broad field or a narrow but very specialized field. The researcher's accomplishments are of such importance and magnitude that they move science forward. Research is of such impact that other researchers must take note of it to keep abreast of developments in the field.

Work at this level includes many of the following:

- primary authorship of a number of important papers including seminal or synthesis publications, some of which have had a major impact on advancing the field or are accepted as authoritative in the field;
- contributions to inventions, designs, techniques, models, or theories are regarded as major advances and open the way for further developments or solving problems of great importance to the professional community, the organization, or the public;
- being sought as a consultant by colleagues who are themselves recognized experts in the field;
- recognition by the scientific community as an authority in the field;
- requests from highly-respected colleagues to collaborate with the researcher;
- attracting new researchers to the field;
- invitations to address or to assume a leadership role in national professional organizations and associated committees; and
- selection to lead research to solve large and complex problems.

In addition, researchers at this level typically perform a variety of advisory activities based on their scientific reputation and standing such as:

- contributing significantly to professional symposia defining the state of the discipline and new or emerging areas in the field;
- contributing to strategic research planning and program development;
- participating in major technology or information transfer activities of great importance to the scientific field, the agency, or the public; or
- participating in applying the research to important management and policy decisions.

PART III – ADMINISTRATIVE CONSIDERATIONS

OFFICIAL TITLING PROVISIONS

Titling

Title 5, United States Code, requires OPM to establish authorized official position titles. These include a basic title and may be appended with one or more prefixes and/or suffixes. Agencies must use the official position titles for human resources management, budget, and fiscal purposes but may establish organizational and functional titles for internal administration, public convenience, program management, or similar purposes. Organizational and functional titles do not replace, but rather complement, official position titles.

Position Titles

Follow the instructions in the occupational or job family position classification standard related to the position under consideration to assign the basic position title and suffixes, as appropriate. Basic titles may be modified with one or more of the following prefixes:

- *Research* – if work satisfies the criteria for applying this Guide;
- *Supervisory Research* – if the work satisfies the grade criteria for applying this Guide and meets the criteria for "supervisor" in the **General Schedule Supervisory Guide**; and
- *Lead Research* – if work satisfies the criteria for applying this Guide and meets the criteria for "leader" in the **General Schedule Leader Grade Evaluation Guide**.

Crosswalk to the Standard Occupational Classification

The Office of Management and Budget requires all Federal agencies collecting occupational data to use the Standard Occupational Classification (SOC) system for statistical data reporting purposes. The Bureau of Labor Statistics uses SOC codes for the National Compensation Survey and other statistical reporting. The SOC system recognizes the research function in describing many occupations, but does not identify that function in occupational titles. For that reason, the SOC code for a professional research position is the SOC code that is appropriate for the basic occupation. For example, the SOC codes for the OPM authorized occupational titles, Research Horticulturist, Research Chemist, and Research Metallurgist, are Horticulturist, Chemist, and Metallurgist, respectively. More information about the SOC is available at **http://stat.bls.gov/soc**.

Evaluation Procedures

Agencies are responsible for properly applying this guide in accordance with OPM guidance and regulations. Human resources specialists play a key role in ensuring compliance and are an integral part in the evaluation process. Agencies have discretion in establishing and evaluating research positions; however, OPM recommends applying the same evaluation method to all research positions within an agency. OPM further recommends the use of evaluation panels:

- staffed by both researchers to provide critical subject matter expertise and human resources specialists to collaborate and to build consensus for the grade level determination; and
- including disciplinary diversity to provide better perspective with respect to the relationship of the specific work of the position to broader areas of research.

The nature, type, importance, and significance of various professional contributions, research products, and other scientific outputs vary across agencies and disciplines. Therefore, agencies may find it helpful to develop supplements to this guide to aid in evaluating research work in their specific research environments.

Agencies applying this guide should establish a comprehensive mechanism for gathering information relevant to the classification process. Information relevant to Factors 1, 2, and 3 is usually included on position descriptions. The researcher typically provides an information package describing professional contributions, recognition, service, impact, and stature for evaluating Factor 4.

Periodic Review

Because significant changes in research positions may occur gradually over time, agency procedures should provide for periodic review to ensure accuracy and proper classification. This classification review may result in a change in grade level or change to a non-research position.

Documentation

Part 511 of title 5, Code of Federal Regulations, permits General Schedule employees to appeal the classification of their positions. Accordingly, agencies must be able to defend their classification decisions. Agencies should retain all material relevant to the evaluation process as part of the documentation supporting their research and grade level decisions.

Vacant and New Positions

Classify vacant and new positions based on the total factor pattern consistent with the contributions, impact, and stature required of prospective candidates.

The Interaction of the Research Situation and the Researcher

The duties and responsibilities of a research position are especially dependent upon the interplay between the research situation or assignment and the individual qualities of the incumbent. For example, the research may call for creativity and originality, but the extent to which these

qualities are brought into play is dependent in large part on the incumbent. Furthermore, while nonresearch situations are typically structured as to the breadth of research, the work typically expands in accordance with the incumbent's capabilities. This leads to what may be termed a "person-in-job" concept, based on the interaction of the assignment and the incumbent.

Two factors make it particularly important and desirable to recognize this person-in-job concept in research positions. First, because of its "unlimited ceiling," and "expandable breadth," the research situation is much more likely to provide opportunity for full play of the incumbent's capabilities than the frequently more structured and limited non-research situation. Second in the non-research situation, the incumbent's impact on the job is reflected in less subtle ways (such as additional duties or functions; greater authority for action; more difficult assignments where the difficulty of assignments can be predicted; less supervisory review, etc.) which can be identified and measured by more conventional means.

This guide provides for considering both the research situation or assignment, and the qualifications of the person who occupies the situation or assignment, to recognize the profound impact of the incumbent researcher’s personal qualifications on the job. These factors together constitute the position actually being performed and form the basis for determining grade level.

Relationship to Grades of Supervisors

This guide recognizes the value of nonsupervisory research involving a very high degree of technical independence, a high degree of originality, and a high level of professional recognition and contribution. While supervision is one ladder to high-level responsibility in scientific work, another ladder is personal creativity and scientific contribution. A good supervisor can do much to create a favorable climate and to stimulate creativity and originality; however, in the final analysis, creativity and originality come from within the person who displays them.

It is not necessary for supervisors of research work to be in higher grades than their subordinates, because research work is personal to the incumbent, is subject to "supervision" to only a very limited degree, and provides an alternate ladder to high-level work. It may be possible for the contribution of a highly creative nonsupervisory researcher to merit the same grade (for different reasons) as the contribution of the supervisor of the organization or unit. This situation can exist where the supervision is not purely administrative in nature. Technical supervision, including overall evaluation of results and guidance as to priorities of research to be undertaken, may be present.

Thus, positions graded under this guide may, in some instances, be properly classified in the same grade as, or in rare cases, in a higher grade than the supervisor of the position. This can occur when the grade of the researcher is determined based on highly independent personal performance and personal creativity, stature, and contributions.

PART IV – EXPLANATORY MATERIAL

KEY DATES AND MILESTONES

In 1997, a group of research scientists, research science administrators, chief classifiers, and human resources specialists from several Federal agencies organized an informal "Interagency Research Evaluation Committee" (the Committee) to propose to the Office of Personnel Management (OPM) the existing Research Grade Evaluation Guide (RGEG), last revised in 1964, be revised and updated to reflect changes in the research environment.

The Committee spent several years developing its proposal. The goals of the Committee were to redefine the research environment and update terminology. For example, the RGEG focused primarily on quantitative measures of outcomes, such as the number of research papers a scientist publishes, while undervaluing the importance of "information and technology transfer." Additionally, it assumed scientists work independently, rather than on collaborative teams.

In May 1999, the Committee met with OPM to present its proposal. Following this initial meeting, OPM formally announced to human resources directors and chiefs of classification it was initiating a study to update the RGEG. OPM thereafter conducted a series of meetings with the Committee, including representatives from the following agencies:

- Department of Agriculture
- Department of Commerce
- Department of Defense
- Department of Energy
- Department of Health and Human Services
- Department of Interior
- Department of Transportation
- Department of Veterans Affairs
- Environmental Protection Agency
- National Aeronautics and Space Administration
- Smithsonian Institution

The fact-finding process for this classification study differed from the way OPM customarily prepares draft documents; however, the broad representation of participants and the Committee's extensive research in the development of its proposal supported the approach taken. OPM worked with the Committee through an iterative process to prepare a draft for agency comments. The Committee provided invaluable occupational information, while OPM provided expertise on classification principles, practices, and policy.

In February 2006, OPM released a draft RGEG for agency review, comments, and test application. The lead agencies for reviewing the draft RGEG were the Department of Health and Human Services, the Department of the Interior, and the Department of Agriculture. In addition to the lead agencies, OPM invited and encouraged all agencies to comment on the draft.

RESULTS OF AGENCY REVIEW, COMMENT, AND TEST APPLICATION

A. GENERAL INFORMATION

Agency test applications of the draft RGEG demonstrated no significant grade impact. Most agencies stated the draft RGEG was an improvement and the expanded occupational coverage will add value. There was overwhelming positive feedback regarding the format of the RGEG. Most agencies described the format as "user-friendly."

The agency reviews, however, recommended a number of changes. Some of the changes involved editorial and formatting changes, while others were more substantive. Some agencies prefer the greater level of detail provided in the previous RGEG. They were concerned about the brevity of some factor level characteristics and commented on the difficulty of applying the short descriptions to obtain the appropriate grade level; however, agencies differed in their recommendation for describing each factor level.

B. RESEARCH GRADE EVALUATION GUIDE – SPECIFIC ISSUES

When the draft RGEG was released, OPM requested agency comments on three specific issues. This section summarizes the agency comments and describes actions taken in response to agency comments.

1. Issue - Expanded Coverage

Agency Comments: The majority of agencies supported a narrow expansion of the RGEG to cover research work in the social sciences family, so long as that work meets the criteria in the draft. They did not support expanding coverage to other professional occupations.

Our Response: OPM expanded the guide to include, in addition to psychology, other professional research work in the social sciences.

2. Issue - Definition of Research

Agency Comments: The majority of agencies felt the definition of research was adequate when linked with the scientific methods and applied to positions properly covered by the RGEG.

Our Response: No changes needed.

3. Issue - Removing Gaps in Point Ranges for Converting Factor Levels

Agency Comments: Because the Committee could not reach consensus on whether to propose retaining or eliminating the point gap feature in the draft, OPM removed the gaps in the draft RGEG and requested agency comments on this issue. Nearly all responding agencies recommended removing the point gap. One lead agency responded in favor of keeping the gap. Those agencies supporting the removal of gaps from the point range agreed the flexibility in assigning points created confusion and led to lack of consistency in the evaluation process. On

the other hand, some agencies recognized the existing gaps provided management flexibility in evaluating a researcher's contribution and stature within the scientific community.

Our Response: Eliminating the gap standardizes the evaluation process in assigning points and is consistent with established methods for the Factor Evaluation System. We therefore eliminated the gap.

C. RESEARCH GRADE EVALUATION GUIDE – MISCELLANEOUS ISSUES

1. Issue – The "In Excess of Degree E" Criteria

Agency Comments: Some agencies recommended retaining the "In Excess of Degree E" criteria to assist in identifying candidates for senior-level scientific and professional (ST) positions.

Our Response: 5 CFR 319.203 requires agencies to determine ST positions are properly classified above GS-15. Additionally, 5 CFR 319.301 provides agency heads with responsibility "for establishing qualifications standards" for senior level positions, in accordance with criteria established in the regulations. For OPM to provide the "In Excess of Degree E" criteria is inconsistent with the regulatory responsibility of the agency heads. We continue to encourage agency development of supplemental criteria, consistent with applicable regulations.

2. Issue – Grade Level 9 Criteria

Agency Comments: The lead agencies recommended removing the grade level 9 criteria from the RGEG, stating work at this level is not "**professional research**" and is better described as "**advanced training**."

Our Response: OPM accepted this recommendation and removed the grade level 9 criteria from the RGEG. Such positions should be classified by applying the appropriate classification standard or guide.

3. Issue – Unpublished Research Results

Agency Comments: Agencies stated OPM will be unable to properly adjudicate classification appeals when unpublished (e.g., classified, confidential) research results cannot be shared with OPM. They recommended inserting language about unpublishable research from the previous RGEG.

Our Response: OPM accepted this recommendation and inserted the original language to clarify how to evaluate these positions in the absence of agency-specific guidance. Specifically, *"the work will have to be evaluated by means of the best possible judgment of its importance and the impact it would have if it could be published."*