GUIDE FOR PROMOTION OF RESEARCH SCIENTISTS AT CUIMC

INTRODUCTION

This document provides guidance on promotion processes and pathways to full-time Research Scientists and their departments. This document aims to:

- Serve as a framework for describing what data should be assembled for the promotion process
- Provide guidance and suggestions on how research scientists can work towards the preparation of their promotion dossier. Specifically, information is provided to research scientists to help optimize the organization of the dossier and the description of their qualitative and quantitative academic achievements and contributions
- Help research scientists and departmental leadership to think strategically about their career development plans well before consideration for promotion

Advancement in rank is marked by evidence of progressive growth in the following:

- Achievements and recognition within the research scientist's most significant area(s) of research
- Growth in reputation as appropriate to the research scientists area(s) of research
- Notable and important internal contributions to research essential to CUIMC schools
- Local, regional, national, and international reputations

Based on the qualifications and contributions to their fields of research, the three academic ranks of Research Scientists at Columbia University are:

- **Associate Research Scientists** are junior officers of research whose qualifications and contributions to their field(s) of research are equivalent to those of an assistant professor.
- **Research Scientists** are officers whose qualifications and contributions to their field(s) of research are equivalent to those of an associate professor.
- **Senior Research Scientists** are officers of research whose qualifications and contributions to their field(s) of research are equivalent to those of a full professor.

Resources and Support:

For additional information, please consult the Office of Academic Affairs website.

Focus for Research Scientists at CUIMC

All Research Scientists are expected to focus on the area of investigation. Themes and accomplishments for advancement may span basic, clinical, and/or public health research, synthesis of existing knowledge, implementation, and dissemination science and/or new applications of existing knowledge. While they may engage in work that sustains educational endeavors, community-based health, workforce diversity and inclusion activities, an appointment within the Research Scientist track does not require teaching or other aspect of education-related activities.

Consideration for Promotion for Research Scientists at CUIMC:

Full-time Research Scientists will benefit from understanding the process of promotion and the opportunities to define the quality and impact of their academic contributions. Promotion for research scientists is focused on the evaluation of their contributions to investigation. No educational contributions are required for Research Scientists.

Navigating the promotion process generally requires four considerations:

a. Readiness for promotion
b. Determination of what research area(s) and achievements provide the strongest examples of the research scientist's research contributions;
c. Assessment of what elements may need to be better developed or documented to prepare for possible promotion
d. Preparation of the required documents

Evaluation of Scholarly Productivity

One of the key aspects of the evaluation for promotion is that contributions and achievements can be assessed through perceived quality, impact and innovation of scholarly products and accomplishments. Research scientists may function as part of research team or as research leaders in specific areas. Scholarly products and achievements, their dissemination and measures will vary according to the area of investigation and academic rank.

Accomplishment should be quantitatively appropriate to the academic rank within the Research Scientist framework.

Promotion to the rank of "Research Scientist" requires substantially different levels of accomplishment, recognition, and impact than Associate Research Scientist. An Associate Research Scientist promoted to Research Scientist should be significant contributors to the work (e.g. NYC, NY State, tri-state, community) and in some cases an emerging external recognition national reputation in their major area(s) of investigative focus. Reputation is defined as the ability of research scientist at this level to be acknowledged by peers inside and outside of CUIMC as accomplished in their area(s) of research.

In contrast, promotion to the rank of Senior Research Scientist, comparable to promotion to "Professor at CUMC," should be marked by substantially more external recognition through more substantial quality and quantity of scholarly contributions and impact. Promotion to Senior Research Scientist requires recognition of contributions within their area(s) of investigative focus. Researchers at this rank should be widely acknowledged by peers inside and outside of CUIMC as accomplished within their area of research.

Framework for the Promotion Process

Planning for academic advancement should begin at the time of appointment when the Research Scientist jointly decides with departmental leadership on their area(s) of investigative focus. An annual review process is recommended to assist research scientists and department leadership with the measurement of progression towards promotion.

The process of promotion has clearly delineated steps. The steps include specific responsibilities for Research Scientists, their department and their CUIMC school's committee on appointments and promotions (COAP). Each school has a committee on appointments and promotion (COAP) to consider non-tenure track appointments including research scientists. School COAP committees consider the major area(s) of research and the sum of accomplishments in those areas.

School specific COAP guidelines will describe the specific promotion process:

- Vagelos College of Physicians and Surgeons:
  www.cuimc.columbia.edu/about-us/explore-cuimc/academic-affairs/faculty-academic-tracks
- Mailman School of Public Health:
  www.publichealth.columbia.edu/info/faculty-staff/faculty-affairs-resources
- School of Nursing:
  nursing.columbia.edu/academics/division-academic-affairs
- College of Dental Medicine:
  www.dental.columbia.edu/faculty/faculty-development/academic-appointments-titles

Collectively, these steps require both faculty and departmental processes

Promotion Dossier Development:

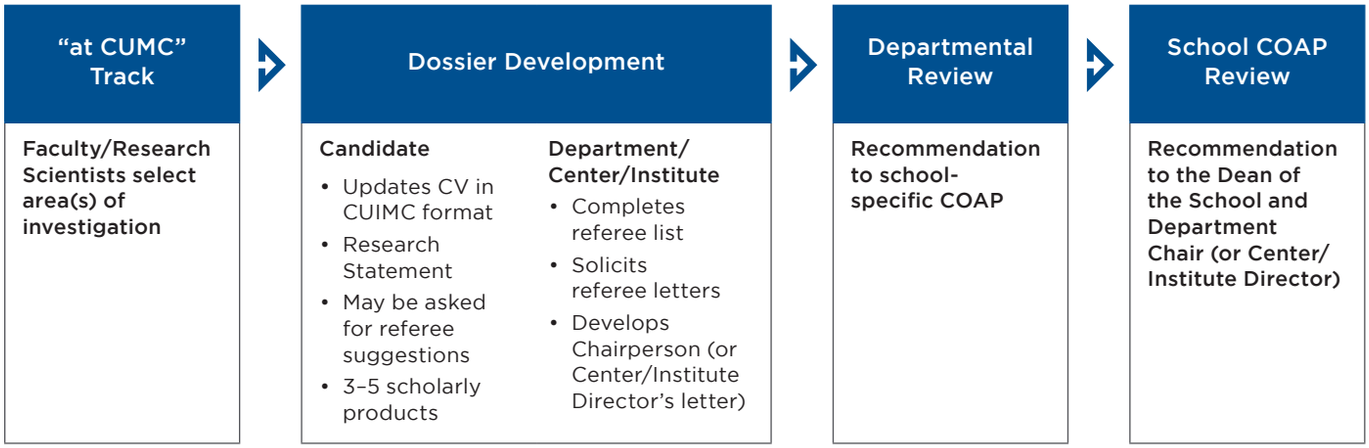
Figure 1 (below) **summarizes the steps required in the promotion process and identifies those responsible for each aspect.**

1. The process starts with the individual Research Scientist identifying their area(s) of investigation, reviewing and updating their CUIMC CV (www ps columbia edu/faculty-development/faculty-diversity/CUIMC-CV), writing a personal statement and then collaborating with the department, to develop a list of referees who can evaluate their work.
2. The referee list is entirely drafted, reviewed and completed by the department (see guidelines below), and referee letters are solicited and received by the department
3. The department Chair writes a letter describing why the Research Scientist should be advanced in rank
4. Scholarly products chosen by the candidate, in collaboration with mentors or department leaders, are included

Departmental Review:

The promotion dossier is referred first for departmental review by their committee on promotions and appointments (COAP). Departmental review of the dossier provides for departmental assessment of promotion readiness of the candidate. If the committee and department's Chair recommend the research scientist for promotion, that dossier, in addition to a formal letter from the Chair, is forwarded to the School COAP committee for consideration. These materials area described in detail below.

Figure 2: The Promotion Process for Research Scientists at CUIMC



Organizing the Promotion Dossier, Including Qualitative Metrics

A research scientist dossier for consideration for promotion provides the documentation of the quantitative and qualitative value of a research scientist's academic contributions. Promotion dossiers should define and illustrate the quality, impact, and diversity of the contributions of the candidate to CUIMC and beyond

1. The CUIMC CV

The CV is a chronological list of academic activities that should also outline the accomplishments overall to reflect excellence, innovation and enduring impact within CUIMC, the community, the region, national and international domains. The CUIMC CV requires a specific format to be followed, and is available online.

The CV of a Research Scientist should include evidence of scholarship and accomplishment, including their record of publications and other research contributions, project/program roles and support from internal and/or external funding.

Evaluable quality, impact and dissemination of academic activities in research and scholarly products may be clarified by selective, concise annotation of the CV It should be annotated such that honors, awards, achievements and contributions to area of research are readily apparent to reviewers, both internal and external. Noting accomplishments/impact since the most recent appointment or promotion (if applicable) can be helpful in documenting continuing productivity.

2. Department Chair or Center/Institute Director Letter

Letters from the department Chair should address the research scientist's accomplishment within their area(s) of investigation, considering accomplishments, impact, importance to the department, special strengths or abilities, and teaching evaluations. Research scientists with appointments in more than one department would need a joint letter signed by all Chairs or Center/Institute Directors.

3. Research Statement

A Research Statement is required by departments as part of the promotion package for research scientists. The Research Statement (generally 1-3 pages) and should include the following:

- An explanation of accomplishments that the candidate has made in each of their major relevant area(s) of research.
- A summary of accomplishments by area of focus and consider quantity, quality, significance, and impact.

- Where possible, metrics of accomplishments and/or qualitative assessments of innovation and impact.
- The candidate's direction to help in the evaluation of future potential the area(s) of investigation in which the Research Scientist makes the most important academic contributions.
- Clarification of accomplishments since the most recent promotion (if applicable) to demonstrate ongoing productivity.

These activities should reflect and potentially integrate in a narrative form the content of each major research area(s) contained within the CV.

The Research Statement allows the candidate to articulate future goals as well, particularly as they are likely to contribute to one's current or emerging reputation as a member of influence within one or more academic communities Although the CV provides a chronological record, the Research Statement provides a narrative from the candidate's perspective of the key contributions. Input from mentors, colleagues and/or supervisors can be useful in drafting a personal statement. More information about research statements is available on our website.

Points to be covered:

a. Describe the main area(s) of research and the themes that flow through their research
b. Describe any special education and/or training they have obtained in research, leadership
c. Describe their professional accomplishments, leadership and impact in research and how these aspects fit together. Briefly describing the context of their accomplishments could help to convey the importance of their achievements.
d. Describe ongoing/planned projects that showcase the themes of your work
e. Describe their future short- and long-term research goals

The Research Statement should emphasize:

a. The role and impact of the candidate in each research area described
b. The context and description of the impact of key findings
c. Any conceptual and/or technical impact that resulted from research findings
d. Innovative models that were used or shared with others, etc.
e. External research support should be identified, along with the candidate's role on externally supported project(s)

4. Academic Accomplishments and/or Scholarly Products

Identification of 3-5 research accomplishments and/or products is required that are appropriate for the proposed academic rank and research area(s) of focus (see section C below). Products should demonstrate:

1. Quality recognized by peers,
2. Enduring impact
3. Dissemination at local, regional, or national levels (depending on rank)

A Research Scientist need not have examples of every type of evidence in their dossier. A sample that supports quality and impact in each major area(s) of research, and is quantitatively appropriate to the academic rank, should be included.

5. Referee Letters

Processes for soliciting referees is available in the Columbia University Faculty Handbook. Letters recommending promotion should come from 5 to 7 established scientists and scholars.

Referees should be asked to specifically comment on the quality and impact of the research scientist's work.

- Of these 5-7 letters, at least four must be from those who have not collaborated with the individual.
- At least 2 or 3 letters should come from outside of the academic unit/department/division/or center/institute.
- Letters are solicited and collected by the candidate's department. A standardized template for solicitation of referee letters to be used by departments is available online.
- FoM COAP members should recuse themselves from reviewing the candidate if they are currently or have previously collaborated with the candidate.

Academic Accomplishments and Scholarly Products by Research Scientists

Evidence about investigative accomplishments should emphasize discovery and the generation of new knowledge, analysis, synthesis and/or applications of existing knowledge, collaborative contributions, as well as positioning knowledge within larger, interdisciplinary contexts.

Academic activities would be focused on: peer-reviewed publications, investigational leadership or contribution through special roles, receipt of competitive funding, recognition of contributions to the field(s), development or use of new technologies or approaches.

Research may be in any discipline related to health sciences, including but not limited to:

a. Laboratory research
b. Clinical and translational research
c. Population- or community-based research
d. Health services/Policy/Economics
e. Heath or healthcare equity, justice, diversity, inclusion in services or outcomes, or implementation or dissemination research
f. Biostatistics, Bioinformatics
g. Novel applications of existing technologies or treatments
h. Multidisciplinary research team membership with a critical, unique role

Evidence may be demonstrated through:

a. The quality and quantity of:
   - Authorship or co-authorship in peer-reviewed papers, with substantial contributions associated with certain context or impact of findings;

b. Research accomplishments:
   - Contributions to research field(s) through leadership and/or substantive collaborative contributions
   - Development or utilization of new technologies or approaches
   - Development of knowledge resulting in new technologies or novel applications
   - Publication in high-impact journal, as lead or senior author or among a team of investigators, identifying their research role(s) on those project(s)

Scholarly products or academic accomplishments could include:

- Authorship or co-authorship in research publications in peer-reviewed journals
- Leadership or key participation in the development and publication of chapters, reviews, commentaries, professional guidelines, white papers, policy statements or commentaries related to their area(s) of investigative focus
- Participation in clinical trials, site PI, registries or other key research, where funding is from government, private or industry sources
- Technology development
- Innovative clinical technology or invention or application with evidence of impact
- Committee leadership or membership for peer review of grants (study sections), manuscripts or abstracts for key meetings, policy development
- Membership through invitation on expert panels or steering committees
- Invited to give presentations at external institutions or meetings. Invited presentations may also include those external to the home department/division or Center while within CU or CUIMC

Adjunct Officers of Research

Promotion criteria for Adjunct Officers of Research

Criteria for advancement in the rank of Adjunct Officers of Research are qualitatively similar to those for full time research scientists for each area of focus. However, quantitative parameters may vary based on the amount of time dedicated to research activities by Adjunct Officers of Research. Adjunct Officers of Research are expected to define their contributions in area(s) of investigation which are qualitatively similar to those for full time Research Scientists; however, their quantitative work products may vary based on the amount of time dedicated to research activities.