Astronomy & Astrophysics Department Research Scientist and Project Scientist Merit & Promotion Policy and Standards

November 28, 2023

The Astronomy and Astrophysics (A&A) department will adhere to campus policy regarding the appointment, reappointment, evaluation, promotion, and termination of research scientists and project scientists. The APM 311 and PPM 230-311 define the Project Scientist series, and the APM 310 and PPM 230-310 define the Research Scientist series. Both the research scientist (RS) series and project scientist (PS) series mirror the rank/step structure of the professorial series but differ in two important respects: no teaching is required, and the appointments are not tenured. RS and PS are supported through extramural grants and contracts. RS are expected to develop independent research programs and may serve as Principal Investigators (PIs); they are expected to primarily support themselves through external grants. The quality of a RS's research is expected to be on par with that of a professor of the same or similar rank and step and is evaluated similarly. RS are also expected to conduct service to the University and/or scholarly profession. PS scientists may conduct service to the University and/or scholarly profession, but are not required to. PS work under the supervision of a faculty member or RS ("mentor") and are not required nor expected to develop independent research programs, and generally cannot serve as PIs but may serve as Co-PIs of extramural grants. PS are evaluated on the basis of the quality and quantity of their contributions to the research programs they are a part of, as well as their professional competence and activity (see APM 311-10(b)). A mentor letter from the supervising faculty member or RS is a key part of the PS evaluation. Both RS and PS are expected to adhere to the highest standards of integrity in scholarship, and treatment of students, colleagues, staff, and other university community members. Correspondingly, collegiality is taken into consideration in the review process.

To guide merit reviews, the A&A department has developed this document setting forth expectations for both RS and PS in terms of both research and service for merit and promotion. This document is required by CAP and RS-CAP and will be updated periodically and voted on by the A&A faculty. PS are not reviewed by CAP, but rather by a separate campus standing committee called <u>PSSRP</u>.

Proposed Merit Standards for Project Scientists

Project Scientists are evaluated on their ability to make significant, original, and creative contributions to a specific project in a research program under the supervision of their faculty or research scientist sponsor. Individuals in the Project Scientist series are expected to have a broad range of knowledge and competency and require minimal supervision, but they are not expected to lead an independent research program. Project Scientists in collaborations should explain their role within the collaboration team in their research statement. Although one cannot provide a simple metric of evaluating productivity, we expect significant contributions to

publications or other research products (software, instrumentation, etc.) in their respective fields. Mentors and letter writers may exercise reasonable flexibility in assessing the quality and impact against quantity of research products, as well as the overall original contributions of the Project Scientist to the research program. Non-independent letter writers and the RS mentor should discuss the Project Scientist's contributions to projects in their research groups, including weighting their impact and skill level demonstrated, as well as any contributions to their professional community. Project Scientists are not required to engage in university or public service, following <u>APM 311</u>.

Accelerations are considered when individuals in this series demonstrate one or more of the following: 1) significantly greater intellectual and/or experimental contributions into research programs and/or publications than expectations for normal merit increases, 2) successfully obtaining Co-PI status on prestigious awards or grants, or 3) exceptional leadership and service in the research group or to the campus or community. If an acceleration is proposed based on publications it should be clearly demonstrated that the combination of high-impact publications, first-authored publications, the number of publications, and/or the quality of the journals in which they are published exceeds normal expectations. Other justifications for an acceleration may include a significant deliverable in an experimental program such as commissioning of an instrument or a major instrument design review.

Proposed Merit Standards for Research Scientists

Merit Advancement: Standards for a regular merit advancement require productivity that demonstrates continuous and effective engagement in independent and creative research activity of high quality and impact, as well as demonstrated evidence of service to the University and/or scholarly profession. There is an expectation that research scientists at all levels regularly publish peer-reviewed papers and attend conferences in their field. Candidates in collaborations should explain their role within the collaboration team in their research statement. The service expectations of research scientists increase as they advance in rank and step, and this can be fulfilled through service to the University and/or the profession.

If an acceleration is proposed based on publications it should be clearly demonstrated that the combination of high-impact publications, first-authored publications, the number of publications, and/or the quality of the journals in which they are published exceeds normal expectations. Other justifications for an acceleration may include a significant deliverable in an experimental program such as commissioning of an instrument or a major instrument design review.

Promotion to Associate Research Scientist:

In this career review the candidate must have an established trajectory of independence, typically demonstrated in named, lead roles on grants, and first and/or senior authored publications in high-impact peer-reviewed journals or conference proceedings. Research

activities should be novel and impactful. There is an expectation that research scientists at all levels regularly publish peer-reviewed papers and attend conferences in their field. A candidate in collaborations should explain their role within the collaboration team. Also of importance is active participation in the research community through University and/or professional or public service.

Promotion to Full Research Scientist:

In this career review the candidate must have a portfolio of established funded research projects and show the capacity to produce impactful results and expand upon those projects. This is typically demonstrated by serving as PI or Co-PI on grants and by being first and/or senior author on publications in high-impact peer-reviewed journals or conference proceedings. Research activities should be novel and impactful. There is an expectation that research scientists at all levels regularly publish peer-reviewed papers and attend conferences in their field. A candidate in collaborations should explain their role within the collaboration team. The candidate is expected to engage in University and/or professional or public service.

Above scale steps for Research Scientists parallel those for faculty, as laid out in <u>PPM 230-310</u>.