

# Overview of performance statistics gathering for research promotions

Chun Ly, Jon Menard, Anya Bartelmann

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**Division Manager**  
Chun Ly, Ph.D.



**Deputy Director of Research**  
Jon Menard, Ph.D.



**Open Scholarship Specialist**  
Anya Bartelmann



- Candidates are identified by DDR and nominators (typically supervisors) for promotion around Spring time. Considerations include:
  - RM2 → RM3: performance, seniority (6 year limit in RM2 rank)
  - RM3 → RM4: performance, leadership, international recognition
- Staff in rank RM3 and above have Princeton continuing appointment
- **Statistics are gathered prior to peer review and voting meetings**
- Nominators present case to peer review committees for promotion, seconders and other peer members provide supporting comments
- Successful votes by peer committee are subsequently reviewed by research council, lab director + DDR, and ultimately C/7
- [Intranet: Overview on Research Promotions and Hiring](#)
- General questions should be directed to supervisor(s), DH(s), and DDR



- Prior to 2022, the process of promotion involved peer-review committee members aggregating candidates' publication statistics. This was:
  - Time consuming (days/weeks)
  - Potentially subjective



- Streamline the process by automating the retrieval of bibliometrics for peer-reviewed and conference papers
  - Fair (i.e. objective)
  - Consistent (i.e. less human error)
  - Transparent (i.e. reproducible)
- Reduce the burden on the Office of DDR and the peer-review committees in preparing for C7 review
- Provide additional support and continuity to peer-review committees
- A solution will not fit all needs, but strive for at least 80%
- Continuous improvements - inputs from candidates and committee members



- Automated generation of a merged list of papers (with DOIs) from the ORCID and Scopus Application Programming Interfaces (APIs)
  - Easier than parsing out information from candidate's CV
- Candidates meet with Research Publications and Data Management Office to update their ORCID iD and/or Scopus profiles (if necessary)
- Automated retrieval of citation counts from two sources, OpenAlex and Scopus
- NEW Candidates complete [Google Form](#) to provide CV, and info on accepted and submitted first-author papers, invited talks, grants
  - Automated workflows to notify peer-review committee, supervisor, DDR, etc.
- Computed 36+ metrics (example later)
- All candidates and supervisors are provided their list of publications to review and comment on for any irregularities, appeals, etc.
- All inquiries/concerns were responded to/addressed in a timely manner
- All candidates and supervisors were provided with the final list of publications
- A summary report is provided to each candidate and their supervisor



- Excluded papers include:
  - Errata, publisher's corrections, publisher's notes, etc
  - Conference/symposium papers not on the list of peer-review list in the guidelines
  - Requested by the candidate for specific reasons (e.g., not peer-reviewed work)
  - Papers that do not have a DOI (impossible to track)
- Team papers were also excluded:
  - Software initially determines if author is in the author list from OpenAlex data by either ORCID iD or last name
  - If not in the list evaluated manually to ensure it's correct
  - Numbers are computed with and without team papers; for final comparison, the latter is used



- Tracking of high-impact papers not limited to PRL, *Nature*, and *Science*
  - Expanded to include KPI list of high-impact papers
  - Better represents diversification of research at PPPL
- Switched to using a Google Form to assist in an automated workflow for approval and notification instead of standardizing CV template
- Peer-review committee members have chosen to move away from being assigned to particular candidates to being assigned to review of specific promotion metric data (e.g., invited talks, grants) so that candidate comparisons are more consistent.



Total articles: 48 (6) [54 (7)]

First author: 6 (2)

High-impact first author: 0 (0)

PRL: 0 (0)

Nature/Science: 0 (0)

Comment: 0 (0)

OpenAlex h-index: 21

OpenAlex Citations:

Total: 1,259 (17) [1,510 (43)]

First author: 97 (4)

Top first author: 40 (4)

Top-5 (summed) first author: 97 (4)

OpenAlex h-index: 21

Scopus Citations:

Total: 1,365 (18) [1,626 (39)]

First author: 110 (5)

Top first author: 46 (5)

Top-5 (summed) first author: 110 (5)

**In rank**

All publications

Excludes team papers





- Improvements needed to Google Form questions/prompts
- Example slide decks for nominators
- Include metrics applicable to wider range of skills - for example computational science



- [RM-3, 4, and 5 Promotion Statistics Development Guidelines](#) (Google Doc)
- [Software](#) is available on PPPL GitLab instance (login required)
- Documentation of software is available [here](#) (GitLab Pages; login required)



Questions?