Scholarship Guidelines
Department of Chemical and Biomolecular Engineering, Lafayette College
Revised and approved June 3, 2025

The Department seeks to foster a community of engaged and productive faculty who demonstrate a continuing record of scholarship in chemical engineering and related disciplines. The purpose of these guidelines is to provide guidance to help pre-tenure faculty during the probationary period and associate professors seeking promotion to full professor prioritize their scholarly activities.

Tenure and promotion are assessed over a multi-year period. In accordance with the Faculty Handbook (4.2.2), faculty are expected to demonstrate scholarly *development*, *accomplishment*, and *promise.* These expectations are normally exemplified through a portfolio of Group A, B, and C activities as defined in Table 1. The candidate's portfolio should contain multiple Group A activities; a significant portion of these should be peer-reviewed disciplinary journal articles. Candidates do not need Group B or Group C activities; however, these contributions do contribute toward meeting the standard, as described below.

Table 1: Priority ranking of scholarly activities

Group A: Most beneficial and meritorious	Peer-reviewed and archived disciplinary journal publication on original research[1]
	Funded major external research grant[2]
	Patents
	Peer-reviewed and archived pedagogical journal publication (Scholarship of Teaching and Learning)[3]
Group B: Highly beneficial and meritorious	Conference presentations with published proceedings
	Non-peer reviewed publications
	Authorship of a book chapter
	Funded minor external research grant [2]
	Other publications not meeting Group A criteria (e.g. textbook, review article)
Group C: Beneficial and meritorious	Conference presentations without published proceedings (abstract only)
	Conference presentations (operational pedagogy)
	Invited external presentations
	Submitted external research grant

Scholarly collaboration is acceptable and encouraged, especially with partners beyond the candidate's dissertation advisor. However, as contributions to a scholarly work may range from significant to minor, the role of the candidate must be clearly articulated. One way to recognize these contributions is through co-authorship. In chemical engineering, the significance of author

contributions typically moves inward from both ends: the first and second authors usually conduct the study, while the last authors are often responsible for its design. Both roles are considered major contributions. In terms of independent scholarship, faculty will normally transition from first to last author near the end of the probationary period and certainly when seeking promotion to full professor. Another way to indicate a significant contribution to a publication is by being listed as the corresponding author. Variations from these norms may occur depending on the field or type of publication, and the candidate's role should be clearly explained to articulate their contributions (see Appendix Table A.2.1 for terms that may be used).

Scholarly *development* is considered the process of establishing an independent and sustainable research program. Development is exemplified by all activities in Table 1 (Groups A, B, and C). The ability to involve undergraduate students in research is highly valued with student presentations at research conferences also considered evidence of scholarly development.

Scholarly *accomplishment* is the successful production of high-quality scholarly works noted as Group A activities in Table 1. Here, it should be clear how the candidate's expertise contributed to the production of the work. To sufficiently demonstrate accomplishment, the candidate must show evidence of contributions across multiple Group A activities, whether in major or minor roles.

Scholarly *promise* is demonstrated through an independent research program and the ability to generate new research ideas. Promise is demonstrated by the ability to adapt these ideas and continue to produce forms of continuing scholarship. While collaboration is encouraged by the Department, evidence of independent scholarship and development of an individual's own research program is needed. Evidence of scholarly promise includes major contributions (including conceptualization and leadership roles) to Group A activities that are distinct from lines of research pursued prior to Lafayette. For promise to be sufficiently demonstrated, these distinct major contributions must be exemplified on multiple Group A activities.

The central premise of these guidelines is that faculty in ChBE are encouraged to have an ongoing record of scholarship in chemical engineering or closely related fields that demonstrates the disciplinary expertise of the individual. Thus, refereed disciplinary journal publications are considered most beneficial and meritorious and should comprise the majority of an individual's Group A activities. Although collaboration with a dissertation/post-doctoral advisor may be common in the beginning of the probationary period, a faculty member's scholarly record must also show clear evidence of progress beyond the dissertation at the time of tenure review.[4] Scholarly work based on research outside of chemical engineering or closely related disciplines is considered meritorious, but anticipated to be insufficient for tenure and promotion. It is understood that faculty members may pursue projects in new research areas after tenure; when doing so, individual faculty are encouraged to articulate any connections to prior publications and/or scholarly expertise.

In alignment with the strategic mission of Lafayette College, scholarly activities that include undergraduate student participation are considered more meritorious with all other factors equal. The Department values the mentoring of students in independent research projects through Honors Theses, Independent Research, or the EXCEL/CBL Scholars Program. Evidence of productive mentorship can be seen in student presentations at academic conferences and in the contribution of students as co-authors and co-presenters of research publications. Faculty members should clearly articulate a student's contribution in any co-authored publication. While considered meritorious, student participation in research is not required.

As a whole, the portfolio of scholarly activities should clearly illustrate all three attributes of development, accomplishment, and promise as evidenced by a combination of Groups A, B, and/or C activities. Normally, there should be unique evidence of all three attributes at the time of evaluation for tenure, with multiple group A activities being necessary and sufficient, as well as evidence of continuing research (such as in the form of a draft manuscript or research proposal). The quality and quantity of scholarly activities will be discussed, at minimum, at evaluation milestones, including the pre-midterm meeting, midterm evaluation and post-midterm meeting. At those points, the number of Group A activities, as well as their impact (such as those published in high impact factor journals with respect to the candidate's field) and the candidate's contribution to each work, will be weighed. For example, a record with 4 Group A activities that are exceptional and all of which are independently conceived by the candidate could easily be viewed as stronger than a record with 5 Group A activities where the candidate is not conceptualizing or leading the project and/or the work itself is not making as important of a contribution to the field. For promotion to the rank of Professor,[5] tenured faculty members will similarly also need to demonstrate a subset of activities described among Groups A, B, and C, where the portfolio illustrates all three attributes of development, accomplishment, and promise.

The Department recognizes that the landscape of research infrastructure and support external to Lafayette may significantly impact an individual faculty member's scholarly activities. These complexities and/or disruptions can include but are not limited to access to laboratory space with operational facilities or computational resources, access to funding, availability of data sources, participation in professional conferences, and ability to collaborate. These circumstances may require a candidate to make adaptations in the topic, method, and distribution of their research, from which delays and/or gaps in the scholarly record may result. Specific impacts can be discussed with the Department Head as they develop and should be described by the candidate in their self-evaluation where appropriate.

The Department Head will bring requests for reconsideration of the above guidelines to the Department for discussion on an annual basis.

Notes:

[1] The process of peer-review of a journal or equivalent must include feedback from an editor and other reviewers, a procedure for revision or adjudication of a submission, and the possibility of rejection; i.e. a non-zero reject rate. Additionally, the journal or equivalent must be able to demonstrate impact by either ISI Impact Factor > 1.0 or an acceptance rate of 40% in cases in which an impact factor is not available. If it does not meet these additional criteria, it may be deemed acceptable in Group A by arrangement with the Department (e.g. new journals endorsed by major national societies.)

[2] Successful grant proposals are considered major grants if they are competitive, peer-reviewed, and have a substantial impact on the ability of the faculty member to provide resources and funding for their work. Minor grants are considered smaller grants that are more operational in nature and only provide for the continuation of ongoing work.

[3] Peer-reviewed pedagogical publications must also meet the criteria described above in footnote #1. It is assumed that SOTL is a faculty member's secondary research interest. For a colleague whose disciplinary expertise is in the area of SOTL, it is anticipated that these publications would comprise the majority of their Group A activities.

[4] Scholarly work completed prior to employment at the College is normally excluded from consideration for tenure and merit.

[5] For promotion to the rank of Professor, no set period of time for advancement is specified in the Faculty Handbook, but will be seriously considered in each four-year review, with particular focus during the second four-year evaluation (Section 4.3.10). Publications in progress (*e.g.* in preparation, under review, or under revision) submitted in the tenure review package as "evidence of continuing research" may be submitted as part of the promotion to Professor package if they have subsequently been published.

Appendix
Table A.2.1

Term	**Definition**
Conceptualization	Ideas; formulation or evolution of overarching research goals and aims
Methodology	Development or design of methodology; creation of models
Software	Programming, software development; designing computer programs; implementation of the computer code and supporting algorithms; testing of existing code components
Validation	Verification, whether as a part of the activity or separate, of the overall replication/ reproducibility of results/experiments and other research outputs
Formal analysis	Application of statistical, mathematical, computational, or other formal techniques to analyze or synthesize study data
Investigation	Conducting a research and investigation process, specifically performing the experiments, or data/evidence collection
Resources	Provision of study materials, reagents, materials, patients, laboratory samples, animals, instrumentation, computing resources, or other analysis tools
Data Curation	Management activities to annotate (produce metadata), scrub data and maintain research data (including software code, where it is necessary for interpreting the data itself) for initial use and later reuse
Writing - Original Draft	Preparation, creation and/or presentation of the published work, specifically writing the initial draft (including substantive translation)
Writing - Review & Editing	Preparation, creation and/or presentation of the published work by those from the original research group, specifically critical review, commentary or revision – including pre-or post publication stages
Visualization	Preparation, creation and/or presentation of the published work, specifically visualization/ data presentation
Supervision	Oversight and leadership responsibility for the research activity planning and execution, including mentorship external to the core team
Project administration	Management and coordination responsibility for the research activity planning and execution
Funding acquisition	Acquisition of the financial support for the project leading to this publication
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