

Perelman School of Medicine COAP Guidelines

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Introduction

The Perelman School of Medicine (PSOM) at the University of Pennsylvania has 4 full time faculty tracks to support the heterogeneous academic achievements of our talented faculty. The diversity of contributions by our faculty is critical to maintaining the excellence of the medical faculty as a whole.

The purpose to this document is to provide guidance to faculty and departments on the processes and procedures related to faculty appointments and promotions. There are several key terms that will appear throughout this document that are defined here to promote better understanding of the process:

- Collaborative research - distinctive contributions to a team of contributing investigators that result in publication and are recognizable by Extramural Consultants and others. Individual investigators should be able to identify their unique, original, and expert skills and ideas contributed to a project.
- Community engagement - institutional, local, national, and international community contributions that are closely aligned with and complementary to a candidate's academic work. Such activities should reflect innovations in science, medicine and healthcare that lead to demonstrable improvement in knowledge, health (individual or population), health care or health delivery.
- Impact - the direct effect of one's work on science, medicine, health care, patient care and/or our community. It can be assessed by a variety of metrics. See detailed metrics in Appendix A.
- Institutional citizenship - participation in service relevant to a faculty member's academic activities and to the missions of the school and University. It encompasses efforts including but not limited to mentoring, professionalism, inclusion, diversity and health equity.
- Professionalism - exemplary behavior including the demonstration of honesty and integrity in all realms of work, respect for patients, colleagues, staff and learners at all levels, evidence of continuous learning and self-management toward a goal of personal betterment, the encouragement of questions, debate and acceptance of diverse viewpoints without prejudice or bias, and consistent with the Penn Medicine Professionalism Statement.
- Trajectory - momentum in pursuit of one's career path. It is expected that the trajectory of one's career grows over time. Promotion anticipates continued upward trajectory and impact. Trajectory will be interpreted within the context of mitigating life circumstances.

The COAP and its Activities

The primary role of the PSOM Committee on Appointments and Promotions (COAP) and COAP Subcommittee for Academic Clinician (AC) and Clinical tracks (COAP-ACC) is to assess candidates for appointment to the school's faculty, to assess progress and compliance with appointment requirements and track expectations for reappointment, and to assess the totality of faculty contributions for promotion. The appropriate peer group reviews each type of case with ultimate authority for all cases resting with COAP. Additionally, COAP works closely with departmental chairs, vice chairs, division chiefs, departmental COAPs, and mentors to guide individual faculty members as they develop their academic careers. COAP members are selected by the Dean from professors in the Standing Faculty (Tenure and Clinician-Educator tracks) and also includes the Chair(s) of the COAP-ACC. Chair(s) of the COAP-ACC will be professors on the Academic Clinician track and are appointed by the Dean in consultation with the Senior Vice Dean for Academic Affairs and the Chair of the PSOM COAP. Terms of service are staggered for continuity reasons. All COAP business is confidential, and members are required to sign a Non-Disclosure Agreement.

The COAP and COAP-ACC usually meet twice a month during the academic year to review every faculty appointment, reappointment, and promotion. Committee members evaluate each dossier and vote to recommend in favor or against the proposed action, or to defer for additional information. The COAP evaluates Tenure, Clinician-Educator (CE), Research, Adjunct, Visiting, and Wistar track faculty actions. AC and Clinical track faculty actions are evaluated by the COAP-ACC. AC track promotions and appointments to Associate Professor and Professor are presented by the Chair of the COAP-ACC at COAP meetings. Any AC or Clinical track action can be further evaluated by the full COAP. The Dean presents the approved recommendations for appointments at, or promotions to, associate and full professor in the Standing Faculty and Research tracks to the University's Provost's Staff Conference (PSC) where the decision is reviewed and then sent for a final decision by the Provost. The PSC members, composed of deans and other senior-level university officials who are advisory to the Provost, review the dossiers independently. In most, but not all cases, the decision of the Provost agrees with the recommendations of a school's COAP. The Provost may decline to approve a recommendation or may defer decision until additional information is provided. Approved recommendations for appointments and reappointments at the level of assistant professor in all tracks and promotions in the Academic Clinician track are presented to the Provost's Staff Conference Subcommittee by the Senior Vice Dean for Academic Affairs.

APPOINTMENTS AND PROMOTIONS

Initial Appointment and Reappointment of Assistant Professors

The COAP recommends that candidates for appointment or promotion be encouraged early on, well before their mandatory promotion review, to follow a career path that is consistent with their own interests and talents and the strategic goals of both their department and PSOM. It is essential that candidates fully understand what is expected for them to successfully advance in their academic pathway. Initial appointments and reappointments should be made in a track that is appropriate for the individual and should be consistent with the goals and expectations of the track. Track selection and the professional development of the faculty member should be reviewed by the faculty member and the department chair/division chief at least annually. The faculty member's Academic Plan should be adjusted accordingly.

Track Changes

A track change may be appropriate for individuals who have substantially changed the direction of their

careers. The University does not formally recognize track “conversions or transfers between tracks”; any change in track requires a resignation from the current faculty position and appointment to the new faculty position.

In general, all track changes must be completed by the year prior to the final reappointment. Track changes from the Research track to the Tenure track result in the probationary period being shortened (from 10 years to 7 years). Track changes from the Research track to the Tenure track must be completed by the end of the first appointment (generally by year 3, not including extensions).

Any change in track must comply with PSOM and University policies (as detailed in the Faculty Handbook) and must support the strategic needs of the department and PSOM. Track changes to Standing Faculty (Tenure or CE) should be rare and require a national search in addition to departmental and school support, unless an appropriate search was performed at the time of the initial faculty appointment. Appointments in the Tenure track also require review and approval by the Executive Vice Dean/Chief Scientific Officer.

Advisory Letters

If COAP identifies concerns in a candidate's dossier at the time of reappointment, the COAP chair will advise the department chair in writing through an Advisory Letter that highlights the apparent concerns identified by the COAP's review of the dossier based on these guidelines. The purpose of the Advisory Letter is constructive and designed to help the candidate effectively address concerns as determined by the COAP prior to the mandatory review. The Advisory Letter should be shared with the candidate and their mentor.

Overview of Tracks

In general, faculty tracks are distinguished by combinations of scholarly products, teaching and clinical work. Individuals who will emphasize building and sustaining an independent research program are most appropriate in the Standing Faculty, Tenure track. Assuming no extensions are granted, the mandatory promotion review for this track takes place in or before the ninth year for those with clinical responsibilities and in or before the sixth year for those without clinical responsibilities.

Individuals who plan to develop and sustain a record of academic productivity, which may include involvement in collaborative and independent research efforts and other peer-reviewed published works are most appropriate for the Standing Faculty, Clinician-Educator track. The Clinician-Educator track includes practicing physicians, psychologists, biostatisticians, epidemiologists, informaticians, bioethicists, clinical, laboratory, and social scientists as well as others. It emphasizes sustained scholarly productivity. Faculty on this track are expected to demonstrate excellence in teaching while those with clinical responsibilities must also demonstrate excellence in clinical care. Assuming no extensions, the mandatory review for the Clinician-Educator track comes in or before the ninth year.

Individuals who contribute to an existing research program, are at least initially involved in primarily collaborative research, who will not care for patients, and who will not emphasize teaching are most appropriate for the Research track of the Associated Faculty. Assuming no extensions, the mandatory review for promotion in the Research track takes place in or before the ninth year.

Individuals who spend the majority of their time in clinical practice, are deeply engaged in teaching (often serving in important educational leadership roles) and whose major academic efforts are in areas of concentration strategically important to Penn Medicine, but do not focus on research efforts or

scholarly productivity are most appropriate for the Academic Clinician track of the Associated Faculty. Appointment at the assistant professor level of the Academic Clinician track will generally be for three years. Individuals, following review and approval by the COAP, may serve as Academic Clinicians at the assistant professor level without limit of time through successive reappointments.

The Tenure, Clinician-Educator and Research tracks all require continuous and incremental scholarly productivity, including peer-reviewed publications, for success. Across these tracks, the COAP recognizes a broad range of peer-reviewed scholarly activity, including but not limited to: all areas of biomedical and health-related research; implementation science; scholarship promoting community engagement, diversity, equity and inclusion; medical education; health policy; ethics; and other scholarly pursuits.

Process

A dossier consisting of a Personal Statement, Chair's Recommendation Letter, Academic Plan, curriculum vitae (CV), and depending on the track and appointment or promotion, internal and/or external letters and an Education Portfolio, is submitted by the chair to the Office of Academic Affairs. The Personal Statement is a critical part of the dossier and is an invaluable document to assure that a person reviewing the dossier understands the candidate's career narrative, including any mitigating factors that might have affected their development and trajectory. This narrative offers an opportunity to illuminate one's role in collaborative efforts, and to explain the rationale for transitions of research interests based upon evolution of the field and/or one's interests and expertise.

For the Education Portfolio, the Education Officer for the departmental COAP obtains comprehensive records on the candidate's educational activities, and then provides a detailed summary report to the departmental COAP. An Education Portfolio is not done for Research track faculty because teaching is not a factor in such promotion decisions.

For actions at the level of associate or full professor in the Tenure, Clinician-Educator and Research tracks, letters are requested from Extramural Consultants from peer institutions in the faculty member's field who are able to evaluate the candidate's academic impact and, where applicable, their clinical and teaching abilities. Extramural Consultant solicitation is conducted by COAP.

For actions at the level of associate or full professor in the Academic-Clinician track, peer references are solicited to evaluate the candidate's impact in the designated Area of Concentration and contributions to Education. Clinical Evaluations are solicited to assess the candidate's clinical skill and professionalism. Both solicitations are conducted by the department.

COAP STANDARDS FOR PROMOTION OR APPOINTMENT

Overview

All Faculty Tracks

Institutional citizenship and professionalism are also considered as part of the promotions process. Institutional citizenship includes service relevant to faculty member's academic activities and to the missions of the school and University. It encompasses efforts related to mentoring, professionalism, inclusion, diversity, and health equity. All PSOM faculty seeking promotion are expected to exhibit sustained professional behavior. Professionalism refers to exemplary behavior including the demonstration of honesty and integrity in all realms of work, respect for patients, colleagues, staff and learners at all levels, evidence of continuous learning and self-management toward a goal of personal

betterment, and the encouragement of questions, debate, and acceptance of diverse viewpoints without prejudice or bias. Department chairs are expected to attest to the sustained professionalism of a faculty candidate in the chair recommendation. Persistent professionalism concerns will be carefully considered during the evaluation process.

For candidates who are being proposed for appointment to the rank of professor or associate professor and have achieved the rank or equivalent at a peer institution, the COAP will consider the totality of the candidate's previous accomplishments, reputation, and the potential impact the candidate will have on the prestige and mission of the PSOM and the University of Pennsylvania. Previous leadership roles and prior institutional impact may be relevant for individuals being appointed to major academic leadership positions.

Standing Faculty and Research Track

Fundamental to promotion in the Standing Faculty and research track is evidence of continuous scholarly productivity and an evaluation of the totality of the impact of a candidate's body of work. Impact is typically assessed using metrics listed in Appendix A. Where possible, impact should include consideration of the validation and reproducibility of a candidate's work over time. Community engagement must be closely aligned with and inform a candidate's scholarly work if to be considered a substantial contributor to the overall assessment of impact. Such activities should reflect innovations in science, medicine and healthcare that lead to demonstrable improvement in knowledge, health (individual or population), health care or health delivery.

There is no set formula for promotion. Each candidate for promotion will have generated a highly unique set of contributions that will be independently evaluated. This independent review highlights the critical need for the Personal Statement, a well-described career narrative that identifies significant achievements and, when appropriate, mitigating circumstances. There must be clear evidence of national impact and recognition for consideration of promotion to associate professor and national/international impact for consideration of promotion to professor. An upward trajectory of an individual's achievements and impact will be carefully evaluated during consideration of promotion to professor.

Promotions to associate professor are generally not considered prior to the faculty member's final reappointment. A candidate who received an extension to their probationary period for any reason can be reviewed by the department *at the time of their original mandatory review year*, thus not using the extension. In such cases, the Chair's recommendation letter should indicate that the candidate is being recommended at the time of their original mandatory review year. If being proposed *before the original mandatory review year*, include a brief statement supporting an "early" proposal for promotion. The department and candidate should recognize the risk associated with this action.

Academic Clinician Track

Fundamental to promotion in the AC track is evidence of contributions to one's Area of Concentration, education, practice related activities, and engagement. Engagement in this context refers to institutional, community, national and international contributions that may be closely aligned with and complementary to a candidate's Area of Concentration or may be examples of institutional citizenship. AC Faculty are required to provide at least 100 teaching credits per year as defined by the PSOM.

Promotions to associate professor are generally not considered prior to an AC faculty member's second reappointment. The standard timeline has the promotion process begin in the department following Provost approval of the second reappointment, thus the process would begin at the start of year 7 and

the promotion could be effective at the start of year 8. Exceptional candidates can be put forward for promotion to associate professor at the time of the second reappointment (year 6) with the promotion effective at the beginning of year 7. Such candidates would be considered “early,” and justification must be included in the chair's recommendation.

Standing Faculty – Tenure Track

Promotion to Associate Professor

The main criteria for promotion is evidence of continuous scholarly productivity since the initial appointment to the Standing Faculty and the national impact of a candidate's body of work. Impact refers to the direct effect of one's work on science, medicine, healthcare, and/or our community. The assessment of impact for this rank will focus on the review of one's independent research program that has produced a series of peer-reviewed original research articles. The candidate is generally funded by highly competitive peer reviewed government and foundation-based awards for which the candidate serves as principal investigator. The impact of the candidate's work within their field of expertise and within team science is expected to have continuously evolved and/or expanded in a clear upward trajectory since their appointment and must be clearly described in the candidate's dossier. Collaborative and interdisciplinary research will also be considered especially when the faculty member's contributions were important to the success of the project.

Successful candidates will have had impact in their area of expertise such that their achievements will be acknowledged by Extramural Consultants. (Additional metrics of impact can be found in Appendix A.) In addition, there should be records of educational impact, professionalism, and institutional citizenship as well as clinical excellence for those involved in clinical care.

Promotion to Professor

The main criteria for promotion at this rank is evidence of continuous and upward trajectory of scholarly productivity since the last promotion that has resulted, when appropriate, in the international impact and recognition of the candidate's academic pursuit. The successful candidate will be among the top scholars in the country in their area of expertise, with evidence of having significantly expanded the impact of their independent research program since promotion to associate professor.

Over the course of their associate professorship, most individuals will have been awarded multiple highly competitive peer reviewed government and foundation-based awards as principal investigator and will currently serve as a principal investigator for one or more awards. The impact of the candidate's work within their field of expertise and within team science is expected to have continuously evolved and/or expanded in a clear upward trajectory since the last promotion and must be clearly described in the candidate's dossier. Collaborative and interdisciplinary research will also be considered.

Successful candidates will have significantly advanced science, education, medicine, and/or other pursuits in their area of expertise with such advancements acknowledged by Extramural Consultants. In addition, there should be increasing records of educational impact, sustained professionalism, and increasing institutional citizenship as well as sustained clinical excellence for those involved in clinical care. (Additional metrics of impact can be found in Appendix A.)

Standing Faculty – Clinician-Educator

Promotion to Associate Professor

The main criteria for promotion is evidence of continuous scholarly productivity reflecting a defined focus resulting in national impact of a candidate's body of work since their appointment. Impact for this

rank will include an assessment of scholarly productivity (defined as original peer reviewed publications, editorials, chapters, and reviews). (Additional metrics of impact can be found in Appendix A.) Collaborative and interdisciplinary research, and team science is expected and encouraged and will be strongly considered but the candidate's role must be clearly described in the dossier.

Successful candidates will have scholarly pursuits, as acknowledged by the Extramural Consultants, that have advanced an aspect of the PSOM's mission with respect to science, medicine, healthcare, education, community engagement, etc. Grant funding is not required but may be used as evidence to support an evolving reputation and scholarly impact. In addition, there should be records of participation and excellence in educational impact, professionalism, and institutional citizenship as well as clinical excellence for those involved in clinical care. Details regarding metrics of impact are in Appendix A.

Promotion to Professor

The main criteria for promotion is evidence of continuous and upward trajectory of scholarly productivity since promotion as associate professor that has resulted in an evolving national (often international) impact of a candidate's body of work. Impact at this rank will include an assessment of scholarly productivity defined as original peer-reviewed publications, editorials, chapters, and reviews in addition to other scholarly metrics listed in Appendix A. Community engagement must be closely aligned with and inform a candidate's scholarly work if to be considered a substantial contributor to the overall assessment of impact. Collaborative and interdisciplinary research, and team science is expected and encouraged and will be strongly considered but the candidate's role must be clearly described in the dossier.

Successful candidates will have continued to advance a scholarly aspect of medicine in their area of expertise with such advancements acknowledged by Extramural Consultants. Grant funding is not required but may be used as evidence to support reputation. In addition, there should be increasing records of educational impact, sustained professionalism, and increasing institutional citizenship as well as sustained clinical excellence for those involved in clinical care.

Associated Faculty – Research Track

Promotion to Associate Professor

The main criteria for promotion is evidence of continuous scholarly productivity since their last reappointment and the national impact of a candidate's body of work. Impact for this rank will include an assessment of collaborative or independent research of high quality with a distinctive, original, and expert intellectual contribution that is recognized by Extramural Consultants. A series of peer-reviewed original research articles in respected journals should present a coherent body of research accomplishments. As in the above Standing Faculty tracks, it is important that the dossier clearly communicates the candidate's specific contributions and impact in collaborative science. The candidate may have independent research grant support, usually from federal organizations, in addition to support from participation in collaborative grants. (Additional metrics of impact can be found in Appendix A.) Mentorship of graduate students or postdoctoral fellows, while not required, should be of high quality. In addition, there should be records of sustained professionalism and institutional citizenship.

Promotion to Professor

The main criteria for promotion is evidence of continuous and upward trajectory of scholarly productivity since the last promotion that has resulted in the international impact of a candidate's body of work. The successful candidate will be among the top scholars in the country and show leadership in

their area of expertise.

Successful candidates will have been awarded federal grants as principal investigator since their last promotion, will currently serve as a principal investigator for one or more federal grants, and demonstrated substantial growth in independent scholarly leadership. Research professors are expected to be members of national research societies, study sections and national organizations. Mentorship of graduate students or postdoctoral fellows, while not required, should be of high quality. In addition, there should be sustained professionalism and increasing institutional citizenship as well as sustained clinical excellence for those involved in clinical care. (Additional metrics of impact can be found in Appendix A.)

Associated Faculty – Academic Clinician Track

Promotion to Associate Professor

The main criteria for promotion is evidence of educational and clinical excellence as well as the impact of one's Area of Concentration. An Area of Concentration may have a clinical, education service and leadership, community service, health equity, diversity and inclusion, quality and safety, health policy, global health, informatics, or other focus. Engagement will be carefully considered and refers to institutional, community, national and/or international contributions that are closely aligned with a candidate's Area of Concentration. (Additional metrics of impact can be found in Appendix A.)

There must be evidence that the candidate has attained local recognition at their personal primary site (PPS) of practice within the Penn Medicine Community as a superior clinician and educator and made contributions to their Area of Concentration.

Promotion to Professor

The main criteria for promotion is evidence of evolving educational and clinical excellence as well as the evolving impact of one's Area of Concentration. There must be evidence that the candidate has attained recognition beyond their PPS to a regional or even national level (depending on the field) as a superior clinician and educator. (Further explanation of metrics can be found in Appendix A.) There must be evidence of a clear expanding trajectory in recognition of clinical skills and impact of contributions from their Area of Concentration since their promotion as associate professor. Generally, faculty are eligible for promotion to professor after five years in rank as associate professor (inclusive of one reappointment). Further description of promotion standards for faculty in the Academic Clinician track refer to the document on AC Criteria.

Associated Faculty – Clinical Track

Members of the Clinical Faculty are expert clinicians with some educational requirements. Clinical Faculty are required to provide at least 50 teaching credits per year as defined by the PSOM. Contributions in the areas of academic scholarship, medical administration and community service are especially welcomed. Ordinarily for appointment as Clinical Assistant Professor, the candidate is expected to be board eligible or certified in his or her specialty and to have evidence of clinical teaching experience (experience as a trainee is acceptable).

Clinical Associate Professor

Reappointment in the clinical track will occur every 5 years with the possibility of promotion after 5 years at each successive rank. Candidates must demonstrate excellence as a medical educator through participation in clinical teaching, lectures, and/or formal courses, a local reputation for delivering high quality clinical care, and show sustained professionalism. Contributions in other areas of academic

scholarship, medical administration, and community service will be considered. Exceptional achievements, such as scholarly contributions to the literature, national distinctions or unusual educational or administrative service, may justify accelerated promotion to Clinical Associate Professor. Candidates for initial appointment at a rank of associate or professor must have documented teaching excellence at a comparable medical school.

Clinical Professor

The position of Clinical Professor is reserved for regionally distinguished clinicians with a continuing and sustained high level of commitment to Penn Medicine. Promotion to this rank will require demonstration of ongoing commitment to and excellence in clinical care, education, and sustained professionalism. Exceptional achievements, such as scholarly contributions to the literature, national distinctions or unusual educational or administrative service, may justify accelerated promotion to Clinical Professor. Faculty are eligible to be recommended for promotion to the rank of professor after the first reappointment, no earlier than 5 years at the associate rank.

Other Categories

Colleagues may be proposed for appointment or promotion as Adjunct, Wistar, or Visiting Faculty. Criteria for these positions are available on the Office of Academic Affairs website.

APPENDIX A: DEMONSTRATING IMPACT FOR PROMOTION

Fundamental to promotion in all full-time faculty tracks (Academic Clinician, Clinician-Educator, Research and Tenure) is the totality of the impact of a candidate's body of work and the individual's upward trajectory over time. Impact refers to the direct effect of one's work on science, medicine, healthcare, and/or our community. The Clinician-Educator, Research and Tenure tracks emphasize scholarly achievements. Community engagement will be carefully considered and refers to institutional, local, national, and international community contributions (particularly to inclusion, diversity and equity) that are closely aligned with and complementary to a candidate's scholarly work.

The sections below highlight examples of how impact can be demonstrated and is not meant to be a checklist of necessary requirements to achieve promotion. The Personal Statement should reflect a description of demonstrated impact for the achievements listed.

Scholarly Activity

Fundamental to promotion in the Standing Faculty and Research track is evidence of continuous scholarly productivity and an evaluation of the totality of the impact of a candidate's body of work. Any area of research consistent with mission of the PSOM is acceptable as long as impact and an upward trajectory of an individual's achievements over time can be demonstrated.

Demonstration of impact requires evidence of successful translation of new knowledge into new approaches, techniques, devices, programs etc. and may include:

- Peer-reviewed research papers
 - Citations of work
 - Contribution to work
 - Authorship
- Grant funding
- Academic awards
- Participation in study sections, organizing committees, etc.
- Editorial leadership roles
- External lectures and invited talks
- Patents and commercialization aligned with primary research program
- Identifiable contributions to team science

Education

Fundamental to promotion in the Academic Clinician, Clinician-Educator, and Tenure tracks is the totality of the impact of a candidate's educational activities as measured by high quality engagement and excellence over time. Promotion to professor requires ongoing engagement and demonstrated excellence.

High quality engagement

- Teaching in any of the defined categories of education
- Leadership roles in teaching or educational programs
- Innovation in local classroom teaching methods or novel application of existing teaching methods
- Developing educational products such as curriculum, assessment tools or programs, policy statements, technologies such as simulation, etc.
- Leading or substantive participation in committees related to education
- Involvement in local mentoring programs, particularly outreach programs related to inclusion and diversity, and those that promote health equity
- Participation in CME, research, and inter-professional meetings
- Participation in the development of scholarly products related to education

Excellence in education

- Internal and external evaluations
- Outcomes of successful mentorship such as scholarly products, regional and national presentations by trainees, trainee career trajectory, etc.
- Course or program evaluations that reflect educational leadership roles
- Awards for teaching, mentoring, contributions and/or innovation related to education.
- Invited lectures to disseminate new knowledge related to successful education programs, interventions, curricula that have been generated by the candidate.
- Funding or scholarship specifically related to education.
- National leadership roles in education/training committees and professional societies

Clinical

For those faculty with clinical responsibilities, impact may be demonstrated as follows:

- Contribution to the development of innovative approaches to diagnosis, treatment or prevention of disease, applications of technologies and/or models of care delivery that influence care locally such as a community-based program, clinical care model, practice guidelines, an innovative application of an existing technology, etc.
- Service on committees in area of clinical expertise such as developing guidelines and policies for health equity, clinical management, evaluating clinical programs, etc.
- Leadership roles in professional organizations, courses or programs related to clinical expertise
- Invitations to share expertise through invited talks, book chapters, clinical reviews
- Awards for contributions and/or innovation in the area of clinical expertise
- Regional, national, and international patient referrals
- Engagement/collaboration in clinical trials
- Clinical awards