College of Optometrist of Ontario Research Panel Reviewer Guide

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1 Purpose

The College of Optometrists of Ontario established a program to provide funding for research that is rooted in the public interest regarding optometric eye care, professional practice, and the policy/regulatory landscape as it relates to optometry and other health professions. The administration of grant funds is overseen by the College's Research Steering Group, which relies on review panels comprised of experts in their fields to evaluate proposals that assist in the College of Optometrists of Ontario (COO) mandate of regulating the Optometry profession within Ontario, including:

- setting the qualifications required to enter practice;
- setting the conditions to maintain registration;
- developing quality assurance programs to promote clinical excellence;
- promoting safe and ethical practice by our members;
- developing professional and ethical standards and guidelines;
- enhancing and promoting access to vision care; and
- responding openly, fairly, and with authority when complaints arise.

The Research Steering Group is comprised of 4 members who have the responsibility of establishing and overseeing the review process and determining the release of funds to proposals endorsed by said panels. The Vice President of Council is the Chairperson of the Group with the President of the Council acting as Vice Chair. Additionally, an additional member is selected by the Executive Committee from among applications of interested members will be selected along with a member appointed by the Registrar with research background and credentials to serve as a Researcher at Large.

Any individual may submit one research proposal per review round in an area listed above which will be reviewed by the Research Steering Group at their next meeting. The deadlines for each review round will be determined on an ongoing basis.

Additionally, Council (or a Committee of Council) may periodically request research proposals within a specific committee mandate for additional support. In such a case, an RFP will be completed for review by the Research Steering Group, which will decided if the project should be funded or not.

2   Principles of Peer Review

As the Research Steering Group relies on the expertise and recommendations of experts in their field to endorse proposals, the integrity of the review panel's peer review process is of great importance. Review panelist must agree to, and abide by, the following policies in order to ensure fair and effective evaluation of submitted proposals for grant funding.

2.1   Confidentiality

No personal information is to be disclosed directly or indirectly to anyone other than the review panelists without that individual's prior written consent. All information contained within the proposals is to be treated as confidential and is not to be discussed with any individual, including other research panelists, outside of the Research Steering Group meetings. Research panelists are not to approach, or have communications with, any applicants regarding the content of their proposals including offering opinions on the chances of success or failure of the proposal.

All written materials used in evaluating the proposal will be made available to the applicant should they request it. The identity of the research panelists will not be revealed on the documentation and will remain confidential. Applicants are not to reach out to any members of the research panel; should the applicant have any concerns on the outcome of the Research Grant Review meetings, they may contact the Research Steering Group within 30 days of the decision being made known.

Throughout the review process, all documentation must be stored securely to prevent unauthorized access. Upon completion of the review process, and following the 30-day period for applicants to contact the Research Steering Group, review documentation must be destroyed or permanently stored in a secure manner.

2.2   Conflict of Interest

Conflicts of interest arise when a review panelist is unable to remain fair and objective when reviewing a particular application. The Research Steering Group will make every effort to ensure that review panels are fair and objective by identifying pre-existing conflicts of interest between review panelists and applicants. All review panelists must declare that they have no conflict of

interest when reviewing an application. Should a conflict of interest exist, the review panelist is required to recuse themself from the review process for that particular application.

Conflicts of interest may include, but are not limited to: personal relationship with applicant, position of financial gain by successful funding of application, scientific or personal differences with the applicant, affiliated with the applicant's work within the past three years, any other reason that the panelists feels the cannot provide an impartial review of the application.

2.3   Fairness and Transparency

Peer review of the applications by the review panel is dependent on all participants to be impartial, reasonable, and understanding of application's context. Review panelists agree to exercise rigorous judgement and to provide a thorough and constructive review that explain the reasoning for the application's rating.

3   Panel Organization

When convened, each Review Panel will consist of a Review Panel Chair and a number of additional members (typically between 2 and 5 reviewers in total). The number of members will be determined by the expertise needed and number of grants to be reviewed. The composition will reflect the need for adequate representation of knowledge and expertise and will also be sensitive to the desire to achieve broad representation, diversity, and inclusion.

Review Panel Chairs and members will be appointed by the Research Steering Group and will serve for an indeterminate period based on the need for additional reviewing.

4   Duties and Responsibilities

During the review process, the composition of the Review Panel may include three panelists: a primary reviewer (Review Panel Chair), a secondary reviewer, and a reader. Both the primary and secondary reviewers will complete the respective reviewer form which includes providing a summary and rating the application on the criteria described below. The summary must include a minimum of the following:

   i.   What is the proposal about?
   ii.   What is the state of knowledge?

iii.   Where is the gap of knowledge?

iv.   How does this proposal fill the gap?

v.   What are the greatest strengths of the application?

vi.   What are the greatest weaknesses of the application?

The reader is only required to read through and become familiar with the application. All other members of the panel are considered observers during the review of the application and will participate in the discussion of the application.

Immediately prior the review panel meeting the applications are arranged by overall rank of the average rating of the primary and secondary readers. An alternative arrangement may be used where applications are organized in order by reviewer to avoid discrepancy in reviewers (i.e., the highest rated application for each primary reviewer, followed by second highest rating, etc.). In either case, only applications where the primary or secondary reviewer gave a score of 7 or higher will be considered. During the meeting a first reading of the applications is carried out. The first reading is carried out by the primary reviewer reading aloud their written summary of the application. This process is expected to take 1-2 minutes per application. A vote is passed on the application to move onto the second reading. Once all applications that have met the minimum criteria (a rating of 7 or higher), or a pre-determined time for first readings have been met, the second reading of applications commences.

The second reading commences with applications in the same order as the first reading. All members of the panel are given the opportunity to read the reviewers' remarks and rating, then a discussion is opened. Each application is given a maximum of 10 minutes for discussion, whereupon a new rating score may be given to make it more in line with the other applications. This is an opportunity for panel members (particularly observers who have not read through the application in full) to ask questions and re-evaluate the initial rating that was given. Once all applications that passed to the second reading have been discussed and assigned any corrective ratings, the review panelists will arrange the applications in order of strength and present them to the Research Steering Group for endorsement.

5   Criteria

Applications for the research grant are assessed based on four equally weighted categories. Each category is given a score ranging from the lowest score of 1, to the highest score of 10. The

average score from each of the categories is assigned as the applications score, and only applications with a score of 7 or higher will be considered for funding. The assessment of the reviewer must be based solely on the information contained in the application material and no additional information (either in favour of, or against the application) must be taken into account. Information contained in the application may be verified before final issuing of grant funds.

5.1   Team Excellence

This category weighs the expertise and ability of the applicant(s) to conduct the proposed research in a proper and timely manner. Particular consideration is given to the contributions and demonstrated abilities over the past six years (not including the time for leaves of absence). Evaluation in this category is based on:

- Knowledge, background, expertise and experience of applicant(s)
    - Evidence could include: degrees, grants, awards, prizes, lectures, publications, committee membership, editorial or advisory boards, public outreach, etc.
- Quality of past contributions in the proposed area of research including: publications, conference presentations, books or chapters, patents, reports, etc. It is important to consider the quality of these contributions, and not simply quantity.
- Importance of contributions as demonstrated by the degree to which the contribution is used. This could be demonstrated by how the applicant(s) has advanced the field or contributed the development of standards or codes of practice.

The following table is a recommended guide for attributing a score in this category.

Exceptional (10)	Applicant is acknowledged as a leader in the proposed field with demonstrated excellence, accomplishments, and contributions in the area. Contributions are of the highest quality. Impact and importance is clearly evident and ground-breaking.
Very Strong (8-9)	Applicant has achieved excellence in the proposed field with accomplishments that are far superior to others. Contributions are of high quality. Impact and importance is clearly evident or influential.
Strong (7-8)	Applicant has achieved excellence in the proposed field with significant accomplishments. Contributions are of good quality. Impact and importance is evident.

Moderate (4-6)	Applicant has achieved excellence in the proposed field with reasonable accomplishments. Contributions are of decent quality. Impact and importance is somewhat evident.
Insufficient (1-3)	Applicant has achieved excellence in the proposed field with reasonable accomplishments. Contributions are of limited quality. Impact and importance is not evident.

5.2   Scientific Excellence

This category weighs the extent to which the application clearly presents an understanding of the current state of the proposed field and whether the proposal has a strong rationale, outlines innovative ideas, and contains solid hypotheses. Consideration should be given in to whether the proposed research is likely to succeed with both short- and long-term goals clearly defined, its significance to the field, and what is unique about the proposal compared to other research currently available.

The following table is a recommended guide for attributing a score in this category.

Exceptional (10)	Applicant has a clear understanding of the current state of the proposed field. The proposal contains exciting innovative ideas based on strong rationale with solid hypotheses. The proposal is unique, very significant and is very likely to succeed with clearly defined goals.
Very Strong (8-9)	Applicant has a clear understanding of the current state of the proposed field. The proposal contains some innovative ideas based on strong rationale with solid hypotheses. The proposal is somewhat unique, significant and is very likely to succeed with clearly defined goals.
Strong (7-8)	Applicant has a good understanding of the current state of the proposed field. The proposal contains innovative ideas based on strong rationale with solid hypotheses. The proposal is somewhat unique, significant and is likely to succeed with well defined goals.
Moderate (4-6)	Applicant has a good understanding of the current state of the proposed field. The proposal contains few innovative ideas based on decent rationale with decent hypotheses. The proposal is somewhat unique, somewhat significant, and is likely to succeed with defined goals.
Insufficient (1-3)	Applicant has a good understanding of the current state of the proposed field. The proposal contains few innovative ideas based on weak rationale with weak hypotheses. The proposal is somewhat unique, somewhat significant and is unlikely to succeed with poorly defined goals.

5.3 Methodology Excellence

This category evaluates the clarity and appropriateness of the methodology as demonstrated by detailed descriptions of the proposed methodology. The degree to which the proposed methodology addresses the goals and hypotheses are considered here. The methodology must align with the scope of the objectives and align with the goals of the proposal and the expertise of the applicant. Justification for the proposed budget is also evaluated here.

The following table is a recommended guide for attributing a score in this category.

Exceptional (10)	Proposed methodology is clearly defined and appropriate. The application clearly demonstrates how the methodology will contribute to the success of the research and aligns completely with the scope of the objectives and the expertise of the applicant(s). The requested budget is very appropriate.
Very Strong (8-9)	Proposed methodology is clearly described and appropriate. The application clearly demonstrates how the methodology will contribute to the success of the research and aligns with the scope of the objectives and the expertise of the applicant(s). The requested budget is very appropriate.
Strong (7-8)	Proposed methodology is well described and appropriate. The application clearly demonstrates how the methodology will contribute to the success of the research and aligns with the scope of the objectives and the expertise of the applicant(s). The requested budget is appropriate.
Moderate (4-6)	Proposed methodology is well outlined and mostly appropriate. The application demonstrates how the methodology will contribute to the success of the research and somewhat aligns with the scope of the objectives and the expertise of the applicant(s). The requested budget is appropriate.
Insufficient (1-3)	Proposed methodology is poorly described and mostly appropriate. The application does not demonstrate how the methodology will contribute to the success of the research and somewhat aligns with the scope of the objectives and the expertise of the applicant(s). The requested budget is not appropriate.

5.4 Relevance and Impact

This category evaluates the application's alignment to the Research Steering Group goals and the degree to which it will have an impact in the public interest regarding excellence in eye care, effective professional practice, and policies/regulations related to optometry.

The following table is a recommended guide for attributing a score in this category.

Exceptional (10)	The application is completely in alignment with the goals of the Research Steering Group. The research will have ground-breaking impact.
Very Strong (8-9)	The application is completely in alignment with the goals of the Research Steering Group. The research will have significant impact.
Strong (7-8)	The application is in alignment with the goals of the Research Steering Group. The research will have significant impact.
Moderate (4-6)	The application is in alignment with the goals of the Research Steering Group. The research will have some impact.
Insufficient (1-3)	The application is not in alignment with the goals of the Research Steering Group. The research will have little impact.

6   Scoring

After each category has been given a score, an average of the scored will be calculated as the application's score. A summary of the overall strength of an application based on its score is shown below.

7-10 = fundable; < 7 = not fundable

10	Exceptionally strong with essentially no weaknesses
9	Extremely strong with negligible weaknesses
8	Very strong with only some minor weaknesses
7	Very strong but with numerous minor weaknesses
6	Strong but at least one moderate weakness
5	Some strengths but also some moderate weaknesses
4	Some strengths but with at least one major weakness
3	A few strengths and a few major weaknesses
2	Poor - very few strengths and numerous major weaknesses

1	Very poor - no strengths and numerous major weaknesses

7 Acknowledgements

This document was established using the guidelines and practices of the following:

1. CIHR Peer Review Guide (https://cihr-irsc.gc.ca/e/49564.html)
2. NSERC Reviewer Guide (https://www.nserc-crsng.gc.ca/_doc/Reviewers-Examinateurs/CompleteManual-ManualEvalComplet_eng.pdf)
3. Fighting Blindness Canada Guide
4. NIH Grant Proposal Preparation

8 Appendices