MRF Grant Reviewing: Information, Guidelines, and Criteria

General.

The MUN Medical Research Foundation (MRF) was established in 1983 to assist the Faculty of Medicine to develop and maintain excellence in its programs of research. The MRF oversees the awarding of a number of grants each year, utilizing funding from a variety of sources including income from the MRF endowment. All areas of research and scholarship within the Faculty of Medicine are eligible to apply and receive MRF grants, and applications from all subject areas are encouraged.

Because MRF grant competitions are usually highly competitive, a detailed assessment of research proposals plays a key role in deciding which grant applications are funded. This assessment is the responsibility of the MRF Grants Review Committee, which is composed of 5 representatives from across the Faculty of Medicine (one appointed from BioMedical Sciences, one appointed from Community Health and Humanities, one appointed from Clinical Disciplines, one elected Faculty-member-at-large, and one appointed Dean's representative).

The main objectives of the review process are: i) to rank applications so that our limited funds will be allotted to best support the development, success, and excellence of our Faculty's research program, and ii) to provide applicants with constructive written feedback on the strengths and limitations of their proposed plan of research.

Please see <u>www.med.mun.ca/MRF</u> or consult the RGS Research Manager for further information.

Review Meetings.

<u>Initial Contact</u>. Members of the Grants Review Committee are contacted well in advance of the grants competition deadline to verify their availability to review, and to schedule the Grants Review Committee meetings.

<u>Review Assignments</u>. Shortly after the competition deadline, applications will be distributed by the RGS Research Manager. Each Grants Review Committee member is asked to briefly look over each application (list of investigators, summary page, and other application components if required) and (using a provided spreadsheet): i) report any potential conflicts of interest and ii) rate their ability to review each application. This information is returned to the RGS Research Manager, and used by the MRF Board to make reviewer assignments.

Applications are normally assigned to two reviewers who will each provide a written assessment of the merits of the application. Each member of the Committee will be assigned a number of applications to review in detail, the number depending on how many applications are received. External reviewers may also be sought if required. While detailed assessment of applications is a priority for the assigned

reviewers, all members of the Committee are expected to familiarize themselves with at least the main features (ie. summary page) of each application. This will not only facilitate Committee discussion and aid in arriving at a consensus score, but also helps in the fair scoring of applications from widely different fields. When the number of applications permit, applications can also be assigned to a third Committee member (a "reader") to review. Readers are expected to contribute to the Committee discussion, but are not required to provide a written review of the application. Committee members are expected to respect confidentiality, and to not communicate with the applicants or other faculty members regarding specific grant applications.

<u>Review Meeting Procedures</u>. A meeting is scheduled at least several weeks following the review assignments. One meeting is typically required, but one or more alternate meeting times will also be identified in case a member has to cancel. Reviewers are asked to submit written reviews and an initial score for their assigned grants to the RGS Research Manager in advance of the review meeting. This information is forwarded to the Scientific Officer, including a table to record the grant scores.

- 1. All members of the Grants Review Committee are required to be present for the deliberations and scoring of grants, except in the case of reviewers temporarily leaving the meeting due to conflict of interest.
- 2. For each application, the 2 assigned reviewers present their individual scores, and Committee discussion leads to arrival at a consensus score (by agreement or compromise). The Scientific Officer (or Chair) directs the process, keeping track of the scores, coordinating the discussion, and noting the main points of concern raised in the discussion.
- 3. Each Committee member (not including the Scientific Officer) then records their individual scoring of the application.
- 4. All individual scores must be within ±0.25 of the consensus score.
- 5. At the end of the meeting each Committee member's scoring form is to be signed and submitted to the Scientific Officer, who will deliver the forms to the RGS Research Manager in a sealed envelope. The final application score will be determined as the average of the individual scores.

Written reviews.

The principle investigator and project title should be noted at the top of written reviews. An extensive restating of the research plan or principle investigator's record is not necessary. The review should be balanced, outlining the strengths as well as the limitations of the application, and an indication of any particular factors which may have influenced the rating of the application. Comments should include constructive criticism that could be helpful to future submissions for funding. The review need not be lengthy: point-form may be used where appropriate (if due attention is given to clarity of the comments). The review should not state the fundability of the project or the identity of the reviewer.

Examples of factors that can be commented on in the review include the following:

• Was the research proposal well organized and written in a manner that is clear to a non-expert?

- Is the main purpose of the research (main aim, objective, question, or hypothesis addressed) clearly stated and compelling?
- Is the background section and rationale for the project valid? Compelling?
- Is the main idea or approach novel, and is any novelty and/or originality of the main idea and/or approach evident and clearly stated?
- Is the methodological approach appropriate and well explained?
- Do the proposed methods and overall research plan appear to be feasible?
- In the case of collaborations, is the contribution of each investigator clear and appropriate?
- Does the research team have appropriate experience and/or training for the proposed research?
- Is the significance/relevance of the project and its potential outcomes clearly stated (or otherwise evident)? Is the importance of the project compelling?
- How does the project fit with the previous body of work of the Principal Investigator or research team?
- What sort of impact is this research project likely to have on the Principal Investigator's longterm research plan? Do they have a long-term plan?
- How likely is this project to be productive in terms of research publications or other outcomes?
- How likely is this project to lead to an externally funded program of research?
- What did you like the most about this application? What did you like the least?
- Was the proposal compelling overall? If not, is there anything that could help?
- Was the budget appropriate? Does it require further clarification/justification?

Scoring.

<u>Purpose</u>. All applications must be scored because i) this provides useful feedback to each applicant, and ii) it is unknown how far down the list of applications funding will proceed (e.g. affected by available funds and success of some applications with other agencies).

<u>Scoring system</u>. For the time being, scoring will remain based on a five point scale as previously used by the CIHR (see table below). An application's score will determine its relative ranking among applications: that is, its priority for funding. In addition, the absolute level of the score is used to distinguish applications that are considered fundable (scores greater than or equal to 3.5) from those that are deemed not fundable (scores less than 3.5). The full scale should be used to assign a score relative to the standards of the relevant field of study.

Table: CIHR 5 point scoring system (with modified descriptors).

Score	Descriptor	Fundable ?
4.50 - 4.99	Outstanding	Yes
4.00 - 4.49	Excellent	

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3.50 - 3.99	Good to Very Good.	
3.00 - 3.49	Low priority or problems; requires revision.	
2.50 - 2.99	Major problems; requires major revision.	
2.00 - 2.49	Fundamentally flawed.	No
1.00 - 1.99	etc	
0.00 - 0.99	etc	

A great many issues may be considered in the scoring of an application including: the potential significance of the research proposal to the development of the research program; the stage of development of the researcher (ie. new vs established researcher); the track record of the applicant(s); the feasibility of the study; the resources available to the researcher(s), including other funds; the likelihood that the project could progress to receive external support; the establishment of a new, innovative, or otherwise exciting research idea or collaboration or approach or method, etc; the potential impact of the outcomes of the research; the originality and/or overall excellence of the proposed plan of research. Scores of 3.5 or higher are typically reserved for research proposals that are more and more compelling in terms of the project's novelty, originality, or innovation, the significance of its outcomes, the impact on the research program, the potential to lead to external funding, etc, and combinations of these considerations.

Precise scoring of applications can be quite challenging, especially when the areas of research across our Faculty are so broad and dissimilar. Please keep in mind that the MRF Review Committee represents a cross section of faculty asked to work as a group to decide how to best distribute limited internal funds in support of the development, success, and excellence of our Faculty's research programs, and to provide constructive feedback on the research proposals of our Faculty.

<u>Triage</u>. The purpose of the Grant Review Committee deliberations is to help determine the priority level for funding an application and to provide an opportunity for additional feedback on the application beyond that provided within the written reports of the two assigned reviewers. If both assigned reviewers are agreement that an applications score is below 3.0, and the Committee is in unanimous agreement, the application can be "triaged": that is, it need not be discussed further by the Committee. However, it is imperative that applications that are close to being funded receive a score, and that triaged applications receive appropriate written feedback that clearly outlines the limitations of the proposal.

Conflicts of Interest.

Reviewers will be provided with an opportunity to declare potential conflicts of interest before applications are assigned for review. Additional conflicts of interest may be realized during the review process. In the vast majority of cases, conflicts of interest can be avoided through the appropriate assignment of applications, and/or by excusing a Committee member with a conflict from the room

during the discussion and scoring of the application in question. When in doubt about a potential conflict of interest, raise it to the Committee's attention. The appropriate course of action can be settled by a vote of the Committee's voting membership (all members, not including the Scientific Officer), and/or through consultation with the Scientific Officer (or MRF Board Chair, if necessary).

Conflicts of interest would include if the reviewer:

- would receive professional or personal benefit resulting from the application being approved or rejected.
- are a relative or close friend, or have a personal relationship with the applicants.
- have had long-standing personal differences with the applicants.
- have been a supervisor or a trainee of the principle applicant in the previous 6 years.
- have worked closely with the applicant on major projects or grants in the previous 6 years (excluding minor collaborations).
- feel for any reason unable to provide an impartial review of the application

Feedback.

The MRF welcomes any comments or feedback you may have on our grant application and review processes. In particular, it would be helpful to know if there is anything we can do to clarify the process or make it easier. Please send any comments to: <u>rgs.researchmanager@med.mun.ca</u>.