SECOND EVALUATION REPORT: SPARC-PDFO INTERNAL REVIEW TRAINING PROGRAM (CIHR PROJECT GRANT)

A review of the second phase of the pilot program was conducted among the participants of SPARC's Internal Review process for the Fall 2019 Project Grant competition to gauge the **appropriateness and effectiveness** of the pilot training program. Adjustments to the program were also assessed based on recommendations identified in the first pilot evaluation report. The results of two separate surveys completed by the reviewers (postdoctoral fellows) and faculty applicants focused on the **learning experience** and the **quality and relevance** of the internal review feedback and are summarized below.

Key Findings:

- Postdoctoral fellow reviewers were very satisfied with the scope, content and delivery of the pilot
 program. They estimated spending ≈25 hours to complete the training program over a two-week
 period. Reviewers were enthusiastic to join the Alumni Network and participate as future mentors.
- Key outcomes included developing grantsmanship skills, participating in a forum to openly discuss feedback of draft applications, and gaining an in-depth understanding of the inner workings of a peer review panel.
- The written and verbal feedback provided by the internal review process was positively received by faculty participants and was viewed as relevant, objective and of high-quality.
- The mock panel review meeting which serves to operationalize the learnings of the training program and ensure quality assurance of the reviewer feedback was identified as a unique strength of the program.
- Reviewers sought more guidance on how to formulate a critique and increased access to past proposal reviews. Comparing and contrasting the internal review feedback against the feedback of CIHR Peer Reviewers (for resubmitted proposals) was viewed as a great learning exercise.
- No negative or inadequate elements were identified by the participants suggesting that the pilot program was practical and positively received.

Survey Summary

Survey 1: Postdoctoral Fellow Reviewers

The six-question survey summarized below was completed by all six fellows admitted to the pilot training program. They were asked to reflect on the training materials, activities and their overall experience in the program four weeks after the start of the program.

1. Reviewer expectations

As described on <u>SPARC's website</u>, the benefits of participation are developing grantsmanship skills, gaining peer review experience and creating networking opportunities. Overall, survey respondents agreed that their expectations had been met and expressed a high-level of satisfaction with the learning. The majority of reviewers highlighted the value of participating in the mock internal review panel meeting.

2. Training sessions

Reviewers were highly satisfied with the scope, content and delivery of the three-mandatory training Sessions (Orientation, Debrief, Mock Panel Review), and highlighted the mock panel review meeting as a

key program strength. They recommended that the curriculum and training materials be provided at the start of the program to maximize self-directed learning and workload planning.

3. Training outcomes

Collectively, reviewers identified grantsmanship and effective grant writing skills as their key learnings. Reviewers gained an appreciation for grant proposal reviews which focus on adjudication criteria – including sex and gender considerations – compared to manuscript reviews which hinge on the interpretation of experimental results. They also valued the knowledge gained on the inner workings of a review panel.

Overall, fellows estimated that they invested 27.5 hours (\pm 4h) to complete the two-week intensive program (12h training sessions + 15.5h take-home assignments). The estimate is in-line with last year's survey which indicated that 25 hours (\pm 4h) were required to complete the training program. (*N.B.* Participants in the second pilot were assigned a third proposal to review which resulted in a higher workload.)

4. Areas for improvement

Respondents indicated that additional guidance and resources aimed at formulating the written critique would be useful. Specifically, examples of constructive feedback and/or samples of CIHR peer review feedback from previously submitted applications – including an applicant's two-page Response to Previous Reviews section – were noted as valuable resources that could be better integrated in the program. It was also recommended that the group size be increased to eight reviewers to promote more discussion.

Survey 2: Faculty Applicants

The four-question survey summarized below was completed by six of the eight faculty applicants. They were asked to reflect on the written feedback provided by the postdoctoral fellow reviewers and the discussion that took place at the face-to-face meeting between reviewers and applicants.

1. Applicant expectations

Faculty applicants noted that the quality of the feedback was satisfactory and the <u>Internal Review process</u> met their expectations. The diverse scientific background and experience of the reviewers was noted as a strength although specialized/ discipline-specific expertise was also requested. Overall, applicants noted that the reviewers were consistent in identifying common strengths and areas of improvement for the proposals, and proficient in articulating their concerns and discussing possible solutions.

2. Quality of feedback

Overall, applicants were highly satisfied with the quality of feedback provided, noting strong scores across the five dimensions of SPARC's evaluation rubric (Appropriateness, Feasibility, Credibility, Communication and Value). There was a high level of consistency in the strengths and areas for improvement identified in the proposals by reviewers.

3. Areas for improvements

Suggestions included developing a structured approach to the discussion format between the reviewers and applicants, and considering an option to streamline the in-person discussion meetings for well-developed proposals (e.g. resubmissions). More time was also requested after receiving the proposal feedback to better consider the comments before participating in the in-person discussion meeting.

Appendix: Survey Question and Answers

Survey 1: Internal Review Training Program – Postdoctoral Fellow Reviewers

1. Expectations: Overall, did the training program meet your expectations*?

- The program definitely exceeded my expectations! I was not originally expecting to have the opportunity to review multiple rounds of a successful application and also have the chance to meet with the applicants who submitted proposals for internal review. The internal review session was also very well organized and really gave a good feel for what these sessions would be like!
- It exceeded my expectations. Very well-organized workshop, after which I felt prepared to write as well as review CIHR grants.
- Yes, it actually exceeded my expectations! The course provided a good introduction to what is involved/expected in grant peer review and provided an alternative perspective that needs to be considered when developing a proposal.
- Yes! It was great. The networking opportunities were a little bit less of a focal point but definitely the grantsmanship training and peer review experience were great.
- Yes absolutely. I had no specific expectations, but was interested in how the grant review process worked.
- Participating in the mock review session discussions was a very insightful and fun process. I enjoyed comparing reviews and the consistency across reviewers. One thing that would have been helpful would be to have better insight into what CIHR's expectations are in terms of grant quality.

2. Training: In your opinion, what were the three most important takeaways from participating in the training program?

- Better overall perspective of how to prepare a proposal.
- Key differences between reviewing a manuscript versus a grant proposal.
- The importance of formatting/organization of a proposal and writing to a general audience.
- The guidance given at the panel meeting to reach consensus for proposals that had differing preliminary scores.
- Grantsmanship: I have a much better feel for what a successful grant needs to look like!
- Gained experience critically evaluating submitted grant applications.
- The steps to peer review and what to look for when applying (ex. choosing an appropriate committee).
- Understanding the peer review process.
- Better understanding of the project grant funding opportunity and more familiarity with CIHR funding streams.
- A new appreciation that the academic background of a reviewer can impact the assessment/interpretation of a proposal.

2b. Training: How long did it take you to complete the following take-home assignments?

	Questions	n/a	<1h	2-4h	4-6h	6-8h	>8h	Avg	Tot
Total								•	27.5h
1.0. Orientation Meeting (3h)								3h	
	1.1. Review IR training materials & complete CIHR's Peer Review Learning Modules		4	1	1			2h	8h
	1.2. Complete the mock proposal review exercise	1	1	2	2			3h	
2.0. Debrief Meeting (3h)								3h	5h
	2.1. Review SPARC case study materials (i.e. from draft proposal to funded grant)		3	3				2h	511
3.0. Mock Peer Review Panel								3h	
(PRC) Meeting (3h)	3.1. Complete the review of two/three assigned proposals				2	2	2	7h	10.5h
	3.2. Revise & submit final IR written feedback and SO Notes (following the mock PRC)		6					0.5h	
4.0. Face-to-face (f2f) Internal								2h	2.5h
Review Meeting (2h)	4.1. Prepare notes & materials for the face-to-face IR meeting with the applicants	2	4					0.5h	2.511
5.0. Other Activities (e.g. preparation time)								0.5h	0.5h
6.0. Networking Luncheon (1h)								1h	1h

*It is expected that PDFs who complete the program will gain grantsmanship skills, peer-review experience, and networking opportunities.

3. Gaps & Improvements: Are there any gaps or areas for improvement?

- It would be beneficial to have access to all the training materials before the first session in order to be better prepared for the upcoming training sessions.
- The proposal grading system was ambiguous and guidance should be given for what constitutes a minor vs a major concern.
- Having additional time to review the other proposals (not the assigned proposals) before the mock review session.

4. Future: How can the pilot program evolve to better meet the needs of postdoctoral fellow and/or faculty participants?

- The program should be extended to more PDF participants and aim for a group of ~8 participants.
- It would be helpful to have access to more CIHR reviews to get a sense of what a thorough and effective review looks like.

	Questions	:)	: :(n/a
1.0. Overall Program Satisfaction		6	
2.0. 3h Orientation Meeting (Jul 9)	2.0 Overall Satisfaction	5	1
	2.1. Goals of the Training Program	6	
	2.2. Basics of CIHR Peer Review	6	
	2.3. Principles of Peer Review	5	1
	2.4. CIHR Project Grant program	5	1
	2.5. Sex and Gender Considerations in Health Research	5	1
	2.6. Mock Review Exercise	5	1
3.0. 3h Debrief Meeting (Jul 18)	3.0 Overall Satisfaction	5	1
	3.1. Discussion of the Mock Internal Review Exercise	5	1
	3.2. Roundtable discussion with Dr. Frances Chen	5	1
	3.3. Case Study (Grant Proposal)	4	2
	3.4. PDF evaluation rubric & evaluation survey	5	1
	3.5. Roundtable panel discussion with members of the Alumni network	2	3 1
	3.6. Next Steps (Reviewer Assignments)	5	1
4.0. 3h Mock PRC Meeting (Jul 30)	4.0 Overall Satisfaction	6	
	4.1. Proposal-Reviewer assignments	6	
	4.2. Discussion of proposals	6	
	4.3. Role of the Scientific Officer (SO) & Note taking process	6	
	4.4. Role of the Chair	6	
5.0. Mentorship	5.0. Would you return as a mentor to help train the next internal reviewer cohort?	5	1

5. Please rate the following sessions:

6. General Comments: For training and learning purposes, do you have any comments you wish to make on the training program?

- This was the most impressive and organized training type session I have ever attended at UBC!
- Excellent training! Please provide this to as many PDFs as possible!

Survey 2: Internal Review Training Program – Faculty & SPARC Participants

1. Expectations: Overall, did the feedback meet your expectations*?

- It is good to get feedback from reviewers from different backgrounds but I was hoping for a higher degree of scientific feedback (e.g. experimental approach).
- Yes, the comments were very much reflective of the resources provided. I appreciated the in-depth comments and practical suggestions.
- It exceeded my expectations. The group was extremely helpful in discussing my preliminary grant.
- Partially a few good points were raised even though the reviewers were not content experts.
- Yes, my specific questions were addressed. I have a strategy to move forward based on the feedback and discussion given.
- It was great and more than met my expectation. I think this was a great opportunity to meet with junior and senior researchers/health professionals and apply their thoughts and suggestions to improve our CIHR proposal.

2. Please rate the feedback provided in general terms:

Questions		
Appropriateness: Did the feedback specifically address the adjudication criteria and aid to strengthen the proposal?		
Feasibility: Was the feedback practical and addressable within the competition time constraints.	6	
Credibility: Was the feedback well described, justified and contained suggestions to address the identified concerns?	51	
Communication: Was the feedback written in clear, understandable and respectful language?	6	
Value: Did the feedback result in careful reconsideration, clarification or changes to the proposal?	6	
Overall: Were you satisfied with the feedback received?	6	

3. Gaps & Improvements: Are there any areas for improvement?

- More time to review the comments provided by the review committee before the in-person feedback meeting.
- A more structured approach to the discussion for the in-person feedback session.
- It would be helpful to have the feedback meeting sooner.
- Separate fully developed proposals from new/preliminary proposals to streamline the in-person discussion meeting.

4. General Comments: For training and learning purposes, do you have any comments you wish to make to the internal reviewers?

- The internal reviewers were very helpful, concise and encouraging.
- Very valuable process. Extremely important to have critical, honest feedback for CIHR project success.
- The internal reviewers could be a bit tougher in terms of their assessment; I would rather receive more blunt comments as it will be easier to find areas to improve.
- This was a great experience and I definitely hope to participate again.
- If possible, involve more reviewers with specialized expertise (e.g. economic evaluation, statistics, and clinical trials).

*SPARC Internal Review aims to **strengthen** and **accelerate** the development of new and/ or revised grant proposals by inviting peer feedback on the **project concept** and **study design** elements. Feedback will also consider the proposal's unique value proposition and provide input on the feasibility, originality and/or urgency of the proposed research study.