



## **Grant Review Process “Peer Review”**

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**Typical grant panel:** chairman  
scientific officer (keeps notes on discussion)  
10-12 members

**Committee Process:**

In preparation for the grant panel meeting

primary reviewer: writes detailed assessment  
secondary reviewer: writes assessment  
reader: reads application in detail  
external reviewers (2-3): writes detailed assessment



## **Committee Process**

All members should be familiar with each grant and external reviews

Committee members, not assigned the application, are only given the application and do not receive the appendices. Therefore do not rely on appendices for the proposed research

Committee members may only read the two summary pages of grants they are not assigned

**summary of proposed research**  
**summary of progress**

these two pages are very important



## Committee Process

### 1. Primary and secondary reviewers propose initial ratings:

	CIHR/MSFHR	VGH	NIH
outstanding	4.5 - 4.9	10	0 - 1
excellent	4.0 - 4.4	8-9	1 - 2
very good	3.5 - 3.9	7	
solid	3.0 - 3.4	6	3 - 4
needs revision	2.6 - 2.9	5	
need major revision	2.0 - 2.5	4	
seriously flawed	1.0 - 1.9	2-3	4 -5
not acceptable	0	0-1	

### 2. Triage:

Applications below NEEDS REVISION by both internal reviewers, and for which the external reviews are essentially in agreement, are NOT be discussed further unless requested by a committee member



**VANCOUVER HOSPITAL**  
& Health Sciences Centre  
**Committee Process**

2. Primary reviewer then secondary give detailed assessment  
  
external reviews are addressed  
committee discusses application
3. Two internal reviewers propose a consensus rating  
(averaged if they do not agree)
4. All committee members vote (secret ballot) within given range  
of consensus rating (eg +/- 0.5 ).
5. Committee never knows the individual rankings or average ranking
6. Granting agency decides cutoff and number of grants funded



## Criteria for review

### **Applicant:**

**Research experience:** previous training ie PhD, Post-doc etc.  
timely promotions

**Productivity:** quality over quantity of publications is most important  
(citation index, Impact factor: sometimes used)

**new investigators:** number and quality of first authored papers  
collaborations, second author etc. - explain contributions  
publishing throughout career (student, PDF )

**established investigators:** number and quality of senior authored papers  
collaborations  
supported students and PDF appear on papers

describe your contribution on collaborative publications



## **Profile: (mainly career awards)**

invited presentations at national and international meetings  
keynote lectures  
seminars at other institutions  
membership on grant or other national/ international committees  
awards for research  
collaboration with other research groups etc.

## **Factors in assessment**

How appropriate to the research proposed is the training or track record of the applicant(s)?

How important and original is the recent productivity of the applicant(s)?

How much confidence do you have that the applicant can do the work proposed?



## **Proposed Research:**

Very important to clearly state the SIGNIFICANCE and RATIONALE of the proposed research and how your proposed experiments will address the HYPOTHESIS and will ADVANCE the field.

State the significance / reasons for the proposed research before you describe the proposed experiments, this way the reviewer knows ahead of time WHY you are proposing the experiments

**Do not let the reviewer have to interpret the significance or wait until reading the entire application to find out. This applies to each section.**



## **Factors in assessment :**

How important and/or original are the hypotheses or the questions to be addressed, and how clearly are they formulated?

How important and original are the contributions expected from the research proposed? What is the potential for important new observations or knowledge?

How well will the proposed experiments address the hypotheses or questions?

How appropriate are the methods to be applied and the proposed analyses of data?

How well will the applicant implement new methods (to science or to the applicant) which are to be introduced and/or explored?

How well have the applicants anticipated difficulties in their approach and considered alternatives?

How critically is the relevant literature appraised and evaluated?



## Types of discussions “*in camera*” :

**Applicant :** does the investigator publish original/ novel papers and is a leader in the field or just a productive “follower”?,  
“quality” of journals in which applicant publishes  
Is the applicant recognized nationally? Internationally?  
Are letters of reference of value?

**Proposed research:** is the research novel and likely to yield results?  
If proposed research is ‘risk taking’ is there evidence of a track record of breaking new ground?

**Training environment:** is there a track record of successful training and have trainees gone on to become independent investigators?



## Types of discussions “*in camera*” :

### What can “kill” an application:

- poor productivity - pertains to all levels of career development
- misleading publication record (ie including non peer reviewed articles)
- experimentally flawed
- no demonstrated experience/familiarity with new area of proposed research
- missing letters of collaboration (particularly for new areas of research)
- apparent ignorance of advances in areas related to proposed research
- failing to give reference or credit to other investigators



**Budget:** zero base approach

**Summary for Final Rating:**

reflects evaluation of all aspects:  
(applicant and proposed research)

**productivity**  
**feasibility**  
**originality**  
**significance**



## **Vancouver Hospital Internal Pre- Review Process**

**Pre review by colleagues is absolutely essential !!!**

Responsibility determined by each Program or Centre or coordinated through UBC / VGH Pre review process

Investigators with experience on grant committees will review applications 3-4 weeks before deadline

Therefore, applications need to be prepared well ahead of deadlines



**CIHR Peer Review Process Information: posted November 13, 2001**

[http://www.cihr.ca/funding\\_opportunities/peer\\_review/ctteguide\\_e.shtm](http://www.cihr.ca/funding_opportunities/peer_review/ctteguide_e.shtm)