

CIHR BSC

Behavioural Sciences C
Committee Meeting Nov. 21-22, 2006

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how budgets are allocated

the process of committee review

some info about the current competition

importance of publication record

features of highly vs poorly rated grants

some things I found surprising & would have liked
to have known as an applicant

upcoming changes to CIHR

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Behavioural Sciences - A

basic behavioural studies (usually in animals)

BS - B

Clinical / applied studies in psychiatric or
neurologic populations

BS -C

Basic studies using cognitive, systems or
behavioural neuroscience approaches (in
humans or animal models)

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each institute (and each committee within an institute) is allotted a piece of the pie based on the number of applications directed at that institute / committee

committee ranks their applications and the top n get funded

n determined by overall CIHR budget and # applications to each institute & committee

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Who reads your grant

two “internal reviewers”

one “reader”

these three people are usually BSC committee members

they are likely **not** in your field

sometimes external reviews are solicited from specialists

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BSC 2005-6

Nicholas Swindale
(UBC, vision)

Esther Strauss
(UVIC, neuropsych)

Shari Baum (McGill, language)

Patrick Bennett
(McMaster, vision)

Daniel Bub (UVIC, neuropsych)

Julie Carrier (U de M, sleep)

Avi Chaudhuri (McGill, vision)

John Connolly (U de M, language)

Laurence Harris (York, vision)

Robert Harrison (HFSC, hearing)

Franco Lepore
(U de M, vision / audition)

Nancy Lobaugh
(Toronto, attention, memory)

Martin Pare (Queen's, vision)

Robert Zatorre
(McGill/MNI, auditory processing)

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Scoring

each internal reviewer announces their score,
to one decimal place, e.g. 4.1

- 4.4-4.9 outstanding
- 4.0-4.4 excellent
- 3.5-3.9 very good
- **not fundable in principle** -----
- 3.0-3.4 acceptable, but low priority
- 2.5-2.9 acceptable, but needs revision
- 2.0-2.4 needs major revision
- 1.0-1.9 seriously flawed
- 0-0.9 rejected

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Triage

Any grant with a mean score below 3.5 is flagged
for triage

if both internals agree, grant is not even discussed

grant is not funded, **no matter how much
money CIHR has**

applicant doesn't receive
score, no SO notes,
only internal reviews

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Discussion

First internal reviewer presents his/her
detailed review of your grant

review of the applicant

review of the proposal

strengths, weaknesses

First internal usually talks for 10-15 minutes

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Discussion

Second internal then presents their review

They usually talk for 5-10 min

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Discussion

the “reader” then has a chance to comment
on the grant

they usually talk for 2 or 3 minutes

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Discussion

Then there is general discussion among the
committee as a whole

significance of the work

strength of the proposal

how your grant compares with others

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Consensus Score

The two internals with input from the committee then decide on a “consensus score” to one decimal place (e.g. 3.9)

Then every committee member gets to cast their own vote, +/- 0.5 (e.g. 3.4-4.4)

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Ranking

At the conclusion of the meeting, votes are collected and a final score is assigned, to two decimal places (e.g. 3.96)

This allows grants to be ranked

- ★ no discussion of requested budget or term of grant (1-5 yrs) happens until after the grant is scored & ranked

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Ranking

top n / N grants are funded

june 2006: BSC: $n=10$; all op. gr. committees: 25% success

jan 2006: $n=8$; 25%

june 2005: $n=15$; 28%

jan 2005: $n=10$; 24%

this time: rumours are 15-18% success

$N=42$; $n?=6$ $n?=7$

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Budget

After the discussion of the scientific merits of the grant the budget is discussed

Discussion of the budget is totally independent of the discussion of the scientific merits of the grant

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Budget

In the current session any equipment requests were zeroed as a matter of course

Committee then proceeds to cut budget by eliminating some common requests

- summer students

- postdocs

- multiple graduate students

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Other stuff

Requested term of grant (3 yrs? 5 yrs?)

Committee can recommend shorter (but not longer) term

Any ethical concerns?

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Rinse and repeat ...

we spent about 16 hours over two days
going through the grants

42 grants

6 triaged

16 hours for 36 grants

about 30 min per grant

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Resubmit

over the last 7 competitions the success rate
for resubmissions has been around 30%,
significantly higher than for new applications
(~ 20%)

through one or two cycles of resubmission
and improvement, about 50% of applications
are eventually funded

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Resubmit

committee takes it into account when your highly
rated grant missed the cutoff in a previous round

but

your grant has to be highly rated

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Publication record

for a junior researcher:

1/yr in the past 5 yrs is absolute minimum

between 1 and 2/yr is “good”

between 2 and 3 is “very strong”

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Publication record

publications typically take at least 1 yr from conception of idea to acceptance of manuscript, especially for young researchers

you must have multiple projects on the go, happening in parallel

you must start publishing early

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Publication record

your first year of a faculty position will be unbelievably busy

it will be virtually impossible to start doing research right away

- ★ your productivity in the last 2 yrs of your PhD and your postdoc years will essentially determine your ability to get a CIHR grant during your first few years of your first job

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Fatal Catch-22

1. you don't have a strong publication record coming out of your PhD + postdoc
2. you arrive in your first job and your lab isn't ready for 6-8 months
3. you can't get a CIHR grant yet because your record is weak
4. money to hire RAs, postdoc, grad students may not be available
5. you don't publish much in the next year or two
6. you are identified in your dept as research-weak (no big grants, few publications)
7. you end up with heavy teaching load and other duties (administration)
8. you have less time for research
9. goto #5, cycle repeats

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Grant Killers

poor track record of productivity
hypotheses not clearly stated
big picture / big question not clear
no experience in proposed area of work
expert co-investigator sometimes helps

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Grant Killers

grant is difficult to read
little or no pilot data
even for a stated "pilot project grant!"
project is too ambitious
failure to discuss relevant literature

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Grant Killers

fundamental problem with method,
assumptions, predictions, hypotheses, logic
central issue/question/approach is not novel
significance / importance not demonstrated
(doesn't have to be applied/clinical
significance)

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Good grants

exciting main idea / question
novel, innovative, "cool"
good track record, productive researcher
proposed expts are approaches in which
applicant has demonstrated expertise
easy for a non-specialist to understand
every aspect of the grant

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Good grants

detailed descriptions of experiments:
methods, measures, analysis
detailed hypotheses & predictions
pilot data for **majority** of experiments
show:
 I can do these experiments
 results are working out as expected

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Recipe is simple

★these are difficult ingredients

- ★ start with a novel, exciting, innovative idea
 - relate your idea to existing literature
 - describe specific aims / hypotheses
 - describe in great detail, step by step, a set of experiments to test these hypotheses
 - make a case that you are already an expert in the proposed experimental methods

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Recipe is simple

★these are difficult ingredients

- describe predicted results
- say what you will do if results don't come out as planned
- ★ show pilot data that suggests most results will come out as planned
- anticipate questions / problems and defuse them, one by one

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Recipe is simple

make the grant totally **transparent**

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Surprising

reviews are **very** thorough

internal reviewers spend a lot of time with your grant

they pick through each proposed experiment, step by step

any missing details are noticed

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Surprising

often grants get low scores because of missing details

sometimes it's a problem that is **easily** addressed

the applicant has simply not addressed it

- ★ say everything that is relevant, anticipate obvious questions

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Surprising

external reviews are essentially irrelevant (at least for the grants we reviewed this time)

internal reviewers almost entirely determine the fate of your grant

- ★ you **MUST** write for the **internal**, not for a specialist in your field

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Surprising

- ★ if you can get the internal reviewer excited about your research, he/she will be **an advocate for your grant**
he/she will argue in favour of funding your grant
he/she will convince the committee about why it should be funded

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Surprising

- sometimes a committee member with very little knowledge about your field will say something uninformed that calls into question the legitimacy of your entire approach
it's up to the (usually non-expert) internal reviewer to defend your grant
- ★ it's up to **YOU** to give the internal reviewer the ammunition to do this

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Surprising

- currently, all equipment requests in your budget are discarded out of hand
even if research absolutely depends on new equipment
assumption that applicants will find funds / equipment elsewhere
- ★ don't "pad" your grant with equipment funds

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Surprising

budget is not considered at all when establishing your score

budget is totally independent of scoring / ranking your grant

★ a “modest” budget will not help you get your grant

you might as well ask for a lot of money (but you must justify the budget)

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Surprising

requested term of grant (up to 5 yrs) is entirely independent of the scoring / ranking of the grant

scoring / ranking is only dependent on the assessment of scientific quality of the proposed research

term of grant is assessed after scoring

committee can recommend shorter term

cannot recommend longer term

★ might as well ask for 5 yrs (within reason)

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Surprising

some budget items get cut for arbitrary reasons

summer students, multiple grad students, postdocs

(mostly) safe line items:

named technicians / research assistants

named postdoc (sometimes)

named grad students (one only)

services (e.g. magnet time)

expendables

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Surprising

some grants (especially resubmissions) are identified as medium-scoring grants that will never get a higher score, **no matter how much revision is done by the applicant**

score is limited by the novelty / significance / innovation of the research itself

★ you must propose important, innovative research

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Upcoming Changes

CIHR administration is considering eliminating the March 2007 competition
a decision will be announced in December

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Upcoming Changes

CIHR administration is considering eliminating the spring competition indefinitely

This would mean there would only be one competition per year

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Questions