How to Prepare a CIHR Grant Application
“To excel, according to internationally accepted standards of scientific excellence in the creation of new knowledge and its translation into improved health for Canadians, more effective health services and products and a strengthened Canadian health care system...”

Section 4, C-6, R.S.C. 2000
CIHR’s Four Research Themes

• Biomedical
• Clinical
• Health services and health systems
• Health of populations, societal and cultural dimensions of health, and environmental influences on health
### Biomedical
- Microbiology
- Oncology
- Genetics
- Pharmacology
- Cardiology

### Health Services and Health Systems
- Economy
- Political Sciences
- Sociology
- Geography
- Anthropology

### Clinical
- Kinesiology
- Medicine
- Psychology
- Social Work
- Nursing
- Sociology

### ETHICS

### Health of populations, societal and cultural dimensions of health, and environmental influences on health
- Performing Arts
- Visual Arts
- Religious Studies
- Music
- Communications
- Philosophy
- Literature
- History
CIHR Programs

• **Grant Programs: central funding**
  – Operating Grants
  – Team Grants
  – International Opportunities
  – Regional Partnership Programs

• **Grant Programs: Institutes and partners**
  – Bridge Funding / Priority Announcements
  – Strategic Initiatives / Request For Applications (RFAs)
  – Cross-cutter initiatives (e.g. Regenerative Medicine and Nanomedicine)
CIHR Programs

• Fellowships and Salary Programs
  – Training Programs
  – Salary Programs
  – Award Programs

• CIHR Innovation and Industry Programs
  – Knowledge Translation
  – Commercialization
  – Industry Partnered
  – Collaborative Programs
CIHR Funding Mechanisms

1. Operating
2. Pilot/High risk projects (limited duration and amount)
3. RCTs
4. New Team (combination of NETs, ICEs, CRDs)
5. Core Research Resources
6. Large Team
7. Clinical/Translational Centres
8. University-Industry
9. Invention/POP (Phases 1, 2, 3 of an Innovation Program)
10. Training (STIHRs)
11. Institutional Establishment
12. International opportunity
13. Development (for preparation of full proposals in certain of the above)
14. Support for scientific meetings
## Changes in Funding: 2000 and 2005

<table>
<thead>
<tr>
<th>Category</th>
<th>2000-2001</th>
<th>2004-2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grants &amp; Awards Budget</td>
<td>$339M</td>
<td>$619M</td>
</tr>
<tr>
<td>Biomedical</td>
<td>$269M</td>
<td>$430M</td>
</tr>
<tr>
<td>Clinical</td>
<td>$46M</td>
<td>$86M</td>
</tr>
<tr>
<td>Health Services</td>
<td>$8M</td>
<td>$40M</td>
</tr>
<tr>
<td>Population Health</td>
<td>$16M</td>
<td>$64M</td>
</tr>
<tr>
<td># of grants and awards</td>
<td>5663</td>
<td>7648</td>
</tr>
<tr>
<td># of researchers supported</td>
<td>5634</td>
<td>9402</td>
</tr>
</tbody>
</table>
Two major avenues of grant funding

OPEN COMPETITIONS
Operating Grants

Investigator-initiated research proposals

Any area of health research

REQUESTS FOR APPLICATIONS (RFAs)

Strategic Research Initiatives

Priority areas and terms of reference chosen by Institutes
OPEN COMPETITIONS

Operating Grants
Open Competition - Operating Grants

- Provides operating funds to support research proposals in all areas of health research
- Major funding mechanism: ~53% of CIHR budget ($347M in 2006-07)
- Also referred to as “MOP” (for MRC Operating Grant Program)
# Applying for a Grant: Timing

<table>
<thead>
<tr>
<th>Registration</th>
<th>Deadline</th>
<th>Peer Review</th>
<th>Notification</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 15</td>
<td>Sept 15</td>
<td>Nov - Dec</td>
<td>January</td>
<td>Apr 1</td>
</tr>
<tr>
<td>Feb 1</td>
<td>March 1</td>
<td>May</td>
<td>June</td>
<td>Oct 1</td>
</tr>
</tbody>
</table>
Open Competition - Operating Grants

- Over 50 Operating Grants committees
- Between 600 and 800 volunteer peers yearly
- Composition for Peer Review Committees:
  - Chair
  - Scientific Officer
  - Plus 6 to 18 members
- Review ~10 - 70 applications over 1 - 3 days, twice a year
Peer Review Committees - Operating Grants

- Aboriginal Peoples’ Health
- Behavioural Sciences A, B & C
- Biochemistry & Molecular Biology A & B
- Biological and Clinical Aspects of Aging
- Biomedical Engineering
- Cancer Biology and Therapeutics
- Cancer Progression and Therapeutics
- Cardiovascular System A, B & C
- Cell Biology and Mechanisms of Disease
- Cell Physiology
- Children’s Health
- Clinical Investigation A & B
- Dental Science
- Developmental Biology
- Endocrinology
- Experimental Medicine
- Gender, Sex and Health
- Genetics
- Genomics
- Health Ethics, Law and Humanities
- Health Services Evaluation and Interventions Research A & B
- Health Policy and Systems Management
- Humanities Perspectives on Health
- Immunology and Transplantation A & B
- Knowledge Translation and Exchange
- Medical Physics and Imaging
- Metabolism
- Microbiology and Infectious Diseases
- Molecular and Cellular Biology of Cancer
- Movement and Exercise
- Neurosciences A & B
- Nutrition, Food and Health
- Palliative and End of Life Care
- Pharmaceutical Sciences
- Pharmacology and Toxicology
- Psychosocial, Sociocultural and Behavioural Determinants of Health A & B
- Public, Community and Population Health A & B
- Respiratory System
- Social Dimensions in Aging
- Virology and Viral Pathogenesis
• AVISON, William. Family structure, stress, and mental health: Long-term consequences of single parenthood for mothers and their children (PSB)
• BARTLETT, Doreen. Understanding determinants of basic motor abilities, self-care, and play of young children with cerebral palsy (CHI)
• BISHOP, Joan. Testing a framework for comprehensive evaluation of outcomes for clients in community mental health services (HIS)
• CAMPBELL, Martha. Maternal and infant health, health services needs and utilization following term and preterm birth: Outcomes in a cohort assembled antenatally (PUB)
• FORD-GILBOE, Marilyn. The effects of personal, social and economic resources on physical and mental health of women in the early years after leaving an abusive partner (GSH)
• HARRIS, Stewart. Urban Aboriginal Health (Community Based) Sandy Lake School-Based Primary Prevention Program (ABH)
• JUTAI, Jeffrey. Dynamic program approach to modeling assistive technology device outcomes in low vision rehabilitation (HSI)
• MANUEL, Douglas. The equity in waiting time to see a specialist in southwestern Ontario (E-WAITS) study (HSR)
• MCWILLIAM, Carol. A study of the costs and outcomes of a flexible client-driven approach to in-home service delivery (HSR)
• MOTTOLA, Michelle. Capacity-building and participatory research development of a community-based Nutrition & Exercise Lifestyle Intervention Program (NELIP) for pregnant & postpartum aboriginal women (ABH)
• MOTTOLA, Michelle. Aboriginal Health Nutrition & exercise lifestyle intervention program (NELIP) for overweight & obese aboriginal and non-aboriginal pregnant & postpartum women (NUT)
• NISKER, Jeffrey. Theatre as an innovative tool for public engagement in health policy development (ELH)
• REID, Graham. Parenting matters: Helping parents with young children (RCT)
• SPEECHLEY, Kathy. Health-related quality of life in children with epilepsy: The first two years after diagnosis through parents' eyes (CHI)
• STEWART, Moira. Evaluation of an innovative on-line education to improve evidence-based family practice (HSR)
• WEIJER, Charles. Conceptual problems in research ethics III (ELH)
• WEEKERLE, Christine M. Maltreatment and adolescent pathways longitudinal study (GSH)
### Operating Grant Applications by Theme (Sept 2005)

<table>
<thead>
<tr>
<th>Theme</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Received</td>
</tr>
<tr>
<td>Biomedical</td>
<td>1295 (71 %)</td>
</tr>
<tr>
<td>Clinical</td>
<td>232 (13 %)</td>
</tr>
<tr>
<td>Health Systems / Services</td>
<td>117 (6 %)</td>
</tr>
<tr>
<td>Population Health</td>
<td>189 (10 %)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1833</strong></td>
</tr>
</tbody>
</table>
REQUESTS FOR APPLICATIONS (RFAs)
Requests for Applications (RFAs)

- Strategic funding opportunities launched primarily by Institutes
- Often supplemented by partner funding from outside CIHR
- May or may not be recurring
- Variety of funding mechanisms
### Applying in response to an RFA

<table>
<thead>
<tr>
<th>RFA Launch</th>
<th>Registration</th>
<th>Deadline</th>
<th>Peer Review</th>
<th>Notification</th>
<th>Funding Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>December</td>
<td>April 1</td>
<td>June 1</td>
<td>Nov - Dec</td>
<td>January</td>
<td>April 1</td>
</tr>
<tr>
<td>June</td>
<td>Nov 1</td>
<td>Jan 15</td>
<td>May - June</td>
<td>June</td>
<td>Oct 1</td>
</tr>
</tbody>
</table>

**Some RFAs may be launched with different deadline dates**
Some Recent Requests for Applications (RFAs)

1. Rural & Northern Health Research
2. Reducing Health Disparities & Promoting Equity for Vulnerable Populations (In partnership with the National Secretariat of Homelessness)
3. Healthy Developmental Trajectories of Infants, Children and Youth (Aimed at disadvantaged children)
4. Global Health Research Grants (Aimed at developing countries)
5. Knowledge Translation Strategies for Health Research
6. Environmental Approaches to Physical Activity, Healthy Eating, and Healthy Body Weight (Includes studies on the socio-economic and cultural determinants of obesity)
7. Ethics in Health Research
Some Specific Recent RFA Competitions

Chair in Neuroethics
May 1, 2006 registration deadline
$300,000 establishment grant & $50,000 per yr for 5 years = $550,000.
The Chair can also be nominated for a CRC Chair or equivalent for salary support.

Pilot Project Grants – Ethics
April 1, 2006 registration deadline
Up to $50,000 per yr for 2 years per grant; $300,000 per year available

www.cihr-irsc.gc.ca/e/780.html

New and relevant RFAs will be launched June 2007
Health Research Communications Awards
April 1, 2006 application deadline
$21,000 per year + $5,000 if held outside Canada, for up to 2 years.
Purpose is to build capacity in science journalism and biomedical communications. Available to those who have applied or those who are enrolled in journalism or communication programs with a human health and/or science backgrounds.

www.cihr-irsc.gc.ca/e/30091.html

New and relevant RFAs will be launched June 2007
Empirical and Conceptual Research on Institutional Conflict of Interest (ICOI) in Canadian Research Institutions (0 of 1 funded)

Ethical, Legal and Social (ELS) Issues in Health and Health Research - Research Network Grants (1 of 2 funded)
- R. Labonte (U Ottawa). Health in an unequal world: Global ethics and policy choices. $38,026 X 3 yrs.

Ethics Operating Grants (2 of 7 funded)
- K Oberle (Calgary). Nurses' perceptions of caring for patients in clinical studies. $14,711 X 1.5 yrs.

Facing our Future: Human Genetics, Ethics, Law and Society (2 of 3 funded)
- T Bubela (Alberta). Impacts of private sector representations of genomics on media coverage, public perceptions and health policy. $61,021 X 1 yr.
- B Williams-Jones (Montréal). Conflicting interests, benefit-sharing and university-industry relations: A socio-ethical analysis of commercial genomics research. $34,002 X 1 yr.
Empirical and Conceptual Research on Ethical, Legal and Social Issues in Studies Involving Pregnant Women and Children (1 of 2 funded)
  – R. Woodgate (Manitoba). Perceptions and Assessment of the Risks to Involving Children in Research: Perspectives of Research Ethics Board Members, Child Health Researchers, and Parents. $92,095 X 3 yrs.

>50 groups received $5000 at LOI stage. Full Applications now under review. Grants will be up to $200,000 per yr, for 3 to 5 years.
Other RECENT RFA Competitions - Results announced Fall 2005 (con’t)

Interdisciplinary Capacity Enhancement Grants - Reducing Health Disparities and Promoting Equity for Vulnerable Populations - LOI Stage:

Examples of titles for invited applications: www.cihr-irsc.gc.ca/e/30088.html

- B. Cameron (Alberta). Reducing health disparities and promoting equitable access to health care services for Aboriginal peoples: Developing sustainable treatment partnerships through interdisciplinary and intercultural knowledge exchange.
- H. Chaudhury (Simon Fraser). The Middle Years - Linking Housing, Employment and Women's Health.
- C. D’Arcy (Saskatchewan). Reducing health disparities in Saskatoon.
- C. Findlay (Ottawa). Environmental and Socio-Cultural Determinants of Diabetes in Aboriginal People and Incorporation of Traditional Knowledge and Community Health Management Views into Diabetes Prevention Programs.
- C. Forchuk (London Health Sciences Centre Res. Inc.). Oppression, Stigma and Discrimination Related to Mental Illness.
- C. Frankish (UBC). It Takes a Province - Reducing Health Disparities through the BC Homelessness & Health Research Network.
1. Conceptual and historical analyses of what it means to be a healthy human being in various cultures/religious/linguistic traditions and the implications that has for:
   a) conceptions of health and illness, life and death
   b) the ethics of health care
   c) the education of health care professionals
   d) the provision of health care
   e) decision-making around health research agendas and technical innovations
   f) the concepts of civic mindedness and public good
   g) the sense of self and identity

2. Contributions of literature and literary studies to various understandings of health and health care:
   a) use of narrative in the analysis of health experiences
   b) the role of metaphor in the interdisciplinary and public understanding of health and health care

3. Contributions of the performing and visual arts to health and health care

4. In light of new technologies and of unfolding social and cultural paradigms, what contributions can humanists make to the question of Nurture and Nature in health and health care that bear on public policy
Applying in response to an RFA

• Ensure that the proposal clearly addresses the specific requirements of the RFA
• Make it clear which question/issue in the RFA the proposal is addressing
• Clearly link the proposed topic to the eligible research area described in RFA
• If a Knowledge Translation (KT) plan is expected, provide one
Address selection criteria

- Relevancy of proposed research to the RFA
- Adequacy of research plan
- Originality, innovation
  - Concept
  - Technique
- Potential impact
  - Science
  - Health care/systems application
- Track record of applicant
  - Necessity for co-applicant, collaborator
- Research environment
Examples of Current RFAs

- Seed Grant: Boys and Men's Health
- Team Grant: Obesity and Related Diseases
- Team Grant: Pandemic Preparedness - Influenza Biology, Vaccines, Ethics, Legal and Social Research
- Operating Grant: Aboriginal Health Networks

For details and deadlines, see [http://www.cihr-irsc.gc.ca/e/780.html](http://www.cihr-irsc.gc.ca/e/780.html)
TIPS

For writing a successful grant application
Grant Writing Advice

http://www.cihr-irsc.gc.ca/e/27491.html
Applying for a grant

Being a Principal Investigator:

*Do you have*

- Appropriate training and publications
- Protected time for research
- Space and facilities
- Preliminary data to show feasibility
- Eligible position (or firm commitment of one)

*If not*

- Start out as collaborator
- “Seed” grants from local or specialized agencies enabling you to produce preliminary data
Applying for a grant
Adequate preparation:

• Stay up to date with changing opportunities and requirements
  – Registration requirements
  – Methods of submission
  – Grant committees

• Read and know the Grants & Awards Guide: [http://www.cihr-irsc.gc.ca/e/805.html](http://www.cihr-irsc.gc.ca/e/805.html)

• See “How to Apply for Funding:” [http://www.cihr-irsc.gc.ca/e/795.html](http://www.cihr-irsc.gc.ca/e/795.html)

• Visit the CIHR website ([www.cihr.ca](http://www.cihr.ca)) often!
Applying for a grant

Adequate preparation:

• Read relevant documents thoroughly
• Questions/unusual situations – consult CIHR staff
• Seek a mentor if you are new applicant
• Have application read by others, and not just your friends and collaborators. Start at least 6 months before deadline, complete the application 2-3 months before deadline.
• Revise, revise, revise
Applying for a grant

Review by colleagues:

Listen to what your reviewers say
- If they express a concern, recognize that there is likely a problem with the way that you have written something even if you do not agree with them

Don’t be defensive, try to see their point of view
- e.g., if they have come to a wrong conclusion, then think about what you might have written that has mislead them
Applying for a grant
Writing:

Remember:

Good grantsmanship
cannot save a bad idea

BUT

Poor grantsmanship
can sink a good idea
Applying for a grant

Writing:

• Write with the reader in mind: readers do not simply read, they interpret

• Readers form opinions about the proposal from the clues they receive from its organization and emphasis

• Information is interpreted more easily and correctly if it is in the right section

• Include comments to convince the reader of your convictions in the choice of activities
Applying for a grant

Writing:

• Let the proposal flow logically throughout
• The application should be easy to read and comprehensible
• Use simple declarative sentences
• Avoid use of imprecise words, jargon, unusual abbreviations, acronyms, and poor syntax
• Use short paragraphs and summarize often
• Proof-read! Proof-read! Proof-read!
Applying for a grant

Help yourself:

• Follow instructions exactly
• Adhere to format guidelines, e.g., font size, margins, page limits, etc.
• Use **bold**, *underlining* and *italics* to highlight key ideas (and names of *you* and your *team members* in any references cited); leave spaces and blank lines to break up text; use headings
• Select preferred review committee carefully: ask CIHR staff for advice
• Write the summary and key hypothesis and rationale sections for generalists, detailed work plan for specialists
Applying for a grant eSubmission:

• March 2007 Open Competition: applications to 32 committees via eSubmission (see http://www.cihr-irsc.gc.ca/e/28832.html)
• Sept 2007 Open Competition: all applications via eSubmission
• Ultimately, all applications to CIHR will be via eSubmission

https://www.researchnet-recherchennet.ca
Applying for a Grant

CIHR Application:

I. CV Module
II. Research Module
III. Budget Module
I. CV Module

General Information:

• A complete picture of the scholarly you
• Publication record is assessed according to the discipline to which you belong
• Done through Common CV website

http://www.commoncv.net/index_e.html
I. CV Module

Track Record:

- Academic & Research Training
- Honours & Awards
- Publications
- Research Accomplished
- Independence & Originality
- Grant Funding
- Leadership
- Mentorship
II. Research Module

Writing: in 11 pages explain

• What you want to do
  – central hypothesis/research question: the big idea
  – plus specific objectives (or aims)

• Why this is a reasonable thing to do
  – review of previous work by you and others,
  – succinct rationale for project (concept and approach)

• Why this is important
  – significant new knowledge to be obtained
  – improvements to health which will result
II. Research Module
Writing: in 11 pages explain

• **How you are going to do it**
  – detailed work plan, logical sequence and timelines
  – analysis and interpretation of results
  – pitfalls, ways around them, alternatives

• **Why you should do it**
  – relevant prior experience and skills
  – collaborators for technical gaps
  – preliminary data showing feasibility
III. Budget Module

Allowable expenses:

• What you need to do it (e.g.,)
  – Supplies
  – Personnel (research assistants, trainees, interviewers) - named, if possible
  – Equipment, database access
  – Services (photography, computing)
  – Travel to present findings, or for collaboration

• Don’t ask for
  – Salary for applicants except if they are trainees or research associates on the grant
  – Infrastructure costs (space rental, heat, light, furniture, regular telephone service, secretarial support, etc.)
III. Budget Module

Justification of budget:

• The application must provide a detailed justification of all costs. For a complete listing and description of allowable costs and activities, see the *Tri-Agency Financial Administration Guide, Use of Grant Funds*:

  http://www.nserc.ca/professors_e.asp?nav=profnax&lbi=f3

• Be clear about other sources of funding that are held or applied for: any potential overlap with other sources of funding must be justified
CIHR Peer Review

Peer Review Committees

Peer Review Process
Selecting the right committee

- Look up committee mandates on web page
- Look at grants successfully funded by committee
  (results are posted in various ways, including by committee)
  [http://www.cihr-irsc.gc.ca/e/25845.html](http://www.cihr-irsc.gc.ca/e/25845.html)
- Consult CIHR Funding Database
  [http://www.cihr-irsc.gc.ca/e/826.html](http://www.cihr-irsc.gc.ca/e/826.html)
- Ask the Deputy Director responsible for the committee for advice
Selecting the right committee

- Applicants indicate first and second choice of peer review committee
- If CIHR feels that committee choice is not appropriate, applicant is contacted
- Applicant has final say in choice of committee, but following CIHR’s advice is highly recommended
- If necessary, additional expertise is obtained by inviting extra members in person or via teleconference, and/or external reviews
Consider potential readership

• Grant applications are not like a journal manuscripts that are only read by specialists
• Summary, generally read by all committee members, should be directed to a more general audience
• Research plan, read by internal and external reviewers, should be more specific
• Lay summary (Community reviewer)
Evaluation criteria

• Significance:
  – Relevance to health
  – Knowledge of the field
• Approach:
  – Feasibility of work plan, usefulness of results
  – Clear, falsifiable hypothesis or central research problem
• Novelty:
  – Originality and innovation in concept or approach
• Applicant(s):
  – Relevant experience
  – Productivity and track record
• Research environment:
  – Institutional support
  – Available infrastructure
## Ratings Scale

<table>
<thead>
<tr>
<th>Descriptor</th>
<th>Range</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>outstanding</td>
<td>4.5 – 4.9</td>
<td>MAY BE FUNDED – WILL BE DISCUSSED BY THE COMMITTEE</td>
</tr>
<tr>
<td>excellent</td>
<td>4.0 – 4.4</td>
<td>MAY BE FUNDED – WILL BE DISCUSSED BY THE COMMITTEE</td>
</tr>
<tr>
<td>very good</td>
<td>3.5 – 3.9</td>
<td>MAY BE FUNDED – WILL BE DISCUSSED BY THE COMMITTEE</td>
</tr>
<tr>
<td>acceptable, but low priority</td>
<td>3.0 – 3.4</td>
<td>NOT FUNDABLE – MAY OR MAY NOT BE DISCUSSED BY THE COMMITTEE</td>
</tr>
<tr>
<td>needs revision</td>
<td>2.5 – 2.9</td>
<td>NOT FUNDABLE – MAY OR MAY NOT BE DISCUSSED BY THE COMMITTEE</td>
</tr>
<tr>
<td>needs major revision</td>
<td>2.0 – 2.4</td>
<td>NOT FUNDABLE – MAY OR MAY NOT BE DISCUSSED BY THE COMMITTEE</td>
</tr>
<tr>
<td>seriously flawed</td>
<td>1.0 – 1.9</td>
<td>NOT FUNDABLE – MAY OR MAY NOT BE DISCUSSED BY THE COMMITTEE</td>
</tr>
<tr>
<td>rejected</td>
<td>0.0 – 0.9</td>
<td>NOT FUNDABLE – MAY OR MAY NOT BE DISCUSSED BY THE COMMITTEE</td>
</tr>
</tbody>
</table>
Peer review process

- 2 internal reviewers provide oral and written reports and initial ratings (from 0.0 to 4.9)
- 1 reader comments but does not have to provide a written report or rating
- In some cases external reviews may also be requested
- Committee members listen to reviews, discuss application, and reach a consensus rating
- Each member rates privately (± 0.5 from consensus)
- Budget is discussed and recommended
- Process takes ~15-45 minutes, then on to the next....
Competition results

- Only applications rated $\geq 3.50$ are fundable.
- Applications are ranked within each committee according to their final unweighted average ratings.
- Funding of an application is determined by its rank, not rating.
- Success rate is the same across all Operating Grant committees.
- Budgets often cut across-the-board by a common percentage.
- Funding usually for 3-5 years, minimum 1 year.
Feedback to applicant

• Internal reviews (anonymised), Scientific Officer’s notes of discussion, and external reviews when available (through ResearchNet)
• Read, get mad, read again after a week, take advice (reviewers and colleagues)
• CIHR does **not** have an appeals process. If not funded, can re-apply next competition.
• Resubmission: 2 pages to *politely* respond to reviewers’ comments and indicate how you have addressed the issues they have raised. The response must be self-contained and understandable as a stand-alone document.
Common problems
A Peer Reviewer’s perspective

- Subject not important enough
- Lack of originality
- Study not likely to produce novel information
- Studies based on a shaky or non-falsifiable hypothesis (or, lack of hypotheses)
- Feasibility is questionable
- Alternative hypothesis not considered
- Failure to address potential pitfalls
- Methods unsuited to the objective
The problem is more complex than the PI appears to realize
Too little (too much) detail in the research plan
Over-ambitious research plan with an unreasonable amount of work
Direction or sense of priority not clearly defined
Inexperience with the proposed work or techniques (get Co-Applicants)
Lack of independence of the researcher
Common problems
A Peer Reviewer’s perspective

• A “fishing expedition,” lacking solid scientific basis
• Rationale for experiments not provided
• Interdependency of specific aims
• Relevant controls not included
• Lacks sufficient preliminary data
• Not clear which data were obtained by the investigators and which reported by others
Obligations of Grantees

- Acknowledgment of CIHR funding in publications
- Advise CIHR of upcoming communications
- Change of status/eligibility
  - Relocation
  - Sabbatical
- Progress reports (5+ year grants)
- Serve on Peer Review Committees if asked
Most scientists regarded the new peer-review process as ‘quite an improvement.’

Visit us often at www.cihr.ca

• Current funding opportunities:  
  http://www.cihr-irsc.gc.ca/e/780.html
• Grants and Awards Guide
• Database of funded research
• Details about peer review and merit review processes
• Application forms
• Staff contacts for assistance of any sort: you will reach a person!
  http://www.cihr-irsc.gc.ca/e/13820.html