Applying to the Discovery Grants Program
June 29th, 2011

Dr. Vanessa Auld, University of British Columbia

Nicole Bennett, SPARC, NSERC/SSHRC IR Officer

Outline

- Overview of NSERC and Discovery Grant Program

- Statistics: National and UBC

- Applying to the Discovery Grant Program

- Evaluation of Discovery Grant Applications

- Top Reasons Why Grant is not Funded

- NSERC Eligibility

- Questions and Discussion

Overview of NSERC & Discovery Grant Program

NSERC Goals

1. **Advancing Knowledge, Seizing Opportunities**
   - Risk, innovation, put Canada on the map

2. **Building Prosperity Through Research**
   - Currencies: economic, industry, and social capital
   - Addressing Canadian opportunities and challenges
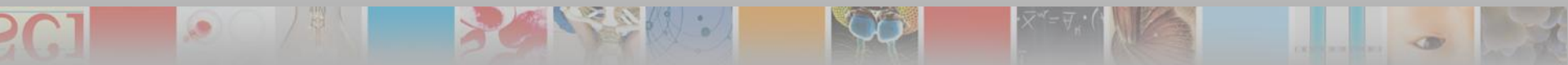
3. **Inspiring the Next Generation**
   - HQP

4. **Showing the Value of R&D Investments**
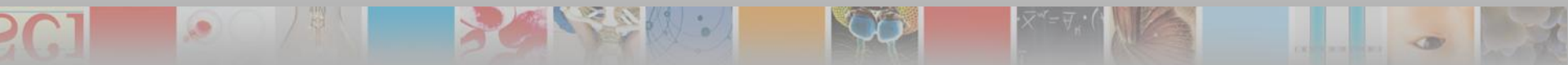   - Showcase the results

5. **Increasing Visibility of Research**
   - Knowledge translation and dissemination

Discovery Grants (DG) Program

- NSERC's largest and longest-standing program.
- Supporting ongoing research programs with **long-term goals (a program of research)**, rather than a single short-term project or collection of objectives.
- Typically 5 years
- Three Evaluation Criteria:
  - **Excellence of the researcher**(s) as demonstrated by the quality and impact of their recent research achievements;
  - Merit of their research **proposal**; and
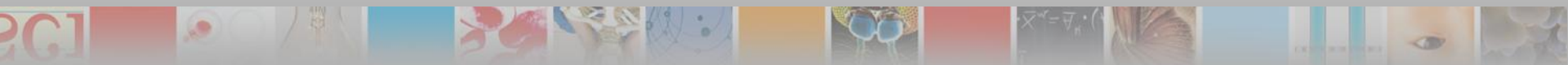 - Achievements in, and plans for, research training **(HQP)**.

NSERC DG Statistics: National & UBC

NSERC DG Statistics: 2010 & 2011

	National		UBC		U of Toronto	
Year	2010	2011	2010	2011	2010	2011
Total applications	3355	3482	194	190	207	?
Success rate	58%	53%	66%	74%	71%	?
Average grant	$33,129	$32,186	$37,793	$36,464	$39,812	?

NSERC DG Statistics - 2011

Institution	Early Career		Established - Renewal		Established – no previous grant	
	Success Rate	Average Grant	Success Rate	Average Grant	Success Rate	Average Grant
UBC	**57%**	**$23,231**	**91%**	**$40,127**	**49%**	**$26,714**
U of T	65%	$28,308	86%	$40,951	45%	$33,329
Alberta	58%	$20,133	82%	$36,488	48%	$29,500
Queens	50%	$22,250	77%	$43,487	59%	$27,868
Waterloo	86%	$20,389	76%	$33,341	39%	$30,083
McGill	63%	$22,684	77%	$39,463	50%	$35,533
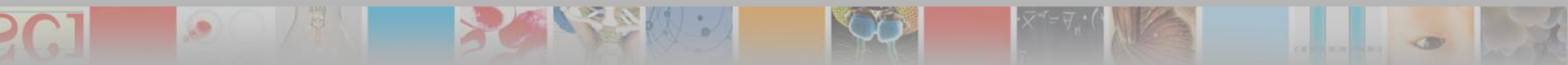
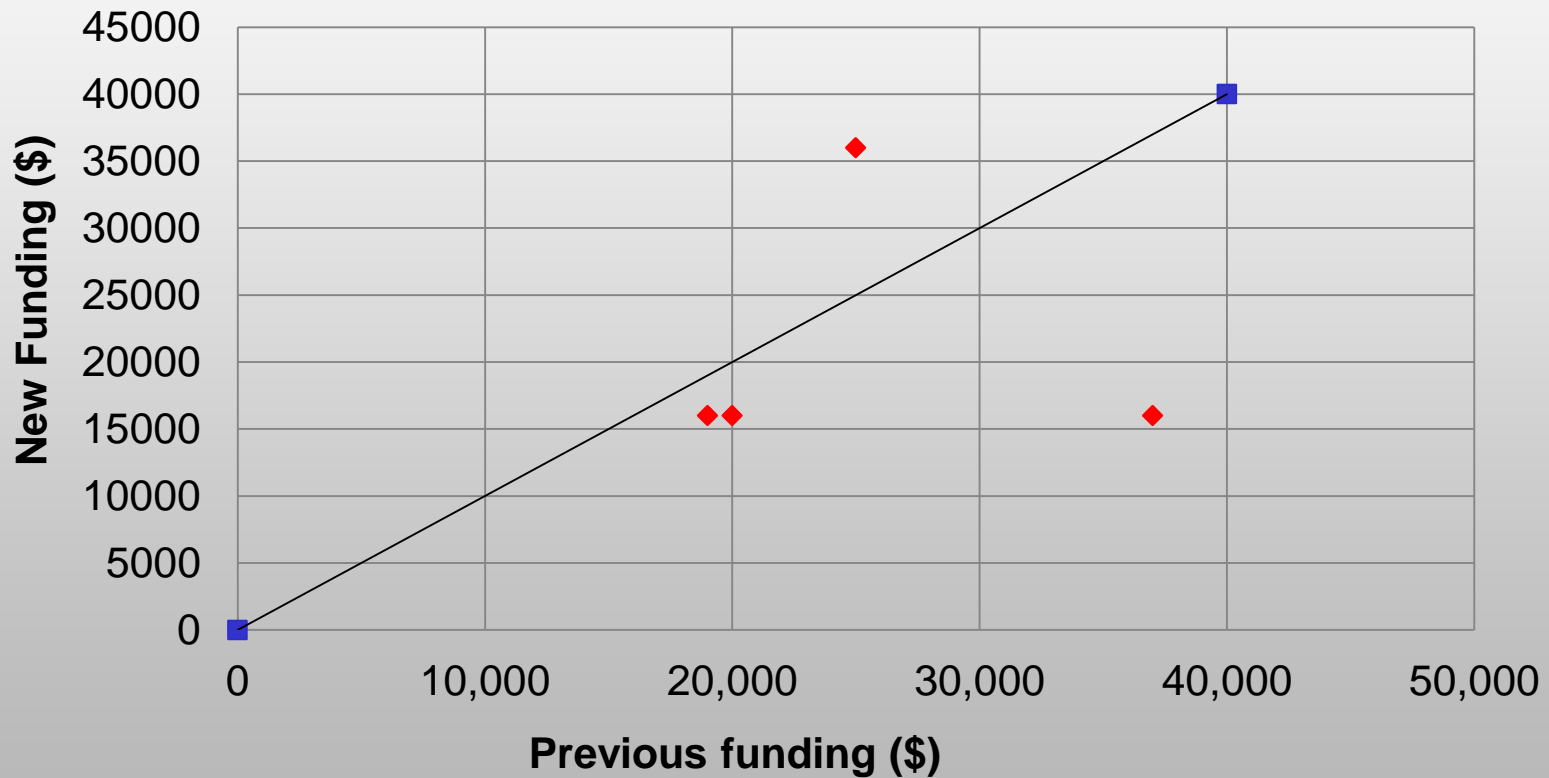# NSERC DG Change in Funding UBC Faculty of Science (2010 to 2011)
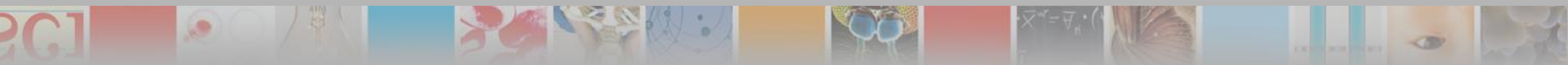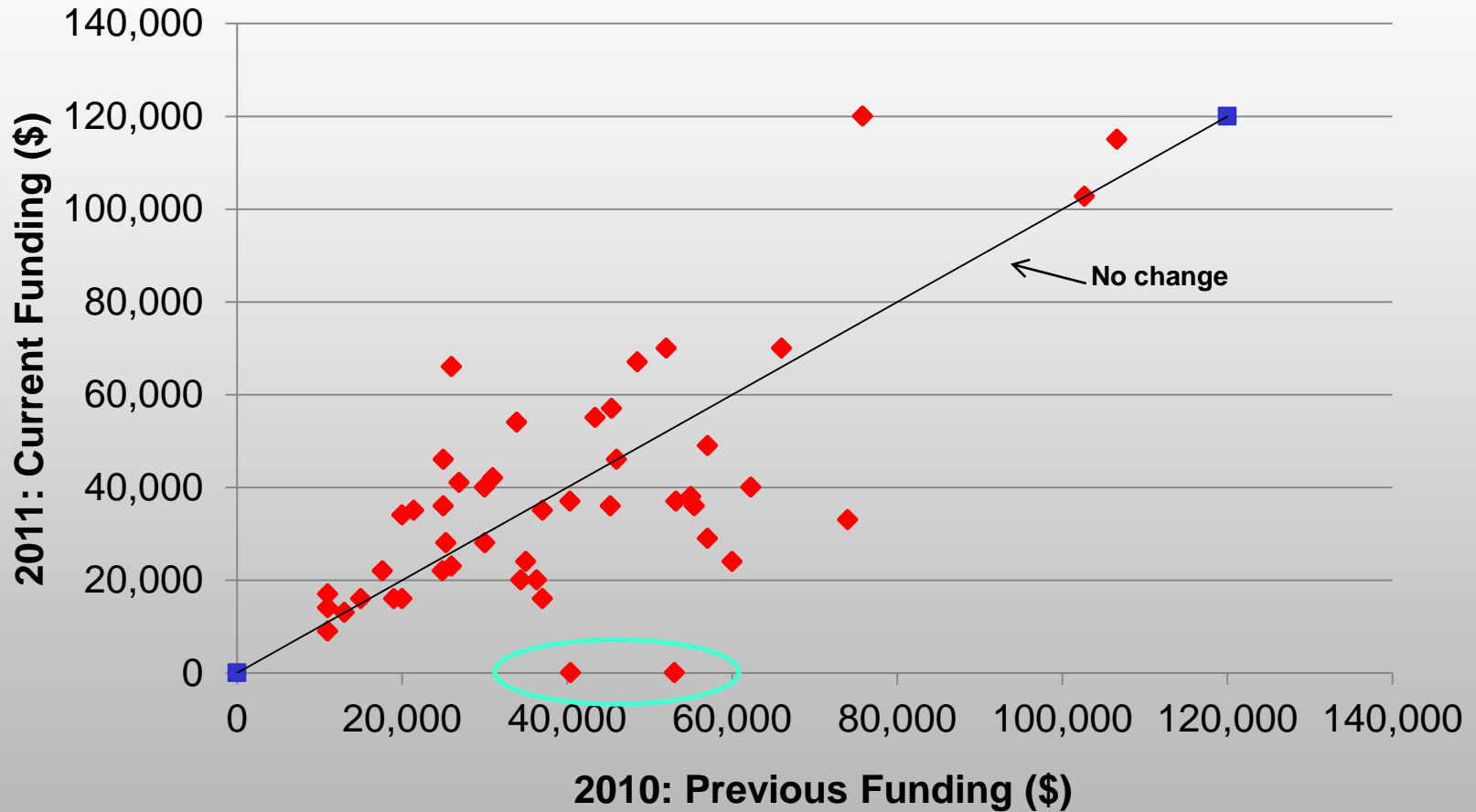
NSERC DG Change in Funding (2010-2011)

Department of XYZ, UBC Faculty of Science

Applying to the Discovery Grant Program

Life Cycle of a DG Application

August 1
Submission of Form 180

September-October
Initial assignment to EG and contacting of Referees

November 1
Submission of Grant Application: Form 100 & 101

Mid-November
Applications sent out to Referees

Early-December
Evaluation Group Members receive applications

February
Grants Competition

March – April
Announcement of Results

Internal Review (IR)
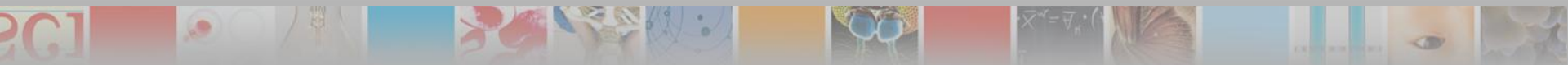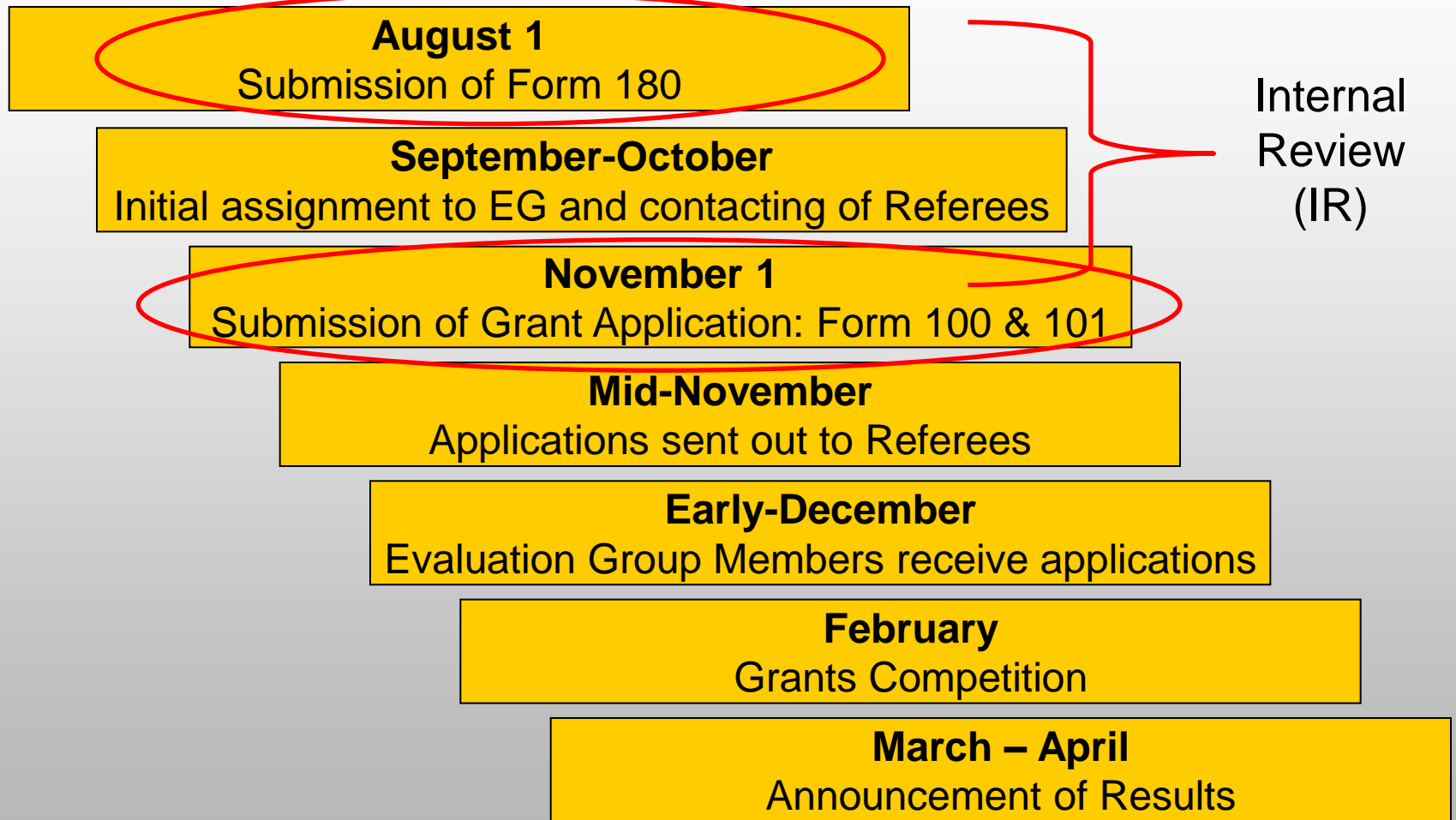
Notification of Intent (NOI) to Apply for a Discovery Grant - Form 180

Deadline August 1

- Online submission only
- "Adverse consequences if not submitted"

Purpose of Form 180

- Primary Evaluation Group, or joint review between EG is beneficial
- Selection of external referees

Instructions here: http://www.nserc-crsng.gc.ca/OnlineServices-ServicesEnLigne/instructions/180/e.asp

Evaluation Group & Research Topics picked from here: http://www.nserc-crsng.gc.ca/Professors-Professeurs/Grants-Subs/DGPList-PSDListe_eng.asp
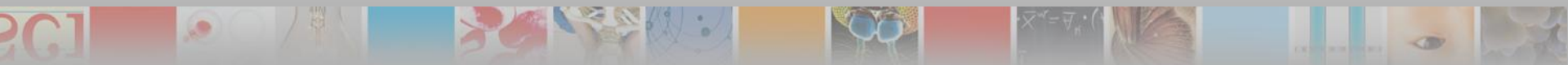
NOI - Form 180 (cont'd)

1. Evaluation Group (EG) assignment

2. Research topics that describe proposal

- Up to 5, in priority order, 1st has to be within EG

3. Key Words (up to 10) that describe proposed research – important in the selection of external reviewers

4. One page summary of proposal

- The objectives of the proposed research program;

- The scientific approach; and

- The novelty and expected significance of the work to a field or fields in the **natural sciences** and engineering.
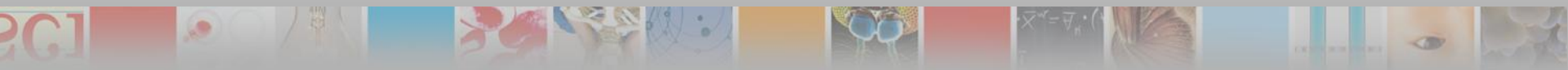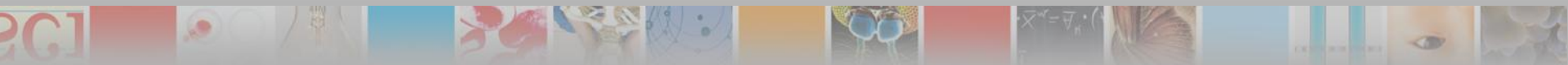
NOI – Form 180 (cont'd)

5. List of external referees

- Can append a list of reviewers you <u>don't</u> want used <u>as separate attachment</u>

6. List of co-applicants (if team grant)

7. List of contributions

- Past six years (inclusive of current year)
- Contributions used to assess EG only (no affect on final evaluation)!

Personal Data Form - Form 100

Deadline November 1

- START NOW

- All applicants and co-applicants fill this out; it is attached to all NSERC grants

- Text must conform to General Presentation standards otherwise may be rejected

Purpose for Form 100

- Used by Reviewers to assess **Excellence of Researcher** and **HQP**

Detailed instructions here: http://www.nserc-crsng.gc.ca/OnlineServices-ServicesEnLigne/instructions/100/e.asp
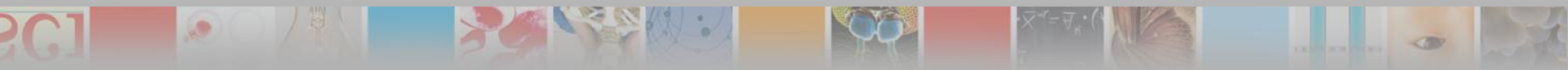
Personal Data - Form 100 (cont'd)

1. **Personal Profile**
- NSERC pin
2. **Current Employment**
3. **Address**
4. **Academic Background**
- Degrees
5. **Academic, Research & Industrial Experience**
- Employment History including Admin experience
6. **Areas of Expertise**
- Research subject codes (http://www.nserc-crsng.gc.ca/Help-Aide/Codes-ListeDeCodes_Eng.asp)
- Key words (research, equipment, tech)
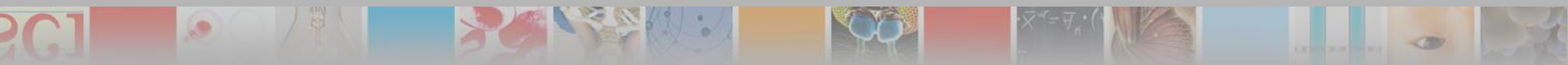
Personal Data - Form 100 (cont'd)

7. Research Support

- All source of support past 4 years

8. Contributions (up to 5 pages)

- Over past 6 years (non-university position use past 10 years)
- Use <u>headings below</u> **and** <u>instructions provided</u>
  - I. Most significant contributions (up to 5, targeted to proposal)
  - II. **Research contributions and practical applications**
    - Boldface students, clarify your role, explain journal choice
  - III. Other evidence of impact and contributions
    - Awards, invited lectures, journal editorships, committee membership
  - IV. Delays in Research Activity (parental leave, etc.)
  - V. **Contributions to training of HQP**
    - Aggregate data on particular group, specialized techniques
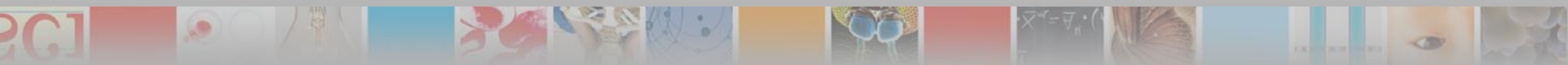
Personal Data - Form 100 (cont'd)

8. Contributions (cont'd)

- **Research Contributions – Publications**

- **Important to** attribute publications to NSERC versus CIHR or other funding agencies (reviewers will check the actual publications to see if NSERC is acknowledged). If funds from both agencies are used, address this – often done in the budget section in the section that address overlap between funding.

- **Important to** ensure that any HQP under your supervision are highlighted in this list and the type of HQP – significance is place on publications that include graduate students as authors

- **Important to** outline your contribution and impact to any collaborative papers

- **Contributions to HQP**

- Critically important to give specific and details, a list of prior students is NOT sufficient
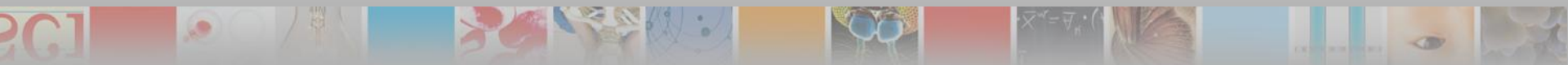
Personal Data - Form 100 (cont'd)

9. Data on HQP

- Summary
  - Number of HQP supervise and co-supervise past six years
  - Explain role if co-supervise
- Personal data
  - Type of HQP (M.Sc, Research Associate)
  - Consent forms required (once for six year period)
  - Up to 40 names
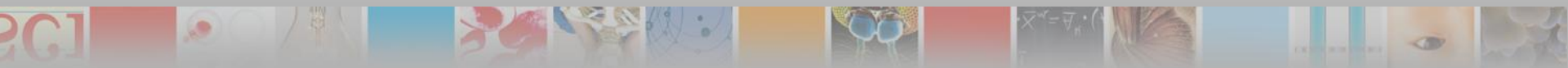
Application to DG - Form 101

Deadline November 1

- Must comply to presentation standards

Purpose of Form 101

- Used to assess Merit of Proposal and **HQP**

Instructions here: http://www.nserc-crsng.gc.ca/OnlineServices-ServicesEnLigne/instructions/101/e.asp?prog=dg
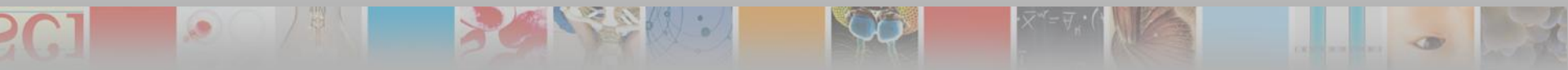
Application to DG - Form 101 (cont'd)

1. **Application Profile**

*   Title (used for publication purpose)

*   Time devoted to activity

*   Evaluation Group Assignment

2. **Areas of Research**

*   Research Subject Codes

*   Key Words (up to 10)

3. **Certification / Requirements**

*   Research involving humans, stem cells, animals, enviro impact

4. **Co-Applicants**

5. **Supporting Organizations**

*   Co-applicant organization's signature (if not UBC)
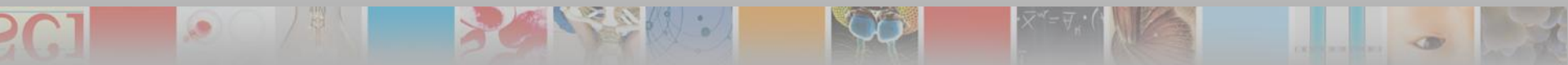
Application to DG - Form 101 (cont'd)

6. Summary of proposal for public release

- Plain language – get your family members to read this

7. Proposed Expenditures

- Financial Guide: http://www.nserc-crsng.gc.ca/Professors-Professuers/FinancialAdminGuide-GuideAdminFinancier/index_eng.asp

- 5-year budget, be realistic

8. Budget Justification

- **New rules for 2011 – 2 page limit**

- Justify!!! (**excellent place to outline details on HQP**)

- Supplies, animal costs, equipment (more than $7000 → RTI grant)

- Travel (not all for yourself, not all at beginning of program)

- Dissemination of Results/Publication costs
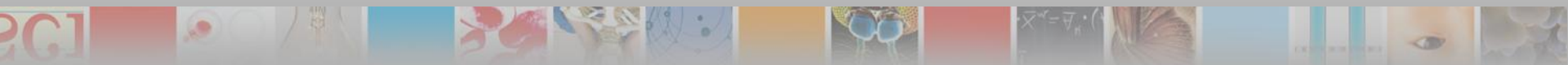
Application to DG - Form 101 (cont'd)

9. Relationship to other Research Support ($)

- Critically important for holders of other grants
  - CIHR, Industry Genome Canada, private/disease based funding agencies
  - Other sources of support include grants and contributions from funding agencies, organizations, the private sector, institution start-up funds, research chairs, the primary place of employment (for adjunct professors), and other institutional research support.

- Essential that time taken to outline any overlap
  - Any conceptual or financial overlap, with work supported by NSERC or other funding sources must be explained
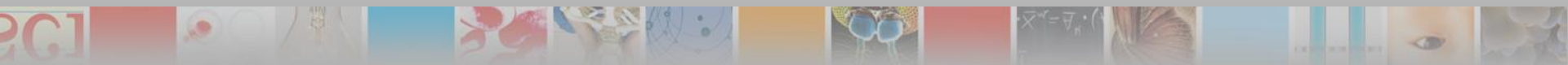
Application to DG - Form 101 (cont'd)

9. Relationship to other Research Support ($) cont.

Use additional pages (no page limit) to provide:

- Information on the conceptual and budgetary relationship or difference between this application and all other support (currently held or applied for).

- For each grant currently held or applied for, clearly describe the main objective and provide a brief outline of the methodology, budget details, and details on the support of highly qualified personnel.

- Optional: A summary and budget page from other proposals or projects can be provided; use the Other Documents section (**important for CIHR holders**).

- Provide sufficient information to enable the reviewers to evaluate the relationship between this application and other sources of support

- **The consequence of not providing adequate information to assess the relationship to other research support is that the reviewers may recommend a lower rating or no funding**
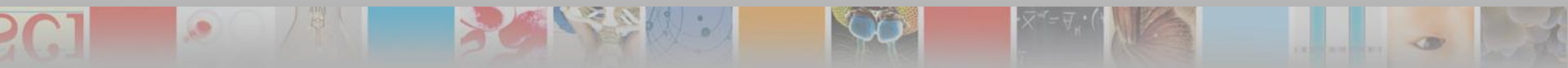
Application to DG - Form 101 (cont'd)

10. Proposal

• 5 pages, single sided (.75" margins, 12 pt font, some white space please!), images and graphics included in page limit

• Address selection criteria for DG program

• Use headings as identified

 I.   Recent progress (related to proposal)

   • If renewal, refer to progress attributable to <u>previous</u> DG

 II.   Short and long term objective

   • What is the overall program? Have a 5 year focus.

 III.   Literature

 IV.   Methodology

   • Balance between detail, rationale and space use

 V.   Anticipated significance

 VI.   HQP Training plan to take place through the proposal
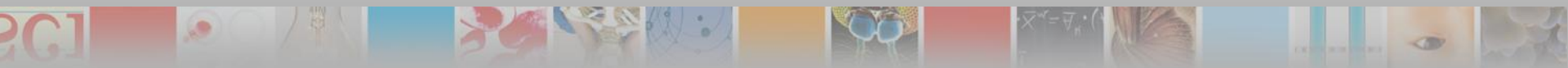
Application to DG - Form 101 (cont'd)

10. Proposal cont.

- New for 2011 applications: Proposal section will include an additional page for the purpose of describing the highly qualified personnel (HQP) plan.
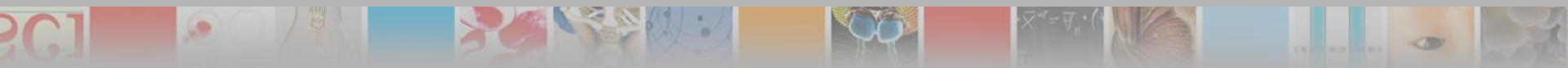
Application to DG - Form 101 (cont'd)

11. References (literature)

- One page limit
- No letters of support

12. Samples of Research Contributions

- Max of 4, within past 6 years
- Re-prints, excerpts from thesis, tech reports
- **Used to assess quality of work – important**
- Should reflect most significant, most recent, contributions

13. Signatures

- Refer to ORS for UBC policy
http://www.ors.ubc.ca/contents/signatures
- Important to know that there can be a 48 hour delay
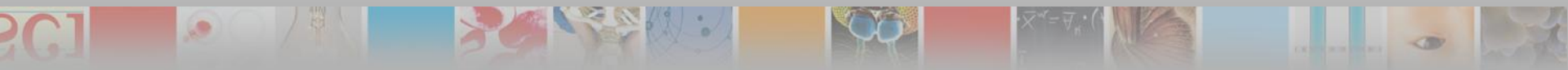
Evaluation of Discovery Grant Applications

Changes in Discovery Grant

- **New peer review model**
    - Grant Selection Committees replaced by 12 discipline-based Evaluation Groups
    - Conference model
- **New rating and funding principles**
    - No guarantee for renew
    - Bin structure with assigned values
        - Values vary year to year and from EG to EG
        - Different cut offs for Early Career Researchers (ECR) vs. Establish Researchers (ER)
        - Yet, no difference in evaluation between researcher types

Full Conference Model : List of Evaluation Groups

- Genes, Cells and Molecules (1501)
- Biological Systems and Functions (1502)
- Evolution and Ecology (1503)
- Chemistry (1504)
- Physics (1505)
- Geosciences (1506)
- Computer Science (1507)
- Mathematics and Statistics (1508)
- Civil, Industrial and Systems Engineering (1509)
- Electrical and Computer Engineering (1510)
- Materials and Chemical Engineering (1511)
- Mechanical Engineering (1512)

Conference Model

EVALUATION GROUP A
Group Chair
~ 30 members
Four Stream Chairs
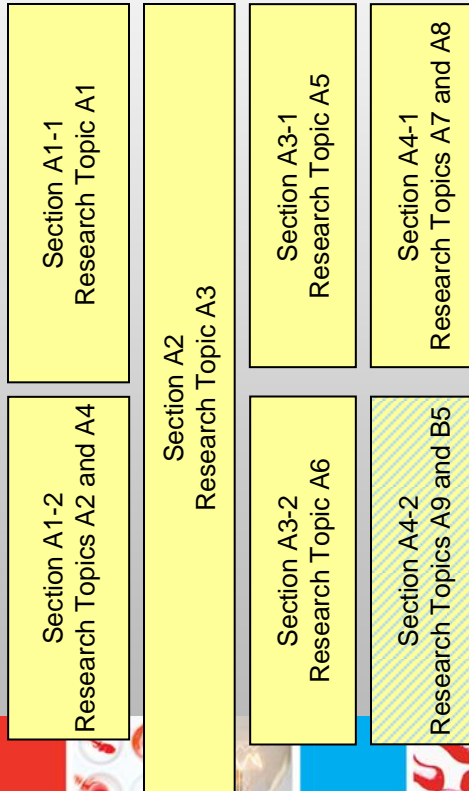
EVALUATION GROUP B
Group Chair
~35 members
Four Stream Chairs
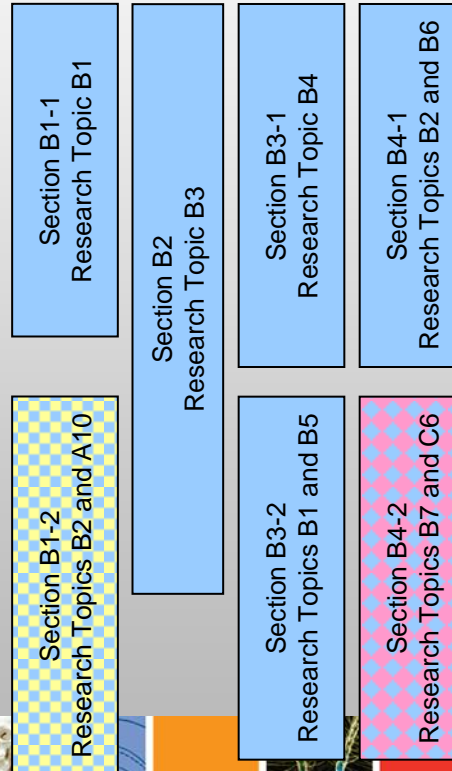
EVALUATION GROUP C
Group Chair
~25 members
Three Stream Chairs

Section A1-1
Research Topic A1

Section A2
Research Topic A3

Section A3-1
Research Topic A5

Section A4-1
Research Topics A7 and A8

Section A1-2
Research Topics A2 and A4

Section A3-2
Research Topic A6

Section A4-2
Research Topics A9 and B5

Section B1-1
Research Topic B1

Section B2
Research Topic B3

Section B3-1
Research Topic B4

Section B4-1
Research Topics B2 and B6

Section B1-2
Research Topics B2 and A10

Section B3-2
Research Topics B1 and B5

Section B4-2
Research Topics B7 and C6

Section C1-1
Research Topics C1 and B5

Section C2
Research Topic C3

Section C3-1
Research Topic C4

Section C1-2
Research Topic C2

Section C3-2
Research Topics C5 and A5

Conference Model & Rating Indicators

Reader

2nd Internal

Reader

Conflicts?

P.O.

Chair

Reader

1st Internal

Excellence	**Merit**	**HQP**
Outstanding	**Outstanding**	**Outstanding**
Outstanding	**Very Strong**	**Outstanding**
Outstanding	**Very Strong**	**Outstanding**
Outstanding	**Very Strong**	Very Strong
Very Strong	**Very Strong**	Very Strong

COR Factor:	**N**	**N**	**N**	**N**	**N**

"Two-Step Review Process"

	Exceptional (6)	Outstanding (5)	Very Strong (4)	Strong	Moderate (3)	Insufficient (1)
Excellence of researcher					M	
Merit of proposal				S		
Contribution to training of HQP				S		

Cost of research	High	Normal	Low

Funding "Bins"

A (L, N, H)
B (L, N, H)
C (L. N. H)
D (L, N, H)
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P

Amounts Assigned to the Quality Categories - 2010

	Genes, Cells and Molecules	Biological Systems and Functions	
A	128,000	128,000	E E E
B	113,000	113,000	E E O
C	94,000	94,000	E O O
D	76,000	71,000	O O O
E	62,000	61,000	O O VS
F	52,000	50,000	O VS VS
G	44,000	42,000	VS VS VS
H	37,000	35,000	VS VS S
I	31,000	27,000	VS S S
J	26,000	23,000	S S S
K*	26,000	23,000	any I *
	0	0	any I
*ECR			

Distribution of Application by Quality Categories
Genes, Cell and Molecules 2010
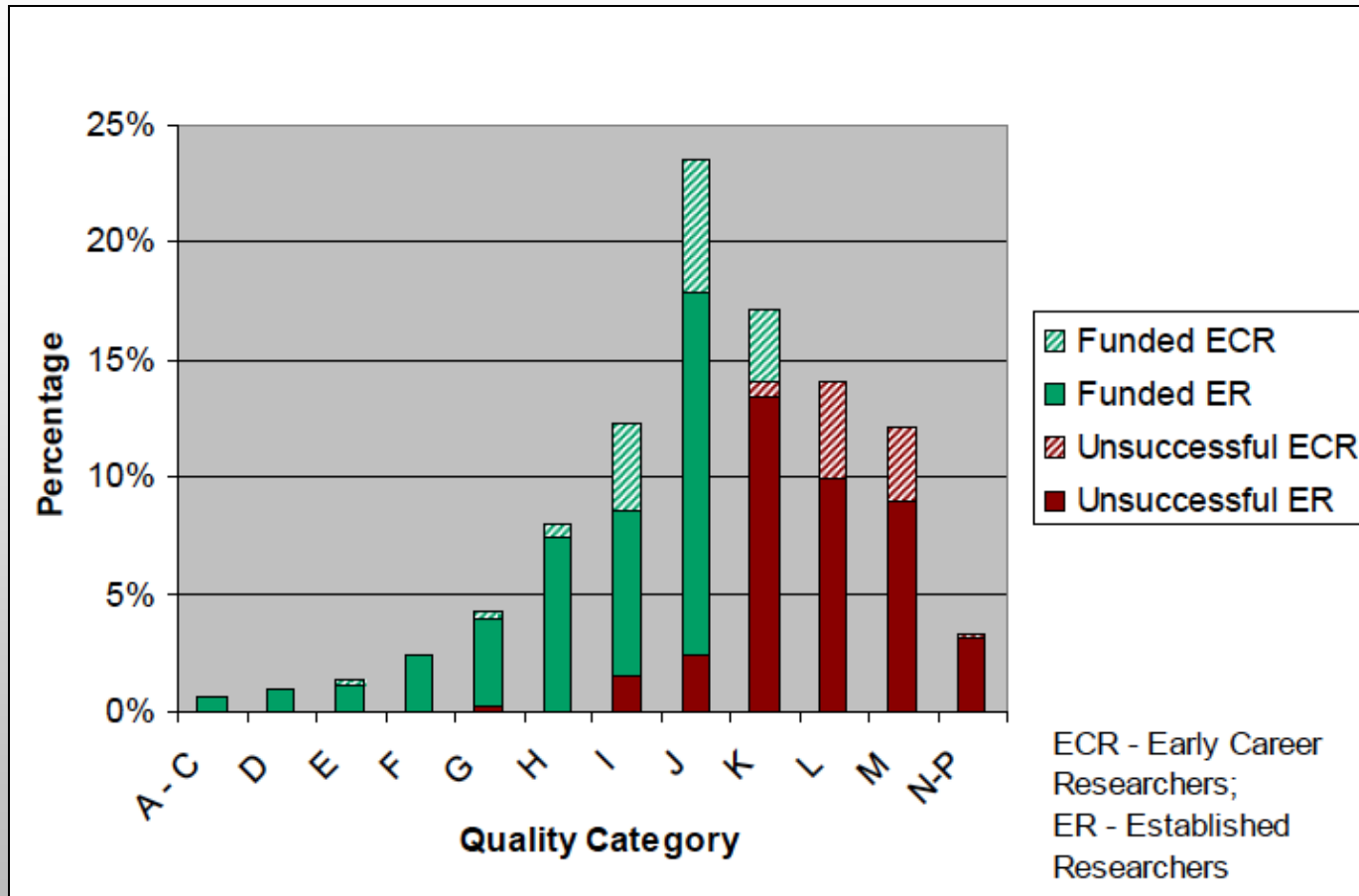
Evaluation Group Statistics 2010

| Genes, Cells & Molecules (1501)	Early Career Researchers	Established Researchers		Overall
		Renewals	Others	
Number of Applications	98	172	184	454
Number of Awards	61	108	68	237
Amount Awarded	$1,745,000	$4,046,629	$2,174,000	$7,965,629
Success Rate	62.2%	62.8%	37.0%	52.2%
Average Grant	$28,607	$37,469	$31,971	$33,610

Data in the above table was revised June 29, 2010 to correct statistical errors.

Biological Systems & Functions (1502)	Early Career Researchers	Established Researchers		Overall
		Renewals	Others	
Number of Applications	93	247	154	494
Number of Awards	36	177	41	254
Amount Awarded	$929,449	$7,631,052	$1,341,695	$9,902,196
Success Rate	38.7%	71.7%	26.6%	51.4%
Average Grant	$25,818	$43,113	$32,724	$38,985

Distribution of Grant Levels - 2010
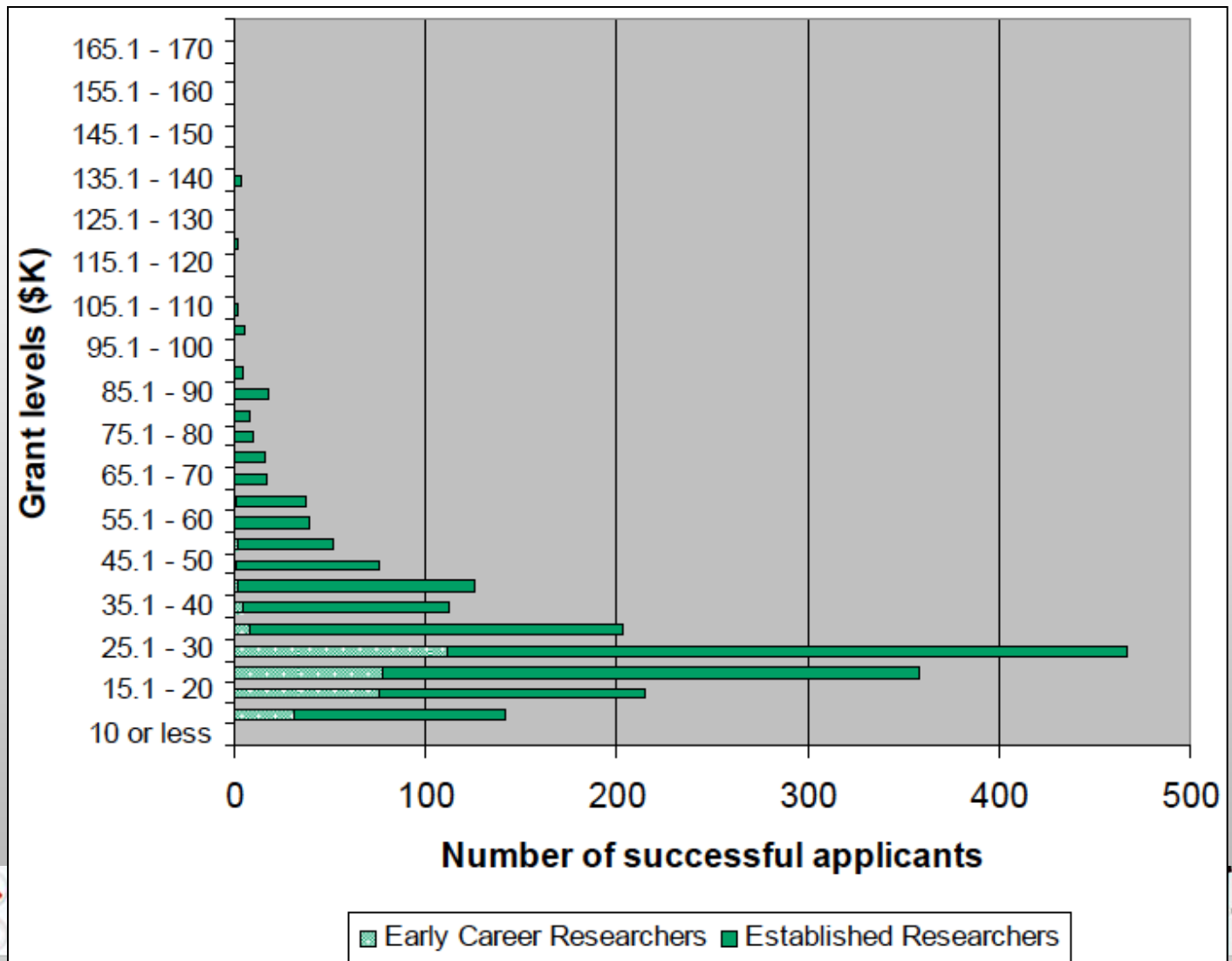
Percentage Change in Grant Level - 2010
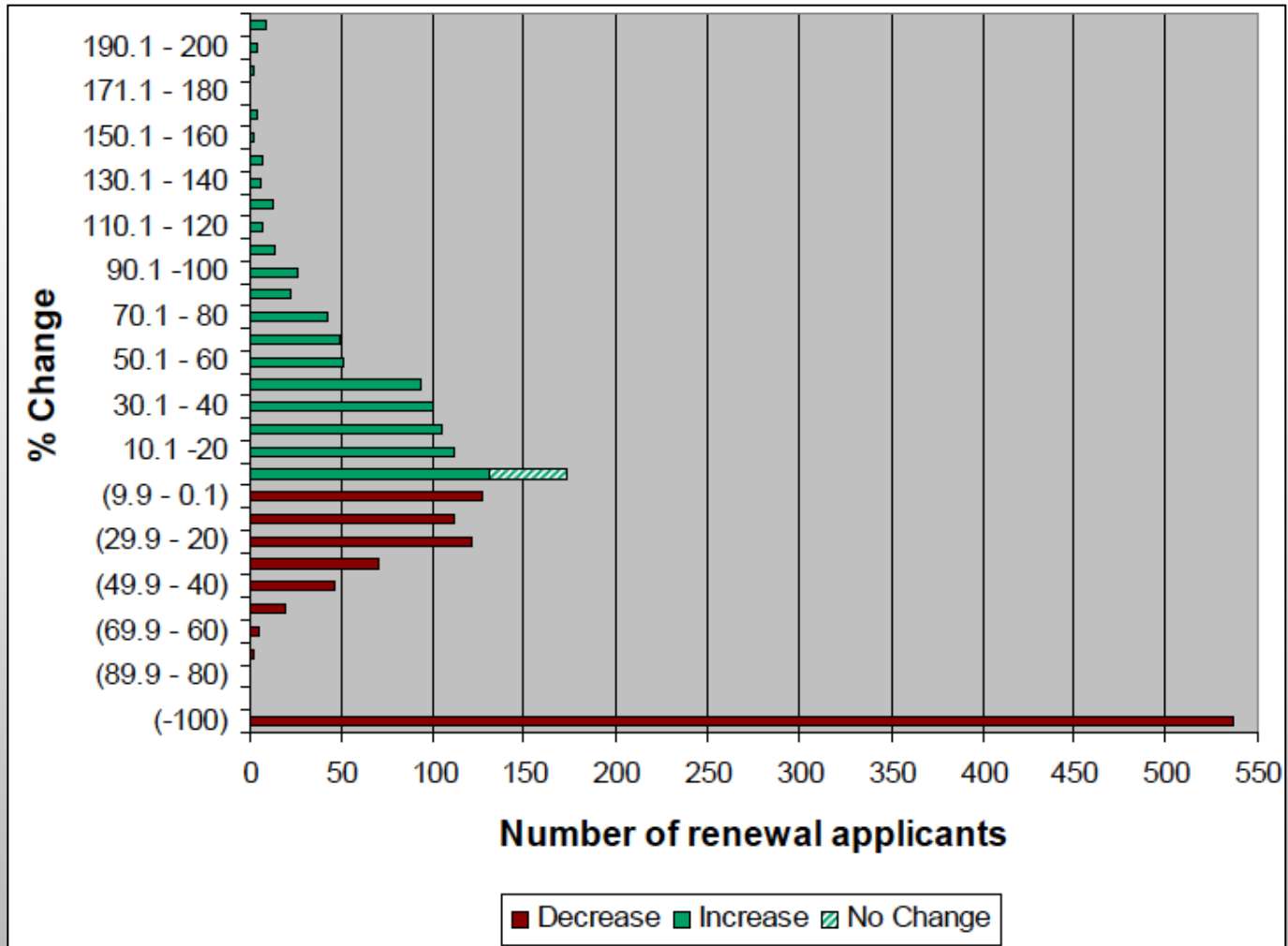
Discovery Grant: Evaluation Criteria

- Scientific or engineering excellence of the researcher(s)

- Merit of the proposal

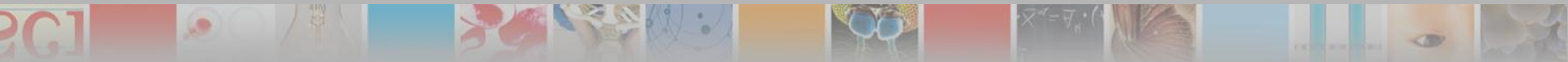- Contribution to the training of highly qualified personnel (HQP)

Evaluation: Merit Indicators

6.13. DISCOVERY GRANTS MERIT INDICATORS[1]

|	Exceptional	Outstanding	Very Strong	Strong	Moderate	Insufficient
Excellence of the Researcher	Acknowledged as a leader who has continued to make, over the last six years, influential accomplishments at the highest level of quality, impact and/or importance to a broad community.	The accomplishments presented in the application were deemed to be far superior in quality, impact and/or importance to a broad community.	The accomplishments presented in the application were deemed to be of superior quality, impact and/or importance.	The accomplishments presented in the application were deemed to be solid in their quality, impact and/or importance.	The accomplishments presented in the application were deemed to be of reasonable quality, impact and/or importance.	The accomplishments presented in the application were deemed to be below an acceptable level of quality, impact and/or importance.
Merit of the Proposal	Proposed research program is clearly presented, is extremely original and innovative and is likely to have impact by leading to groundbreaking advances in the area and/or leading to a technology or policy that addresses socio-economic or environmental needs. Long-term vision and short-term objectives are clearly defined. The methodology is clearly defined and appropriate. The budget clearly demonstrates how the research activities to be supported are distinct from and complement those funded by other sources.	Proposed research program is clearly presented, is highly original and innovative and is likely to have impact by contributing to groundbreaking advances in the area, and/or leading to a technology or policy that addresses socio-economic or environmental needs. Long-term goals are clearly defined and short-term objectives are well planned. The methodology is clearly described and appropriate. The budget clearly demonstrates how the research activities to be supported are distinct from and complement those funded by other sources.	Proposed research program is clearly presented, is original and innovative and is likely to have impact by leading to advancements and/or addressing socio-economic or environmental needs. Long-term goals are defined and short-term objectives are planned. The methodology is clearly described and appropriate. The budget demonstrates how the research activities to be supported are distinct from and complement those funded by other sources.	Proposed research program is clearly presented, is original and innovative and is likely to have impact and/or address socio-economic or environmental needs. Long-term goals and short-term objectives are clearly described. The methodology is described and appropriate. The budget demonstrates how the research activities to be supported are distinct from and complement those funded by other sources.	Proposed research program is clearly presented, has original and innovative aspects and may have impact and/or address socio-economic or environmental needs. Long-term and short-term objectives are described. The methodology is partially described and/or appropriate. The budget demonstrates how the research activities to be supported are distinct from and complement those funded by other sources.	Proposed research program, as presented lacks clarity, and/or is of limited originality and innovation. Objectives are not clearly described and/or likely not attainable. Methodology is not clearly described and/or appropriate. The budget does not clearly demonstrate how the research activities to be supported are distinct from and complement those funded by other sources.
Training of HQP	Training record is at the highest level, with HQP contributing to top quality research. Most HQP move on to positions that require highly desired skills, obtained through training received. Research plans for trainees are appropriate and clearly defined. HQP success highly likely.	Training record is far superior to other applicants, with HQP contributing to high-quality research. Most HQP move on to positions that require highly desired skills, obtained through training received. Research plans for trainees are appropriate and clearly defined. HQP success highly likely.	Training record is superior to other applicants, with HQP contributing to quality, original research. Many HQP move on to appropriate positions that require desired skills, obtained through training received. Research plans for trainees are appropriate and clearly described. HQP success is likely.	Training record compares favourably with other applicants. HQP generally move on to positions that require desired skills, obtained through training received. Research plans for trainees are appropriate and described. HQP success is likely.	Training record is acceptable but may be modest relative to other applicants. Some HQP move on to programs or positions that require desired skills, obtained through training received. Plans for trainees are described and should contribute to HQP success.	Training record is below an acceptable level relative to other applicants. HQP do not, in general, move on to positions that require skills obtained through training received. Plans for trainees are not appropriate or are not described with enough information to predict likelihood of HQP success.

[1] The Discovery Grants Merit Indicators should be used in conjunction with the Peer Review Manual (Chapter 6) which outlines how reviewers arrive at a rating.

	High	Normal	Low
Cost of Research[2]	Majority of justified expenses represent costs higher than the norm for the research area.	Majority of justified expenses are within the norm for the research area.	Majority of justified expenses are lower than the norm for the research area.

[2] Possible examples include: Cost of training of HQP; Equipment intensive research and/or high users fees; particularly expensive or frequent consumables; Travel (for collaborations, field work, access to facilities, conferences, ...)
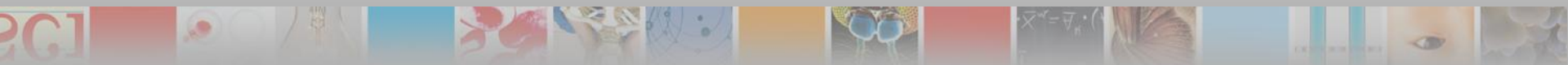
Scientific or Engineering Excellence of the Researcher(s)

- Knowledge, expertise and experience
- Quality of past and potential contributions to research (past six years)
- <u>Impact</u> of contributions
  - To what extent have they advanced the field?
  - Influenced direction of thought in the <u>target</u> community?
- Team applications
  - Complementarity of expertise and synergy
  - Added value?
  - Ratings will reflect an assessment of the blend of individuals
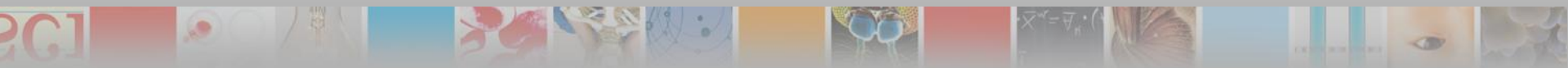
Merit of the Proposal

- Originality and innovation

  - To what extent does proposal suggest and explore novel or potentially <u>transformative</u> concepts and lines of inquiry?

- Significance and expected contributions to research; potential for technological impact

  - Results appropriate for open dissemination?

- Clarity and scope of <u>long</u> & <u>short</u> term objectives

  - Relationship between long and short obj clear?

  - Well-focused and realistic? Scope, breath and depth

- Clarity and appropriateness of methodology

  - Appropriate and up-to-date?

  - Clear methodology

Merit of the Proposal (cont'd)

- **Feasibility** (past progress)
  - Can objective be reached within the proposed time frame?
  - Access to necessary equipment & resources?
- Extent to which the proposal addresses all relevant issues (including the need for varied expertise)
  - Outline recent progress in field and frame the relationship of your proposal to other work
- Appropriateness and justification of the budget
  - i.e. number of trainees in relation to available equipment
- Relationship to other sources of funding (onus on the applicant to fully explain)
  - Must be clear, comprehensive and <u>convincing</u>
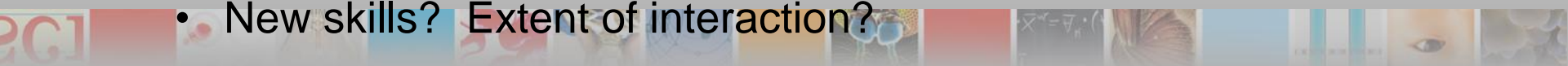
Merit of the Proposal (cont'd)

Hints / Points of Reflection

- Program vs. Project
  - DG used to support ongoing research program, which can be comprised of well-defined projects
  - If projects are defined without being placed in broader context of program → insufficient
  - Clarify in long/short objectives & expected contributions
- Creeping Conservatism vs. Risk Taking
  - Open to new approaches & challenges, is it interesting?
- Overlap with other funding
  - Two types: budgetary & conceptual
  - Explain perceived duplication in funding
  - Indicate how NSERC complements research funded by other sources
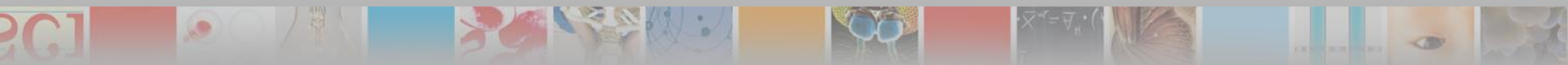
Contributions to the Training of HQP

- Quality/Impact and extent of past contributions to training during the last six years

- Contribution to training at all levels
  - Undergraduate, postdoc, technicians, research associates
  - Undergraduates: explain the <u>nature</u> of their training, how long was the training and what was the <u>outcome</u> of research

- Training expected to lead to high quality contributions
  - Expected to move on to NSE careers (all sectors)
  - Evidence of intellectual involvement: co-publishing papers (explain order of authors), conferences, patents, etc.

- Proposed plan for the training of HQP
  - Detailed training plans; how does it fit into research program?
  - Role in co-supervision
  - New skills? Extent of interaction?

NSERC
CRSNG
Investing in people, discovery and innovation
Investir dans les gens, la découverte et l'innovation

FORM 100
Personal Data Form
PART I

Date

Family name	Given name	Initial(s) of all given names	Personal identification no. (PIN)

☐ I hold a faculty position at an eligible Canadian college
(complete Appendices B1 and C)

☐ I do not or will not hold an academic appointment at a
Canadian postsecondary institution

Place of employment other than a Canadian postsecondary
Institution (give address in Appendix A)

Highly Qualified Personnel (HQP)
Provide personal data about the HQP that you currently, or over the past six years, have supervised or co-supervised.

			Personal identification no. (PIN)	Family name
Name	Type of HQP Training and Status	Years Supervised or Co-supervised	Title of Project or Thesis	Present Position

APPOI
Title of p

Departme

Campus

Canadian

ACADE
Degre

TRAINI
Indicate

Underg

Master

Doctora

Postdoctoral

Others

Total

Highly Qualified Personnel (HQP)

Provide personal data about the HQP that you currently, or over the past six years, have supervised or co-supervised.

			Personal identification no. (PIN)	Family name
Name	Type of HQP Training and Status	Years Supervised or Co-supervised	Title of Project or Thesis	Present Position

Canadä

Canadä

FORM 100
Personal Data Form
PART I

Date

Family name | Given name | Initial(s) of all given names | Personal identification no. (PIN)

Highly Qualified Personnel (HQP)

Provide personal data about the HQP that you currently, or over the past six years, have supervised or co-supervised.

Personal identification no. (PIN) | Family name

Name | Type of HQP Training and Status | Years Supervised or | Title of Project or Thesis | Present Position

TRAINING OF HIGHLY QUALIFIED PERSONNEL

Indicate the number of students, fellows and other research personnel that you:

	Currently		Over the past six years (excluding the current year)	

APPOIN
Title of po

Departme

Campus

Canadian

ACADE
Degre

TRAININ
Indicate th

Undergr

Master's

Doctora

Postdoc

Others

Total

- Make sure the numbers in the table on the first page match the names and status of the students listed in the other table
- Include as much information as possible
- Your student's names should be in **bold** font in the list of contributions/publications

A Complete Discovery Grant Application Includes:

1. An electronic Application for a Grant (Form 101) with supporting documentation (respect page limits!)

2. An electronic Personal Data Form (Form 100) for the applicant and all co-applicants

3. Electronic samples of Research Contributions (reprints, pre-prints, thesis chapters, manuscripts, patents, technical reports, etc.)

4. All required Appendices
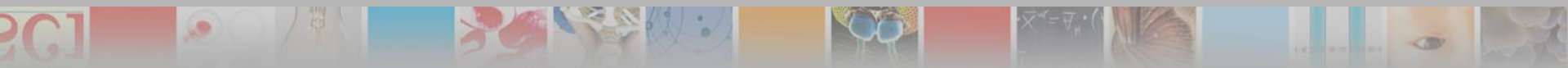
Top reasons why grants were not funded

1. **Overlap between CIHR and NSERC grants**
   - Write to meet NSERC & DG goals
   - Program vs. project

2. **HQP**
   - Space not taken to explain the <u>quality</u> of past training
   - Details on the how the proposal leads to new training of HQP
   - Match HQP stats on all forms:
     - Form 100 – consent required
     - Form 101 – bold students name (not yours)

3. **Merit of proposal – lack of progress on prior NSERC**
   - Lack of progress on NSERC grant (i.e. lots of publications on CIHR funded research but none attributed to NSERC)
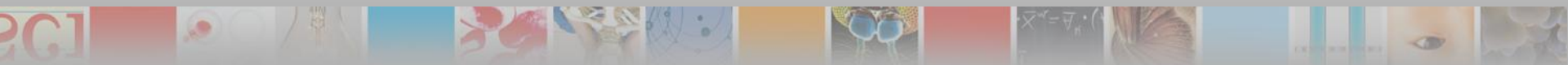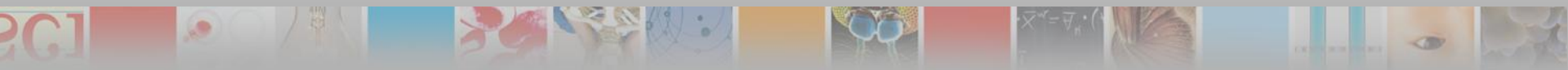
Top reasons not funded (cont'd)

4. Budget

- Rational overlap w/ IRC, CRC, CiHR; explain how it is complimentary with your other goals/programs. You are leveraging other funds to compliment use of NSERC funds.
- Justify everything, Be honest!

5. Methodology

- Not enough detail.   What is plan B?

6. Try to explain everything - not enough room on page

- Express grand overall vision (long term program objectives)
- Choose a few short term projects and focus on the 5yr plan

Top reasons why you are not funded

**7. Way too ambitious; Scope is too big.**

- New researchers typically attempt to outline very ambitious goals which detract from the feasibility of the program.

8. Contributions of applicant not explicit

- <u>Explain</u> author order, co-supervision of students, what you contributed to the publication when have repeated authors

9. Font / Style / Acronyms

- Make it easy for reviewers! If too dense, it will detract from merit of application. Use headings given and use **bold face.**
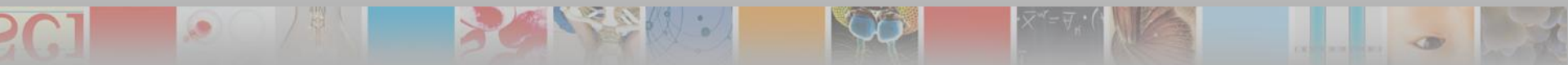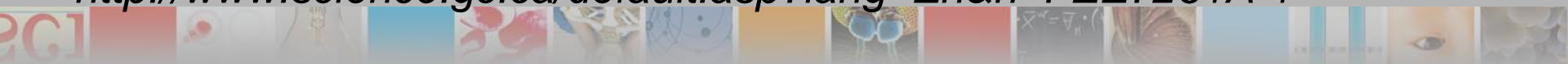
NSERC Eligibility

General Guidelines for the Eligibility of Subject Matter at NSERC

Applications to NSERC as the primary source of research or research training support must meet the following criteria:

- The program of research must be primarily in the **natural sciences** and engineering;

- The intended objectives of the research must be, primarily, to advance knowledge in one of the **natural sciences** or in engineering.

- The primary objective of any research supported by NSERC must be to advance knowledge and training in the natural sciences or engineering (NSE). The question to be asked is: ***does the research challenge lie within the NSE?***

- *In what journals would the research be published in?*

Selecting the Appropriate Federal Granting Agency

http://www.science.gc.ca/default.asp?lang=En&n=FEE7261A-1

NSERC eligibility cont.

Eligible for NSERC support:

- **Research in basic life sciences, cell biology, biology, genetics, biochemistry etc.**

- Research in animal health and veterinary medicine.

- Research in nutrition related to food components, nutraceuticals)

- Research seeking to further our understanding of fundamental processes in humans.

- Research whose primary purpose is the development of monitoring and diagnostic technologies (such as health IT, in-vitro diagnostics, diagnostic imaging, patient monitoring, and endoscopic devices) unless it is at the clinical trials stage (as defined by the International Conference on Harmonisation (ICH)). The research challenge must lie within the NSE.

- Research whose major challenges lie in the NSE (materials science, engineering, computer science, chemistry, etc) which could eventually lead, among other applications, to the treatment or prevention of human disease.

NSERC eligibility cont.

<u>Not</u> eligible for NSERC support:

- Research involving the refinement of already existing technology for facilitating clinical therapies or health delivery systems.

- Research whose primary purpose is the investigation or development of vaccines, active pharmaceutical ingredients (API), or other therapeutic agents for human applications.

- Research whose primary purpose is the investigation/treatment of injuries or human performance.

- **Research seeking to develop animal models of human diseases in order to study primarily the disease state, or treatments for injuries or diseases represented by the model.**

- Applied research for disease treatment, diagnosis or prevention

- Research involving clinical trials (as defined by the International Conference on Harmonization (ICH)).
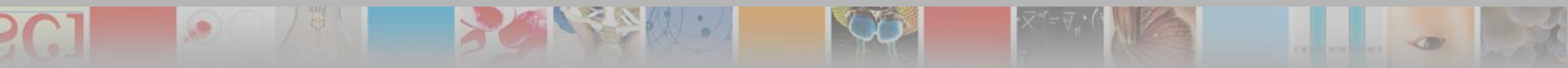
Resources

Faculty Grant Development & Grant Facilitation

Faculty	Contact	Email
Science	Kathie Thompson	thompson@science.ubc.ca
Medicine - Point Grey	Elizabeth Cheu Lina Jung	echeu@medd.med.ubc.ca ljung@medd.med.ubc.ca
Medicine – CFRI	Dawn McArthur	dmcarthur@cw.bc.ca
Medicine - VCHRI	Tamara English	tamara.english@vch.ca
Education	Robert Olaj	robert.olaj@ubc.ca
Arts	Pam Forsberg	pam.forsberg@ubc.ca
Engineering	May Wang	may.wang@ubc.ca
Sauder	Frances Chandler	frances.chander@sauder.ubc.ca
CFIS	Linda Leathley	linda.leathley@ubc.ca
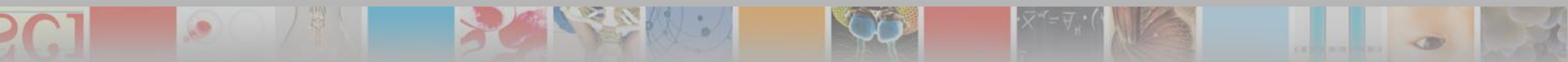
Resources (cont'd)

- NSERC
    - General inquiry phone and email
    - Evaluation Group Program Officers (http://www.nserc-crsng.gc.ca/ContactUs-ContactezNous/EvaluationGroups-GroupesEvaluations_eng.asp)
    - Web version of forms and instructions
    - [Peer Review Manual](#) (Chapter 6 – Evaluation)
    - Video on how to apply for an NSERC grant (http://www.nserc-crsng.gc.ca/Professors-Professeurs/Videos-Videos/DGTips_eng.asp) - **excellent tips!**
- SPARC
    - Dr. Rabab Ward, UBC's NSERC Coordinator
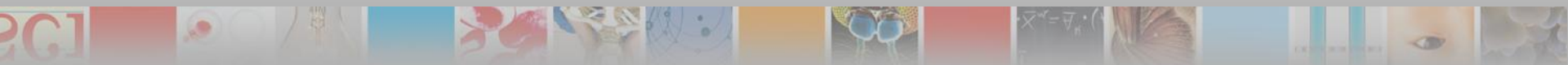   - Nicole Bennett, IR officer
    - **Internal Review!** http://research.ubc.ca/sparc/internal-review
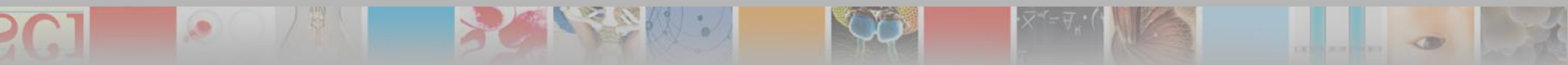
Questions?

Questions and Discussion

NSERC Contacts

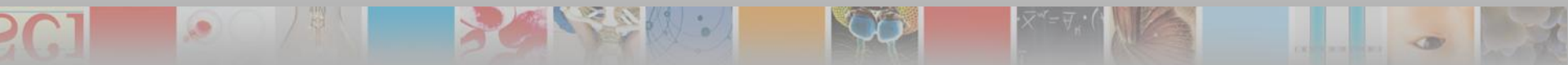|	
Evaluation Group (EG) Program Officer	firstname.lastname@nserc-crsng.gc.ca
NSERC Web site	www.nserc-crsng.gc.ca
Discovery Grants (including eligibility)	resgrant@nserc-crsng.gc.ca 613-995-5829
Use of Grant Funds	casdfinance@nserc-crsng.gc.ca
On-line help	webapp@nserc-crsng.gc.ca

Discovery Accelerator Supplements

- Provides timely resources who have a well-established research program and show strong potential to become international leaders in their respective area(s) of research.

- Include those whose research proposals suggest and explore novel or potentially transformative concepts and lines of inquiry, and are likely to have impact by contributing to groundbreaking advances in the area.

- The timeliness of DAS support represents the potential for the researcher at this time to capitalize on an opportunity—such as a recent research breakthrough, a paradigm shift or a new strategy to tackle a scientific problem or research question.

- Valued at $120,000 over three years ($40,000 annually) and provides recipients with additional resources to compete with the best in the world.

Research Tools and Instruments (RTI) - Category 1

- Deadline date – October 25
- NSERC will accept requests up to $150,000 (equipment value can be up to $250,000)
- Must already hold or be submitting an application for an NSERC research grant (not necessarily a Discovery Grant)

RTI Applications: Tips

- Describe the research that will be done with the equipment
- Explain the need and urgency of the request
- Justify each item
- Illustrate the suitability of the proposed equipment for research program
- Indicate the impact on HQP training
- Give alternative configurations and pricing options