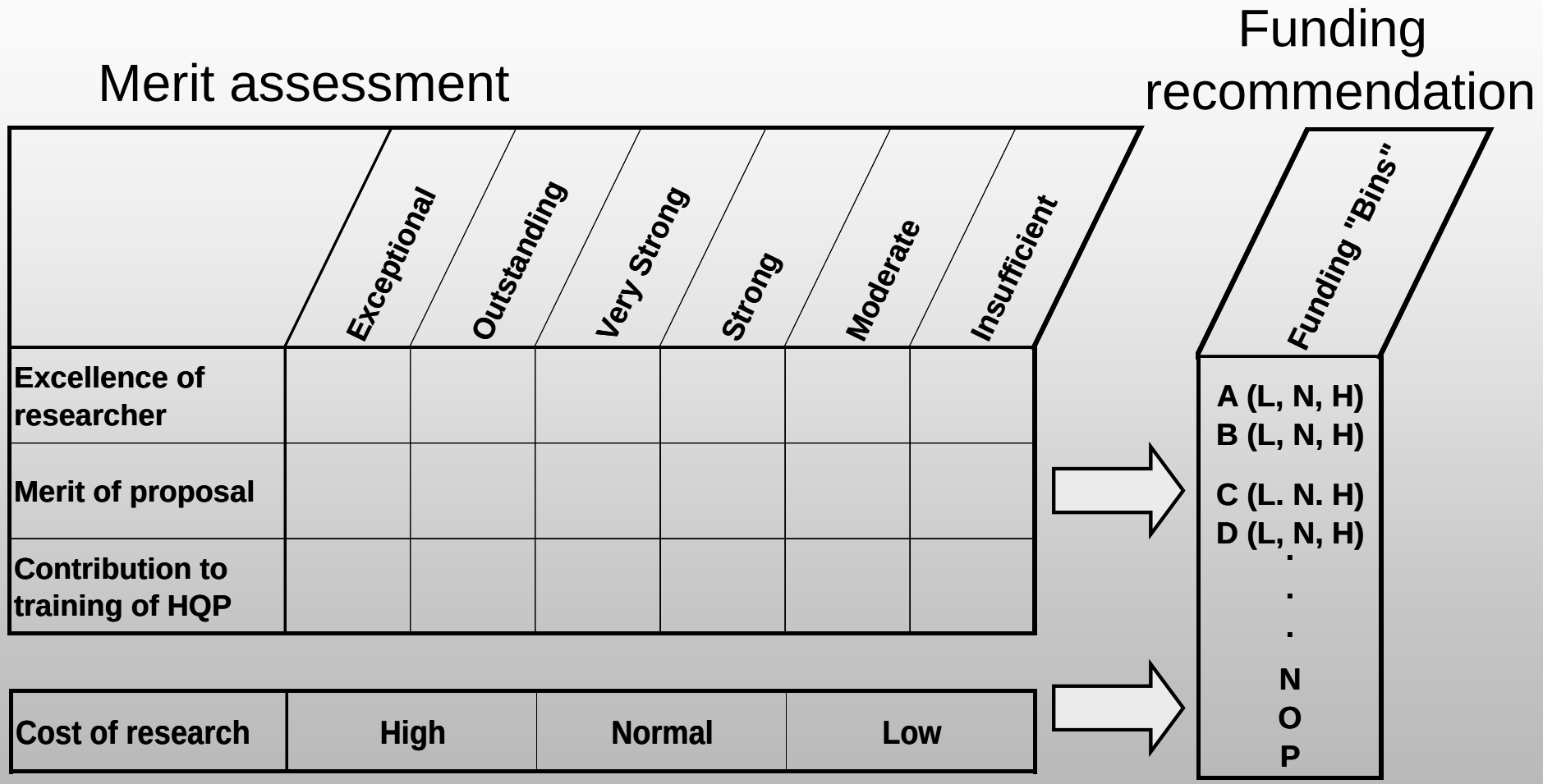
# Discovery Grants Roundtable
# EG 1503

August 14th, 2014

# DG Evaluation Process Overview

- Merit assessment uses six-point scale to evaluate:
  - Scientific or Engineering Excellence of the Researcher(s)
  - Merit of the Proposal
  - Contributions to the Training of HQP
- Each application assessed by 5 reviewers in conference model setting, ensuring best possible review
- Applications of comparable merit grouped in “bins”
- Within an EG, each bin is assigned a funding recommendation, with possible modulation related to the cost of research

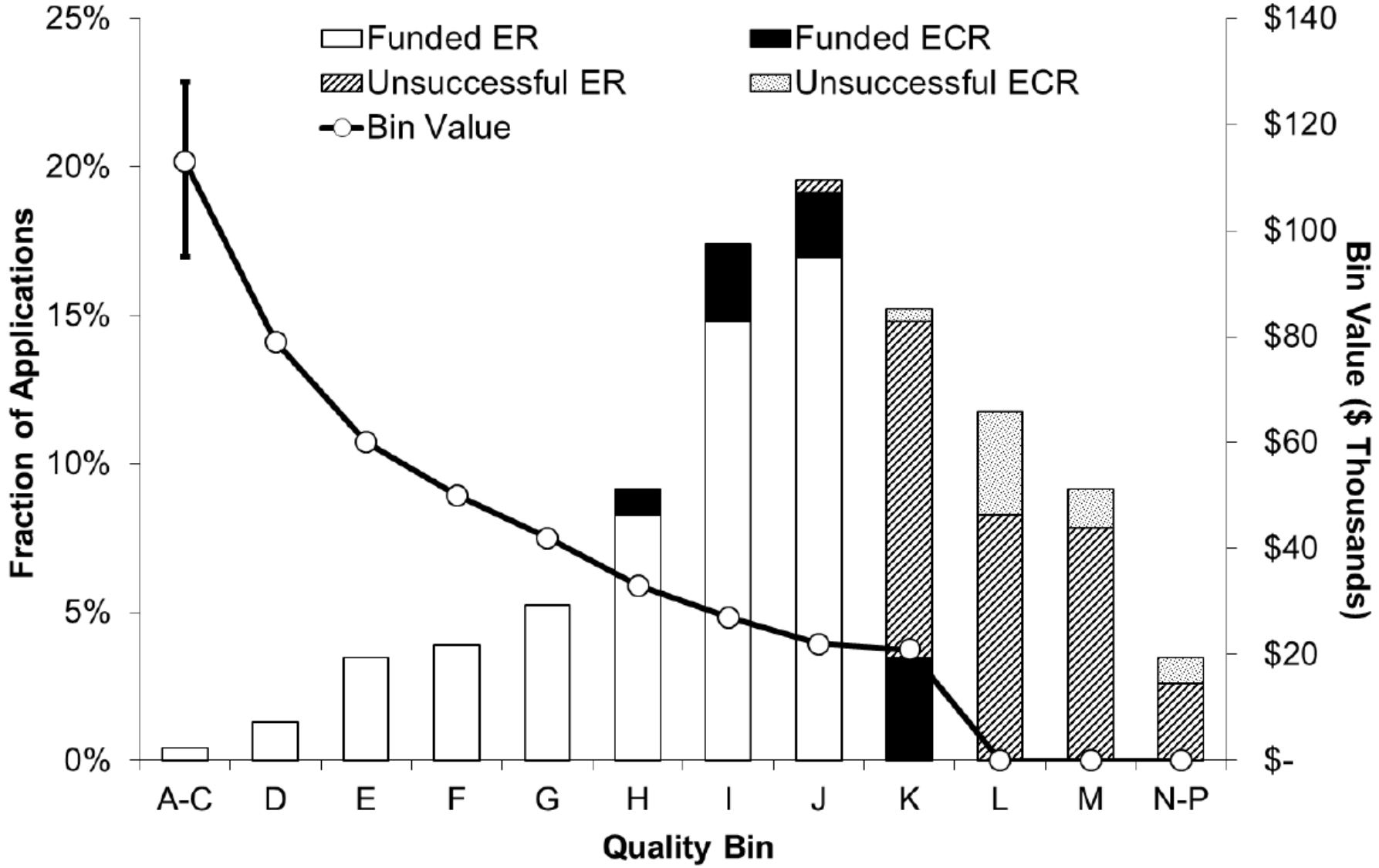
# DG Two-Step Review Process



# 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)

# Evolution and Ecology*



# APPLYING TO THE DISCOVERY GRANTS PROGRAM

# Life Cycle of a Discovery Grant Application

**August 1**
Submission of Notification of Intent to Apply with CCV

**September to October**
Initial assignment to EG and contacting of external reviewers

**November 1**
Submission of grant application with CCV

**Mid-November**
Applications sent out to external reviewers

**Early December**
Evaluation Group members receive applications

**February**
Grants competition

**March to April**
Announcement of results

# Notification of Intent to Apply for a Discovery Grant – Why?

- Used to identify:
  - Most appropriate EG to review the application
  - Need and potential benefits of a joint review between EGs
  - External reviewers for the application
  - Mandate eligibility issues

# Notification of Intent to Apply for a Discovery Grant – When and What?

- Deadline: August 1
  - Electronic submission only through the Research Portal
  - Mandatory: if not submitted by deadline, full application will not be accepted

- Includes:
  - Notification of Intent to Apply, listing up to five research topics in priority order
  - CCV
  - CCV of co-applicants (for team grants)

# Submitting a Discovery Grant Application

- Deadline November 1st
  - Check institutional internal deadline
- A full Discovery Grant submission includes:
  - Application for a Grant
  - NSERC Researcher CCV for the applicant and all co-applicants
  - Samples of research contributions (reprints, pre-prints, thesis chapters, manuscripts, patents, technical reports, etc.)
- Note that applications **must be** submitted electronically using the Research Portal

# Submitting a Discovery Grant NOI and Application

- Changes to the submission process
  - Research Portal
    - Replaces previous online system submission of forms F180 - Notification of Intent to Apply and F101 - Application for a Grant for Discovery Grants Program ONLY
  - CCV
    - Replaces F100 - Personal Data Form
    - Needed for both the NOI and the Full Application
    - Applicants are encouraged to allow ample time to familiarize themselves and enter their data in the NSERC CCV as it can be time consuming the first time to populate the fields

# New in 2014

- researchers will have the ability to do basic formatting in text boxes (bold, underline, italic, superscript, and subscript).
- the eligibility profile in the application will be improved to facilitate the eligibility review;
- the limit of characters in text boxes will be modified.
- The Research Portal will be open for applications in early August. Instructions will be posted at that time. Webinars on how to complete an application will be scheduled for September.
- **Please note** that the retention period for notifications of intent and applications on NSERC's Research Portal is three months after the deadline date. We encourage all applicants and university administrators to use the "Export the application and attachment to PDF" function to make a copy of their submissions for their records.

| **Application Modules** | **Text Box**<br>**Limit of characters** |
|---|---|
| Summary of Proposal | 2,500 |
| Relationship to Other Research Support – Explanation | 10,000 |
| Highly Qualified Personnel Training Plan | 5,000<br>10,000 for team grant applications |
| Past Contributions to Highly Qualified Personnel Training | 2,500 |
| Most Signification Contributions to Research | 7,500 |
| Additional Information on Contributions | 2,500 |
| Research Team | 2,500 |

# EVALUATION OF DISCOVERY GRANT APPLICATIONS

# Evaluation Criteria

- Scientific or Engineering Excellence of the Researcher(s)
- Merit of the Proposal
- Contribution to the Training of HQP

# Scientific or Engineering Excellence of the Researcher(s)

- Knowledge, expertise and experience
- Contributions to research in the NSE
- Importance of contributions
- Complementarity of expertise and synergy (for team applications)

# Scientific or Engineering Excellence of the Researcher(s): Tips

- Describe up to five most significant research contributions (now in **application**) and highlight quality & impact
- List all types of research contributions
- Explain your role in collaborative research activities
- List all sources of support
- Give other evidence of impact
- Explain delays in research activity or particular circumstances that might have affected productivity
  (See Peer Review Manual, Section 6, for details)

# Merit of the Proposal

- Originality and innovation
- Significance and expected contributions to research, and potential for technological impact
- Clarity and scope of objectives
- Clarity and suitability of methodology
- Feasibility
- Extent to which the proposal addresses all relevant issues
- Appropriateness and justification of the budget
- Relationship to other sources of funding

# Merit of the Proposal: Tips

- Write summary in plain language
- Keep in mind that two audiences read your application: expert and non-expert
- Provide a progress report on related research
- Position the research within the field and state-of-the-art
- Clearly articulate short- and long-term objectives
- Provide a detailed methodology and realistic budget
- Consider comments/recommendations you may have received for previous applications

# Merit of the Proposal – Tips: Overlap

- Discuss relationships to other research support
  - For each grant currently held or applied for, clearly provide: the main objective, a brief outline of the methodology, budget details, and details on the support of HQP
  - Must include summary and budget pages for CIHR and SSHRC grants currently held or applied for
- Explain any potential conceptual overlap with other programs/projects
  - Complementary research is encouraged, but must be clearly explained
- Saying “there is 0 overlap” is **not** sufficient

# Contributions to the Training of HQP

- Quality and impact of contributions to training during the last six years
- Proposed plan for future training of HQP in the NSE
- Enhancement of training arising from a collaborative or interdisciplinary environment (where applicable)

Read the Policy and Guidelines on the Assessment of Contributions to Research and Training

# Contributions to the Training of HQP - Tips

Past contributions to Training:

- ***NEW***: Use an asterisk to identify students who are co-authors on the listed contributions
- Explain your role in co-supervision activities
- Explain any delays that might have affected your ability to train HQP
- Describe nature of HQP studies
  - HQP ranges from undergraduate theses and summer projects to postdoctoral levels, and includes technical and other research personnel

# Contributions to the Training of HQP - Tips

Training Plan

- Describe the nature of the training (e.g., length, specific projects) in which HQP will be involved, the HQP's contributions and pertinence to the research program proposed
- Discuss the training philosophy and the expected outcomes
- Clearly define your role in any collaborative research and planned joint HQP training

# Cost of Research

- Determined by the reviewers as Low, Normal or High as compared to the norm for the research areas **represented in the applications considered by the EG(s)**

# Discovery Grants 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.

| Cost of Research[2] | High | Normal | Low |
|---|---|---|---|
| | 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, …)

# My tips...overall:

- Read the indicators carefully – they are referred to constantly in deliberation
- Know your EG membership, they are more important than your external reviewers (esp your primary and secondary reader)
- Help the reviewers navigate your CCV – e.g. use asterix / font to indicate HQP where possible
- Summarize CCV fields and highlight what's important

Group Chair: Hugh MacIsaac, Great Lakes Institute of Environmental Research (University of Windsor)
Co-Chairs: Luc-Alain Giraldeau, Université du Québec à Montréal
Mark Johnston, Dalhousie University

Jeff Bowman, Ontario Ministry of Natural Resources
Anne Bruneau, Université de Montréal
David Coltman, University of Alberta
Richard Cunjak, University of New Brunswick
Ian Fleming, Memorial University of Newfoundland
Frédéric Guichard, McGill University
Chantal Hamel, Agriculture and Agri-Food Canada
Lawrence Harder, University of Calgary
Andrew Iwaniuk, University of Lethbridge
Ladd Johnson, Université Laval
Jeremy Lundholm, St. Mary`s University
Stephen Marshall, University of Guelph
Eliot McIntire, Natural Resources Canada (CFS)
Jonathan Seaquist, Lund University, Sweden
John Smol, Queen's University
William Taylor, University of Waterloo
Wendy Untereiner, Brandon University
Minus van Baalen, CNRS Université Pierre et Marie Curie, France
Linda Wahl, Western University
Jeannette Whitton, University of British Columbia
Tony Williams, Simon Fraser University

# Merit of Researcher

- Include contributions that are representative of your work and HQP, not just the highest IF ones
- Summarize impact indicators if you want them to be used – the EG can only use what is in your proposal
- Highlight other indicators of merit
- Explain your role in collaborations
- If you had delays, be clear on their impact

| Outstanding | Very Strong | Strong |
| --- | --- | --- |
| 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. |

# Merit of Proposal

- Remember it is still a “program” not a project description
- Details are still important
- Use effective figures and text boxes to break up the document where appropriate
- Must have HQP roles well-defined
- Budget realistically, and ensure that budget matches activity

| Outstanding | Very Strong | Strong |
| --- | --- | --- |
| 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. |

# Merit of HQP

- Quality counts as much as quantity, be sure to showcase information on their merit
- Talk about individuals, not just numbers
- All HQP levels are considered important
- Describe where your HQP progress to after you have trained them
- Training philosophy / plan environment is important
- Ensure that HQP activity is integrated in the proposal and detailed – feasible and appropriate

| Outstanding | Very Strong | Strong |
|---|---|---|
| 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**. |