

Review Manual for CAP Recognition Selection Committees

Based on the NSERC Peer Review Manual

Developed during the 2023-2024 Recognition Program

Last updated: September 12, 2024

Foreword

This manual is designed as a guide for Selection Committee members. It outlines activities to be undertaken by members and describes the policies, guidelines, and deliverables relevant to these activities. The manual is reviewed annually.

Roles and responsibilities

Selection committees are established for each recognition following guidelines outlined in Appendix I.

Committee structures

Below is a short summary of the various committees and the reporting structure:

CAP Board: Receives recommendations from the Chair of the Recognitions Committee (RC Chair)

Recognitions Committee (RC): Provides leadership and sets policy related to the CAP recognition program

Selection Committee (SC): There is a SC for each recognition, i.e., Herzberg Medal SC, Fellows SC, etc. The chairs of the various SCs report the results of deliberations to the RC Chair.

Committee members

SC members participate in the assessment of nomination packages and make recommendations to the SC Chair based on their assessment. Specific responsibilities of members include:

- participating in preparatory meetings/discussions and information sessions prior to the selection meetings;
- participating in training sessions as needed;
- following conflict of interest guidelines;
- reading all assigned nomination material;
- participating in deliberations during SC meetings; and
- voting on all assigned nominations.

SC Chairs provide leadership to ensure the complete evaluation of nominations, and the transmission of accurate documentation to the RC Chair. In addition to their commitments as a SC member, their responsibilities include:

- leading efforts to maintain a high-quality review and selection process;
- advising committee members on policies and procedures;
- ensuring a consistent and equitable approach during the SC meetings;

- ensuring that all important aspects of nominations are considered and comprehensively discussed, including best EDI practices and non-standard career paths;
- assisting with the preparation of messages from the SC that reflect the committee's assessments and recommendations;
- submitting a document to the RC Chair that accurately reflects the SC's assessments and recommendations.

Meetings

Throughout their term, members are required to attend a number of information sessions and meetings. All meetings will occur virtually or by email. Depending on the SC, the frequency, format, and lengths of these meetings will vary. Where possible, meetings are combined to make optimal use of members' time. We recommend that all meetings that will be held virtually be booked as soon as the committee is formed to avoid delays; the CAP Office can assist the SC Chair with bookings. An overview of recommended information sessions and meetings is provided below.

Orientation meeting

An orientation session for all committee chairs is typically held in October. Chairs will be updated on CAP policies and guidelines and the membership of the different SCs will be reviewed.

Calibration meeting

The first meeting of the SC is an opportunity for members to review CAP policies, guidelines and best practices, including the CAP Conflict of Interest Guidelines. The session should include a discussion of the criteria to be used to evaluate the nominations and may include a mock review of a selection of nominations with the objective of familiarizing members with the evaluation criteria and the review process. This session is crucial to achieving a high level of consistency among members of the review committee on the interpretation and use of the ratings.

Decision meeting(s)

The decision meeting should occur virtually. Committee members typically review the files independently and complete the first round of voting on the nominees before the meeting. At the decision meeting, the committee discusses all of the assigned nominations, completes a second round of voting, and decides on a recommendation. If a clear recommendation cannot be made during the meeting, subsequent rounds of voting will be done after the meeting to determine a clear recommended recipient.

Policy review meeting

Evaluation criteria and assessment processes should be reviewed on a regular basis. In this regard, SCs are encouraged to hold a policy meeting following the completion of their review of nominations, within 4 weeks of the completion of their selection process. Possible topics include a discussion of administrative processes, policies, forms, membership, and recognition criteria.

Feedback resulting from this policy meeting should be summarized in a document agreed upon by all committee members and submitted to the Chair of the Recognitions Committee.

In addition to the annual review noted above, feedback from the SCs may be sought on policy matters currently under review at the CAP.

Time commitment

Participation of experts in the review of nominations for CAP medals is crucial to the success of the program; serving in this capacity involves a significant time commitment to preparation, review of materials, decision meeting and policy review. In addition to attending two or three meetings lasting about one hour, the time commitment will depend on the number of nominations to review. The number of nominations is typically about five, except for the Fellows of the CAP which can be much more; good nominations typically take about one hour to review.

Review procedures

Nominations and review material

In order to maintain the principle of fairness in the competition, nominators must adhere to the guidelines in the preparation of nomination materials. The onus is on the nominator to provide complete and sufficient information that adheres to these guidelines. CAP staff will work with the nominator if the package is not complete, allowing up to 5 business days post-nomination deadline to rectify any deficiencies. Members who have doubts as to the completeness of the package should advise their SC Chair and CAP staff of their concerns.

Eligibility of applicants

Eligibility decisions are the responsibility of CAP staff, who may consult with the RC Chair, who in turn may seek guidance from members of the SCs. Members who have doubts as to a nominee's eligibility should alert their SC Chair and CAP staff to their concerns and the reasons thereof as soon as possible.

Monitoring diversity

The RC Chair will work with CAP staff to ensure that the pool of nominations reflects the diversity of the physics community. If a lack of diversity for a particular recognitions category is identified, the deadline for nominations may be extended and the community encouraged to seek out appropriate nominations.

Accommodations

Some of our recognition programs have time limits (e.g., Herzberg, 12 years since PhD). In these cases, accommodation will be made for any eligible delay in research, where we will use the NSERC definition of [eligible delays](#). For all eligible leaves of absence (e.g., maternity and parental leave, personal illness, chronic illness, mental illness, or disability associated with reduced research activity, leave taken for family-related illness, bereavement, extraordinary administrative duties, delays related to COVID-19), we will credit eligible delays double their

total duration, consistent with NSERC's policy. For example, a candidate who took a 7-month parental leave after starting their appointment would have their eligibility window extended by 14 months. Professional leaves (e.g., training, sabbatical, administrative) are not credited.¹

Nominators should contact CAP staff during the submission process to ensure that any need for accommodation is properly captured within the nomination system.

Declaration of Conflicts

Before voting starts, the CAP, through its online medal selection system, shall call for a declaration of any conflicts of interest amongst the SC members, and ensure that there are no conflicts of interest according to the [CAP Conflict of Interest Guidelines](#) (circulated to SC members with the call for conflict declaration). In cases where the Conflict of Interest Guidelines require a committee member to be replaced, a replacement will be secured before the first round of voting is completed.

[NOTE: If there is sufficient capacity on the SC, then the committee member may not necessarily be replaced. In such cases, the conflict will be shared with the committee and the member in conflict will refrain from participating in the first round deliberations concerning the candidate with whom they are in conflict.]

EDI Considerations

In accordance with the CAP's EDI Statement, committee members are reminded to pay close attention to equity, diversity and inclusion in their deliberations. They should participate in EDI training if they have not done so recently.² The CAP office (programs@cap.ca) is happy to consult with our EDI Advisory Committee to answer any questions that you might have.

Nomination package assignment, if appropriate

If the number of nominations warrants, the Chair of the SC may assign first and second readers to different nomination packages. Alternatively, the Chair of the SC may opt to divide the applications amongst SC members, ensuring that each file is reviewed by at least two members, in order to triage the nominations.

For example, the system could be set up as follows. The first and second reviewers carry out an in-depth review of the nomination. During the SC meeting, the first reviewer leads the presentation of the nomination package and makes a rating recommendation for each of the selection criteria. The second reviewer then follows up on the presentation made by the first reviewer and presents their rating recommendation for each of the selection criteria. The other reviewers who have read the full nomination package and participated in the deliberations then present their rating recommendations for each of the selection criteria.

¹ Text taken from NSERC's rules for the Arthur B. McDonald Fellowship, https://www.nserc-crsng.gc.ca/Prizes-Prix/McDonald-McDonald/About-Apropos_eng.asp, February 23, 2024.

² For example, Tri-Agency's Bias in Peer Review module, <https://cihr-irsc.gc.ca/lms/e/bias/>

Evaluation of nominations

Each medal has its own criteria and each SC should develop/revise its own ratings or rubrics form based on these criteria. For example, each criterion could be assigned a scale of qualifiers that contain statements with reference to major points of consideration to guide members toward arriving at a rating for each selection criterion. See the NSERC [Discovery Grant Merit Indicators](#) for an example. All members should use the same rating form to evaluate each nomination package. The Committee Chair is responsible for establishing and communicating the evaluation criteria for their recognition to committee members and programs@cap.ca prior to opening the first round of voting. Please contact programs@cap.ca with questions.

Members are expected to discuss and justify their ratings during the SC decision meeting. Members should ensure that an assessment of research outputs is based on the significance and impact of the scientific content rather than the journal name or publication metrics. They should also consider indicators other than publications to measure the impact, such as contributions to policy, creation of intellectual property, and knowledge translation initiatives. Members must make every effort to review nominations without bias.

Please note that the evaluation should be based only on the material referenced in the nomination package. Members must not research or access additional information about material not referenced in the nomination package, such as information about publication status, other funding requests, prizes, HQP outcomes, or impact factors, nor should they, at any time, offer additional information they are personally aware of that is outside of the material provided. Committee members should draw attention to, and disregard, any generalized statements and discussions that do not relate directly to the evaluation material. Nominators have been advised of best practices for writing letters of support as used by the Canada Research Chairs program.

The Decision Process

1. Conflict Declaration

The CAP Office shall initiate the conflict declaration process through the CAP secure online medal selection system. Once SC members complete a conflict declaration, they will instantly be able to access all nomination packages.

2. Rounds of Voting

As each round of voting is initiated, the SC members shall receive an email from the CAP medal system inviting them to participate in the next round of voting and providing necessary instructions. All committee members participate in the voting. The first round of voting will include the entire slate of nominations. Following the first SC meeting where the nominations are discussed, the slate of nominees put forward to the next round of voting can be reduced.

3. Rankings and comments

For each round of voting, the Committee members shall establish their ranking (first, second, third, ...) by dragging the candidate lines into their desired order. Comments related to each specific nomination can be added as comments against each nominee. The rationale for the

ranking of candidates can be entered into the round comments box. (Note: details of each round of voting, including SC member comments on individual candidates and round comments, will remain available through the secure online system as the committee moves through the selection process by clicking on the previous round number(s) in the review section). Comments are visible to the SC and the CAP Office, and may be shared with the RC Chair as the CAP Office deems necessary.

4. Mandatory Conference Call

Following completion of the first round of voting, the Committee will participate in a mandatory virtual meeting to discuss the merits of each of the candidates. Given the importance of equity, diversity, and inclusivity in inspiring a diverse new generation of physicists, the SC may wish to prioritize nominees from under-represented groups in cases when the levels of accomplishments of nominees are equally meritorious. Following the discussion, SC members should submit their second round of votes.

5. Defining a Clear Winner

The process shall continue with subsequent rounds of voting (with the SC Chair dropping one or more of the lowest-ranked candidates) until there is a clear winner. A clear winner is defined to be a candidate who is assigned a first-place score by a majority of the SC members. Once this stage is reached, no redistribution of scores from the other candidates should be able to affect the outcome, assuming that the first-place choices remain the same.

Submitting the Selection Committee's Recommendation

- a) If a clear winner has been determined, the SC Chair will submit the recommendation including a statement as to why the candidate has been chosen to the RC Chair for review, with a copy to the CAP Program Manager. This statement, which should be no more than 50 words in length, should complete the yyy section of the statement "The committee is recommending that this (medal, scholarship, etc.) be awarded to xxx in recognition of yyy". The statement can be based on the citation provided by the nominator. It is recommended that the SC Chair work with the SC in developing the recommendation statement, typically during the SC conference call, or by email if the decision is reached subsequent to that call. If done by email, all communications should be labelled "confidential".

The SC Chair shall then complete the recommendation form provided by the CAP Office in a timely manner and send the form to programs@cap.ca and to the RC Chair.

If desired, the Chair of the RC can meet with the SC Chair to discuss their recommendation. At the conclusion of that meeting, the final recommendation is prepared for presentation to the Board of Directors by the RC Chair. Any modifications made to the originally submitted recommendation and the degree of consensus that was present should be noted.

- b) It is within the purview of the SC to recommend that no recognition (in the case of medals for example) or fewer than the maximum number of recognitions (in the case of Fellows or scholarships) be offered, independent of how many nominations are received. This would occur based on the SC's assessment of the quality of the nominations within the cohort under consideration. This recommendation can be submitted via the secure online system.

Once the list of recommended recipients is finalized, the Chair of the RC makes a recommendation to the CAP Board to either accept or reject the report on the basis of due process being followed. The CAP Board then votes to endorse the recommendation and functions as the ultimate decision-making body for the recognition selection. The final list of recipients is then submitted by the Chair of the RC to the CAP Office for processing of winner notifications, award announcement, and preparation of recognition material.

Appendix I - Selection Committee Composition

The CAP Office, in cooperation with the Chair of the RC, is responsible for securing new members for the SCs each year. Typically the CAP Program Manager will work with the Chair of the RC to establish the SC Chairs. They will then approach SC Chairs to let them know of vacancies or impending term limits and ask for suggestions for new members. The CAP Office will then contact the suggested members to secure their participation, repeating this process as needed to fill the committee slate.

SCs typically consist of 5 members including the Chair although some have as many as six regular members. An additional alternate member is recommended for committees of 5 members or fewer to help out when conflicts of interest arise.

A. Fellows Selection Committee

FCAP nominees that meet the eligibility requirements will be evaluated by a SC made up of at least five CAP members, of which at least two members should be FCAP holders or CAP members of similar status; members of the CAP Board are not eligible to serve. Each committee member will be asked to serve a 3 year term, with the inaugural committee members given a term of 1, 2 or 3 years to ensure continuity of 2-3 members on the committee as members are replaced. The Chair will be assigned a 3-year term.

B. CAP Medal for Lifetime Achievement in Physics

The Committee will be made up of the following individuals:

- 1) a past winner of the CAP's Achievement Medal (but not within the last three years)
- 2) a past winner of the CAP's Herzberg Medal (but not within the last three years)
- 3) a chair of a physics-related NSERC Discovery Grant Evaluation Group
- 4) a Past-President of the CAP (also appointed to the Herzberg Committee)
- 5) a Past-President of the CAP (also appointed to the Herzberg Committee)

- 6) a distinguished physicist with an international reputation who is currently working outside Canada (and who has some familiarity with research in Canada)

The Chair will be selected from among the committee members and, ideally, is someone who has served on the committee for at least a year (or has served on some other recognition SC previously).

C. CAP Herzberg Medal

The committee should be made up of the following individuals:

- 1) a past winner of the CAP's Achievement Medal (but not within last three years)
- 2) a past winner of the CAP's Herzberg Medal (but not within last three years)
- 3) a chair of a physics-related NSERC Discovery Grant Evaluation Group
- 4) a Past-President of the CAP (also appointed to Herzberg Committee)
- 5) a Past-President of the CAP (also appointed to Herzberg Committee)
- 6) a distinguished physicist with an international reputation who is currently working outside Canada (who has some familiarity with research in Canada).
- 7) an alternate (someone who can be called to help in cases of conflict of interest, perhaps a member who is retiring)

The Chair will be selected from among the committee members and, ideally, is someone who has served on the committee for at least a year (or has served on a recognition SC previously). The past winners of the Herzberg Medal and Medal for Lifetime Achievement medals serve two year terms; all other members serve 3-yr terms.

D. CAP-CRM Prize in Theoretical and Mathematical Physics

The Committee will be made up of the following individuals:

- 1) a representative of the CAP, who will be Co-Chair of the SC
- 2) a representative of the CRM, who will be Co-Chair of the SC
- 3) a distinguished Canadian theoretical or mathematical physicist, member of CAP
- 4) a distinguished Canadian mathematical physicist
- 5) a distinguished theoretical or mathematical physicist with an international reputation who is currently working outside Canada
- 6) a distinguished mathematical physicist with an international reputation who is currently working outside Canada

All members serve 3-yr terms, staggered as needed to ensure the continuity of $\frac{2}{3}$ to $\frac{1}{2}$ of the members each year (allowing for substitutes for conflicts).

E. CAP/DCMMP Brockhouse Medal Selection Committee

The SC will be made up of the following individuals:

- 1) the past-past chair of DCMMP (who will act as the Chair of the awards committee);
- 2) the past chair of DCMMP;
- 3) a Canadian condensed matter or materials physicist familiar with the community (e.g., served on an NSERC grant evaluation committee);
- 4) a distinguished Canadian, who might be a former medal winner

- 5) a distinguished physicist with an international reputation who is currently working outside Canada (but who might have had a Canadian connection/origin and therefore some familiarity with research in Canada).
- 6) an alternate (someone who can be called to help in cases of conflict of interest, perhaps a member who is retiring)

Positions (1) and (2) will normally be for 2 years, while positions (3)-(5) will normally be for 3 years – initially one of these will be for 1 year, the second for 2 years and the third for 3 years. Individuals in positions (1) through (4) must be CAP members.

The new chair is responsible for selecting the one new member from one of the categories (iii) to (v) that will need to be found each year.

F. CAP-TRIUMF Vogt Medal

The SC should be made up of the following individuals:

- 1) a past chair of PPD /a person appointed by the TRIUMF director, is normally Chair
- 2) a past chair of DNP³
- 3) a past chair of PPD⁴
- 4) a recent chair of the NSERC SAP Evaluation Section
- 5) a distinguished Canadian subatomic physicist, who might be a former medal winner
- 6) a distinguished subatomic physicist with an international reputation who is currently working outside Canada (but who might have had a Canadian connection/origin and therefore some familiarity with research in Canada)

All members serve 3-yr terms, staggered as needed to ensure the continuity of $\frac{2}{3}$ to $\frac{1}{2}$ of the members each year (allowing for substitutes for conflicts).

G. CAP Medal for Excellence in Undergraduate Teaching

The SC should be made up of the following individuals:

- 1) One of Two faculty (teacher) representatives, one of whom is normally Chair
- 2) Two of Two faculty (teacher) representatives
- 3) One of Two past medal winners, but not the two most recent winners
- 4) Two of Two past medal winners, but not the two most recent winners
- 5) The CAP Councillor representing Student Affiliates (an undergraduate student)
- 6) An alternate (someone who can be called to help in cases of conflict of interest, perhaps a member who is retiring)

Each member (except the undergraduate student who changes every year) would hold a four year term as they enter the Committee, with new appointments alternating between faculty and past winners each year. The faculty representatives would be asked to assist in securing a replacement for themselves as they complete their final year on the Committee.

³ Or previous council member of the CINP, if they are in good standing with the CAP

⁴ Or previous council member of the IPP, if they are in good standing with the CAP

H. CAP-COMP Peter Kirkby Memorial Medal for Significant Service to Canadian Physics

The SC should be made up of the following individuals:

- 1) Past President or designate - CAP
- 2) Past President or designate – COMP
- 3) Member-at-Large – CAP
- 4) Member-at-Large – COMP
- 5) Executive Director – CAP
- 6) Executive Director – COMP

The Past Presidents of CAP and COMP serve 1-yr terms, all other members serve 4-yr terms.

I. CAP Medal for Outstanding Achievement in Industrial and Applied Physics

The SC should be made up of the following individuals:

1. a recent winner of the CAP Industrial and Applied Medal (but not within last three selection cycles);
2. a representative of one of the CAP's Corporate or private sector members;
3. the current or a former Chair of the Division of Industrial and Applied Physics (now Division for Applied Physics and Instrumentation);
4. an alternate (someone who can be called to help in cases of conflict of interest, perhaps a member who is retiring).

The recent winner of the medal serves a 1-yr term, the corporate or private sector representative serves a 2-yr term, and the chair of DAPI serves a 4-yr term.

Appendix II - Special Considerations

A. Fellows Selection Committee

The Fellows SC (FSC) will adhere to the standard CAP policies regarding conflict of interest and award deliberations.

The FSC should first consult with the CAP Office to determine the number of FCAPs that can be awarded for the current FCAP award year. This is normally 1% of the full membership of the CAP, including Full, Joint, and Foreign memberships of both regular and retired members. Unused allocation from the previous year can be added to this amount.

The FSC will then evaluate each nomination and decide whether or not to first discuss a shortlist drawn from the full cohort of FCAP nominations for further consideration, or to simply treat the full cohort of nominations as the shortlist. This will depend on how large the full cohort is; the decision to discuss and rank the cohort so as to produce a shortlist, as well as how long the shortlist should be, is left to the discretion of the FSC.

The FSC will then take up a discussion of the relative merits of the shortlist FCAP nominations, in relation to the evaluation criteria for Fellowship. Given the importance of equity, diversity, and inclusivity in inspiring a diverse new generation of physicists, the SC may wish to prioritize nominees from under-represented groups in cases when the levels of accomplishments of

nominees are close. The FSC will then vote on the shortlisted FCAP nominations, so as to produce a ranked list of the shortlisted nominations. It is within the purview of the FSC to recommend that fewer than the maximum number of FCAP awards be offered, independent of how many nominations are received. This would occur if the FSC felt that a cut-off less than the number of FCAP awards allocated was appropriate, given their assessment of the quality of the nominations within the cohort under consideration.