



# **Peer Review for Grant and Award Applications**

Presented by Arthritis Society Canada & Canadian Arthritis Patient Alliance  
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## Outline

- ▼ Funding arthritis research in Canada
- ▼ Principles of the peer review process
- ▼ The peer review process
- ▼ Accountability
- ▼ Summary



## Arthritis Research Funding in Canada

- ▼ There are several organizations that support arthritis research by providing research funding. These include:

### Canadian government funding agencies

- Canadian Institutes of Health Research (CIHR)
- Natural Sciences and Engineering Research Council of Canada (NSERC)
- Social Sciences and Humanities Research Council (SSHRC)

### Other organizations

- Health charities (e.g., Arthritis Society Canada who is the largest charitable funder of arthritis research in Canada)
- Hospital foundations
- Philanthropists



## Obtaining Research Funding

- ▼ To obtain research funding, researchers **apply to grant or award competitions**
- ▼ Researchers **write grant or award proposals** to support research questions they wish to explore. Researchers refer to the current evidence to support their research proposals
- ▼ Research proposals are **evaluated by peer reviewers**. Peer reviewers include both researcher and consumer reviewers
- ▼ Proposal applications are evaluated on a set of **pre-established criteria** to ensure an equitable review process
- ▼ Evaluation criteria will differ for specific funding opportunities and between organizations
- ▼ **Grant and award competitions are normally very competitive!**

# Peer Review Process



## Principles of Peer Review

- ▼ Research projects funded through Canadian funding agencies go through a peer review process
- ▼ The peer review process is confidential to the people who are in the room during the panel review meeting. Discussions that happen at the meeting are not shared outside of the meeting, except for subsequent advisory committee/board discussions, and sharing of reviewer reports to applicants.
- ▼ **Confidentiality** and **absence of conflict of interest** in the peer review process ensure:
  - Fairness
  - Transparency
  - Accountability



## Confidentiality

- ▼ Confidentiality ensures applications submitted for review are always held in strict confidence. All documentation provided to reviewers must be used only for the purpose for which they were originally intended – namely, to review applications and to make funding recommendations as applicable (CIHR, 2016)
- ▼ Prior to the peer review process, reviewers typically complete a Reviewer Confidentiality Agreement & Conflict of Interest Declaration Form
- ▼ Reviewers must not discuss with applicants or other reviewers their feedback on an application outside of the panel review proceedings



## Conflict of Interest (COI)

- ▼ A COI occurs when a person's professional, personal or financial interests affect or are perceived to affect their objectivity during the peer review process (Arthritis Society Canada, 2023)
  - This may lead to reviewer bias during the peer review process
- ▼ If a reviewer has a professional or personal relationship with an applicant or are involved with the application under review, reviewers must declare their COI
- ▼ If a reviewer is a direct competitor or is known to have strongly conflicting scientific or professional views, reviewers must declare their COI (Arthritis Society Canada, 2023)
  - Declaration of COIs ensures integrity, objectivity, and transparency during the peer review process, which enables an equitable review process for all candidates



## Peer Reviewers are Selected Based On...





## Peer Review Panel

Each peer review panel member has a specific role, and can be different for each application. Roles are often defined by the following titles:

- ▼ **Chair:** Leads the panel meeting and facilitates all aspects of the panel meeting, including panel discussion for each application
- ▼ **Primary reviewer:** Provides an in-depth written review of the designated applications prior to the panel meeting. Leads off the discussion during the panel meeting on designated application(s) and provides scores
- ▼ **Secondary reviewer:** Provides a written review of the designated applications prior to the panel meeting. Provides additional constructive commentary on the designated application(s) and provides scores
- ▼ **Reader:** Provides additional constructive commentary on the designated application(s) and provides scores



## Peer Review Panel Continued

- ▼ **Consumer reviewer:** A consumer is a person living with arthritis or their informal caregiver, such as a family member or friend. Consumer reviewers represent the collective views of consumers and family members affected by arthritis. They evaluate applications for relevance to consumers and participate in panel discussions
- ▼ **External reviewer:** Additional expertise may be needed and a reviewer outside of the review panel may be secured. They provide a written report and may participate in the discussion of the application.
- ▼ **Observers:** May include junior investigators, donors, funding agency partners, and other invited guests
- ▼ **Scientific Officer:** Captures the spirit of the discussion. This feedback will be shared with the both successful and unsuccessful applicants



## Peer Review Panel Process

**For each submitted application, the peer review process typically occurs as follows:**

1. The Chair leads the session

2. All reviewers with conflicts of interest (COI) are asked to remove themselves from the discussion for those applications as they come up in order

3. All assigned reviewers announce their individual preliminary scores for the application

4. The Primary Reviewer presents their comments for discussion

5. The Secondary Reviewer and Reader, if assigned, adds their comments for discussion. External reviewers' comments will also be provided to the panel



## Peer Review Panel Process

**For each submitted application, the peer review process typically occurs as follows:**

6. The Consumer Reviewer presents their comments for discussion

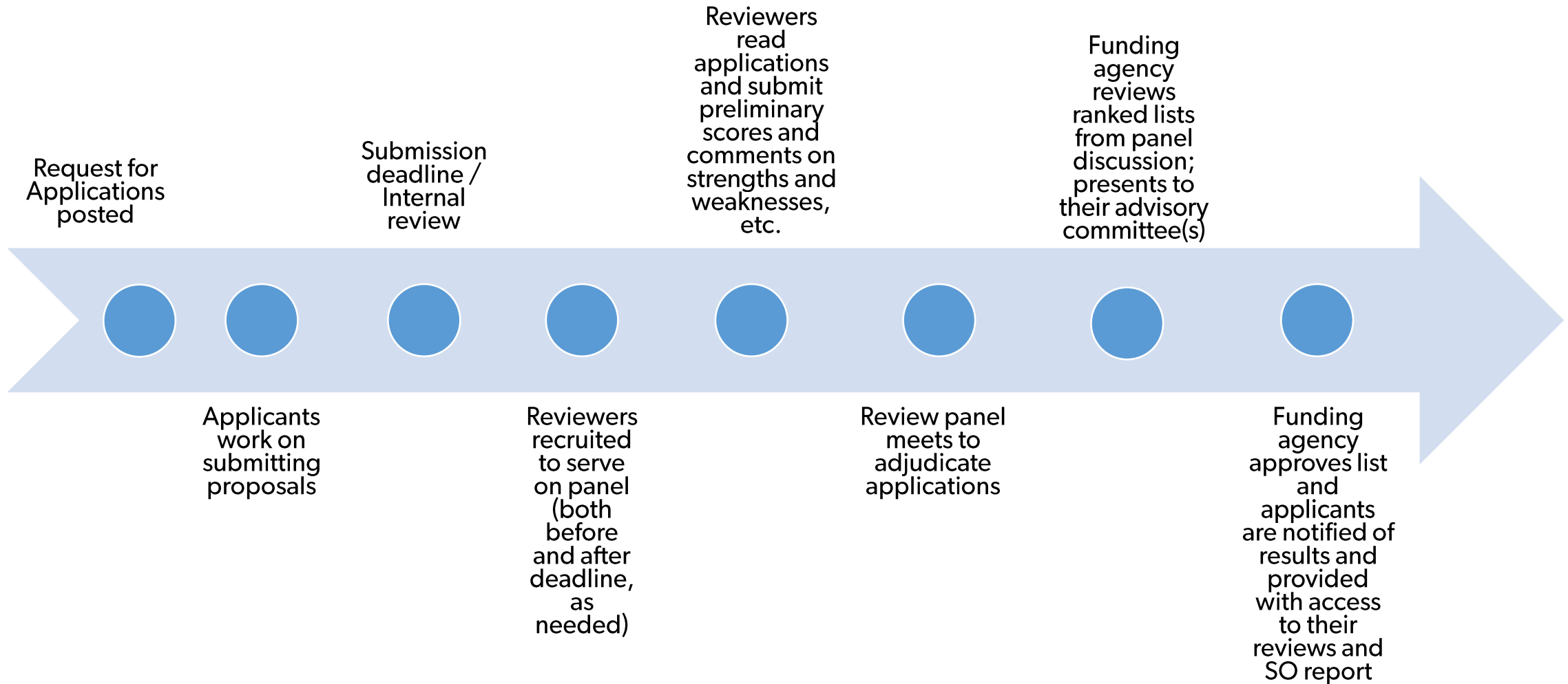
7. Members of the review panel may ask questions for clarification and offer additional perspectives

8. At the end of the discussion, the primary, secondary, reader and consumer reviewers declare their final scores for the application

9. The Scientific Officer captures the spirit of the discussion, which is provided as individualized feedback to each candidate



## Research Competition Cycle – Typical Timeline





# Accountability



## **Accountability: Monitoring Research Projects**

- ▼ Funding agencies hold researchers accountable for research funds. Arthritis Society Canada requires the following documentation:
- ▼ **Annual progress & financial reports:**
  - An annual research progress report is due at the end of each year of the funding term. Compliance with this policy is necessary for ongoing funding of the research project, to receive subsequent payments and to be eligible to apply for future research funding
- ▼ **End of project report:**
  - To capture the outcomes of the grants and to effectively report back to stakeholders/partners, end-of-grant reports are typically required following the end of the funding term
- ▼ **Post two-year report**
  - To capture the continued impacts of the research, post-grant funding reports are required two years following the end of a funding term





## **Accountability: Reporting on Research Projects**

- ▼ Funding agencies may use information from financial, progress, and end-of-grant reports to share research project impacts with:
  - Donors
  - Consumers
  - Other external stakeholders and partners

# Summary



## Summary

- ▼ Research is funded through various Canadian agencies
- ▼ Researchers must submit grant applications to compete for funding
- ▼ Grant applications are reviewed by a panel of peer reviewers
- ▼ Transparency, objectivity, and accountability are priorities to ensure an equitable peer review process



# Research at Arthritis Society Canada



## About Arthritis Society Canada

- ▼ Canada's national healthy charity dedicated to people with arthritis with revenue of over \$29M, funded primarily by donors
- ▼ Established in 1948 after dedicated health professionals and citizens demanded the government put resources towards bettering the lives of people who were ravaged and disabled by rheumatic disease
- ▼ Governed by a volunteer board of directors
- ▼ Integrated Scientific and Medical Advisory Committee (iSMAC) provides advice on Arthritis Society Canada's research, information, support tools, and resources
- ▼ Supported by more than 500 volunteers!



## About our Research

- ▼ Arthritis Society Canada is the largest charitable funder of arthritis research in Canada
  - Funded more than \$220 million in research projects since our founding
  - We invested more than \$6.3M in research last year – and increasing each year
  - Currently supporting 117 lead researchers across Canada
- ▼ Selection of research projects based on expert review process, including consumer reviewers
- ▼ Focused on providing support to:
  - World-class researchers in Canada;
  - Trainee programs;
  - Building capacity in young investigators; and
  - Collaborating with the next generation of researchers
- ▼ We fund biomedical, clinical, health services, as well as social, cultural, environmental, and population health research.



## Research at Arthritis Society Canada

- ▼ Arthritis Society Canada's research program is grounded on our goal of finding the causes and cures of arthritis and to promote the best possible treatments and care of those living with arthritis
- ▼ We hold ourselves to a high standard when selecting which research projects have the potential to generate the most impact in solving the unanswered challenges of arthritis
- ▼ Through the process of an open call grant competitions, we invite researchers to submit their research proposals for consideration by a panel of experts in clinical care and discovery research, as well as people who have lived experiences with arthritis
- ▼ Transparency, fairness, and accountability remain priorities in our research programs



## Become a Consumer Reviewer

- ▼ Many people affected by arthritis help shape Arthritis Society Canada's research programs
- ▼ We are fortunate to be able to work with so many enthusiastic and dedicated consumers, who have and continue to be actively involved as expert reviewers for Arthritis Society Canada's research grants and awards. Their insights, experiences, and knowledge of living with arthritis have been integral to funding innovative research and supporting new trainees
- ▼ Every Arthritis Society Canada-potential research investment undergoes a thorough expert review. Both researchers and consumers actively participate in review panel discussions and score applications
- ▼ Consumer reviewers specifically evaluate the potential relevance of a research proposal to people affected by arthritis





## Become a Consumer Reviewer

- ▼ If you are interested in becoming a consumer reviewer or would like more information about the Research Review Panels at Arthritis Society Canada, please contact our Research Department at [research@arthritis.ca](mailto:research@arthritis.ca)



## Additional Information

- ▼ For further information about research at Arthritis Society Canada, please view the following links:
- ▼ About Research: <https://arthritis.ca/researchers/>
- ▼ Research Strategy: <https://arthritis.ca/researchers/research-programs/research-strategy>
- ▼ Current Research Investments: <https://arthritis.ca/researchers/current-funding-opportunities/competition-results>
- ▼ Consumer Engagement: <https://arthritis.ca/researchers/get-involved-in-research>



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