



Grant Reviewer Scoring Guidelines

Scientific research plays a crucial role in advancing knowledge, fostering innovation, and addressing societal challenges. To ensure the equitable distribution of limited research funding, the evaluation and selection of grant applications must be based on rigorous and standardized criteria. The development of a comprehensive and transparent scoring guideline is essential for enhancing the precision and consistency of this evaluation process.

At the Arthritis National Research Foundation (ANRF), we are committed to ensuring fair reviews of grant applications. Therefore, we have compiled reviewer guidelines to ensure all applications are reviewed consistently, regardless of the individual reviewer. We also make these guidelines available to all applicants to ensure transparency in review criteria.

The review process:

Once the application period has closed, ANRF Scientific Advisory Board (SAB) reviewers conduct a 4-round review process as follows:

Round 1 – Initial review – Staff review applications for compliance to grant criteria. Any applications that do not meet page limitations and formatting requirements dictated in the Grant Application Requirements Document, and/or application policies in the Grant Policies document (both found at <https://curearthritis.org/research-grants/>), will not move on to additional rounds of review.

Round 2 – Triage review – SAB reviewers and applications are split into 2 or more groups. All reviewers briefly review all applications assigned to their group and give a ‘yes/no’ response to if they believe that the application is competitive amongst peer applications. Applications that are scored at higher than 50% ‘yes’ move on to the next round. The SAB Chair is the tiebreaker on any applications that are scored at 50%.

On rare occasions, applications may be rescued from elimination at the triage review if an SAB reviewer feels strongly that it should move on to the main review. This practice is similar to the NIH’s objection policy.

Applicants that do not move on are provided feedback on why the application is not progressing to the main review.

Round 3 – Main review – Applications are each assigned 2 SAB reviewers knowledgeable in the application subject area. Applications are reviewed in depth, scored ([based on the scoring scale below](#)), and provided comments. SAB reviewers are not made aware of other reviewer’s assigned applications or any scores given.

Round 4 – **Discussion** – Reviewers meet to discuss applications scored in the top tier. Main reviewers discuss the application’s strengths and weaknesses with the group and answer any questions from the SAB. All of the reviewers then anonymously score the application.

Once the scores are all in, ANRF will fund the top applications. The number of grants funded is based on the funds available. In general, only 10-20% of applications are funded.

What reviewers look for in applications:

The ANRF seeks to provide support for investigators on the cusp of independence, in whom an award will allow the PI to move forward in their career.

Grant applications ANRF typically funds:

- Investigators with a clear upward trajectory, ideally just before or within a few years after transition to independence to their own research groups.
- Applications that provide mechanistic insight into the processes that underly arthritis and other rheumatic diseases, especially (but not exclusively) with potential therapeutic relevance.
- Human studies and/or animal studies that inform human immunobiology.
- Applications containing unambiguous evidence of institutional support for the mentee’s development as an independent scientist.
- Applications that show a clear path to independence when working on a PI’s project and include a clear understanding of how they will take the project with them when they transition to independence.

Grant applications ANRF does not typically fund:

- Applications that lack evidence of careful mentoring support for awardee, including in the preparation of the grant. Poor-quality writing, small/illegible figures, and non-standard format are indicators that the mentor was not able to provide sufficient guidance to the PI.
- Early-stage investigators without a publication track record. ANRF reviewers look for investigators that will be ready for at least K-level NIH funding over the 2-year grant cycle.
- Staff scientists or extremely senior trainees without clear evidence of a trajectory toward scientific independence.
- Exploratory/developmental/pilot grants for collection of preliminary data (“fishing”).
- Projects entirely reliant on recruitment of new human cohorts.
- While the committee will consider all forms of research, historically ANRF has rarely funded research in these categories: descriptive epidemiology, health services delivery, surgical method development, physical therapy interventions, and technical/method development.

Scoring scale:

The ANRF scoring scale aligns with the [NIH peer-review scoring model](#).

All reviewers are expected to consider the rating guidance herein to improve the reliability of their scores, as well as their ability to communicate the scientific impact of the applications reviewed.

Score	Evaluation of Program Criteria Descriptions
1	Exceptional , no weaknesses on program criteria
2	Outstanding , minor weaknesses on program criteria
3	Excellent , more strengths than weaknesses on program criteria
4	Very good , moderate weaknesses on program criteria
5	Good , strengths and weaknesses are equivalent on program criteria
6	Satisfactory , weaknesses are slightly greater than strengths on program criteria
7	Fair , weaknesses are significantly greater than strengths on program criteria
8	Marginal , too many weaknesses on program criteria
9	Poor , little to no strengths on program criteria

Note: All applications that advance through the initial review will be provided comments by reviewers, but will not receive scores. Scoring is kept confidential at all times.

Accompanying descriptors:

Exceptional: Brilliant, Remarkable, Unique

Outstanding: Superior, Advanced, Overarching

Excellent: First-rate, Admirable, Superb

Very Good: Valuable, Respectable, Beneficial

Good: Decent, Standard, Acceptable

Satisfactory: Suitable, Adequate, Status quo

Fair: Objective, Rational, Neutral

Marginal: Subpar, Minimal, Limited

Poor: Inadequate, Deficient, Insubstantial

Reviewer scoring guidance:

Triage review:

Questions reviewers should consider when choosing to move an application forward to the main review:

- Does the proposed research address an important problem or a critical barrier in the field?
- Are the goals and objectives of the project aligned with the priorities of the funding organization?
- Are the concepts, approaches, or methodologies novel and innovative?
- Are the research design, methods, and analyses well-reasoned and appropriate to accomplish the specific aims?

- Do the applicant and mentor have the appropriate experience and expertise to conduct the proposed research?
- Has the applicant demonstrated that they are making contributions to the field?
- Does the scientific environment in which the work will be done contribute to the probability of success?
- How does the application compare to others in terms of significance, innovation, and feasibility?

Main review:

- To avoid clustering of scores, the full range of scores must be used.
- Applications in the main review should be evaluated independently of other assigned applications. In other words, do not compare applications &/or applicants to one another.
- Best approach is to review each application assuming each criterion will fall start at 5 “in the middle”, then adjust your scores for each criterion accordingly based on strengths and weaknesses discovered.
- ANRF, like NIH, expects that scores of 1 or 9 will be used less frequently than the other scores. A score of 5 correlates to a good, medium-impact proposal and should be considered an average score.
- Very few proposals discussed should ultimately end up with an overall score in the 1-2 range.
- Reviewers whose evaluations or opinions of a proposal fall outside the range of those presented by the assigned reviewers and discussant(s) should ensure that their opinions are brought to the attention of the entire committee.
- Reviewers should feel free to assign the score that they believe best represents the impact of the proposal, and not feel constrained to limit their scores to the upper half of the score range if they do not feel such a score is warranted.
- Unconscious bias can significantly impact peer review scoring – please consider your bias training when evaluating proposals. Reviewers are also encouraged to call biases to the attention of the SAB.

Reviewer guidance for creating quality critiques:

- Address each review criterion with concise statements regarding the strengths and weaknesses.
- Ensure applicants can clearly understand the strengths and weaknesses you determined in the proposal.
- Include basic comments with suggestions for improvement on the criteria that you scored unfavorably. In this competitive funding environment including singular strength comments are not the most informational source for applicants.
- If you have scored an application in the 2-9 range, your critique must include sufficient statements to demonstrate the minor or major weaknesses/areas of improvement for the applicant.

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- When needed, contact the SAB chair or ANRF grant management staff for clarity.

Questions:

We are happy to help! Please do not hesitate to reach out with any questions or comments. Contact grants@curearthritis.org or call 1-800-588-2873 x103.

The Arthritis National Research Foundation's mission is to provide initial research funding to brilliant, investigative scientists with new ideas to cure arthritis and related autoimmune diseases.