

## Grounds for rejection

Failure to satisfy the following two items are grounds for rejection.

- Proposal addresses access to other compute resources
- Code performance and scaling data are provided

## Assessment and Summary

- Research objectives described
- Peer-reviewed supporting grant(s) — OR — Science review
- Progress report, publications, and prior usage (if applicable)
- **[R]** Proposal describes access to other compute resources

## Appropriate Methodology

- Right tools, codes, algorithms, etc., for the research objectives
- Appropriate parameterizations, model configurations, etc., for the research objectives

## Appropriate Research Plan

- Necessary & sufficient experiments or work plans to answer the research objectives?
- Request totals calculated correctly
- Justification provided for number of replicates, problems sizes, duration of calculations, etc

## Efficient Use of Resources

- Appropriate resources chosen
- Resources to be efficiently used
- **[R]** Code performance and scaling data are provided and appropriate

## ***XRAC Research Request Rubric for Reviews***

The following descriptions elaborate on the primary elements of the “short-form” rubric.

### Grounds for Rejection

- The two grounds for rejection are failure to address access to other resources and failure to provide appropriate code performance and scaling.
- These are both also addressed within the parts of the review, but are called out here for emphasis.
- Reviewers who reject requests on these grounds should explicitly identify the reason in the Assessment and Summary portion of their review.

### Assessment and Summary

- Does the main Document succinctly state the scientific impact of the research to be conducted?
- Are the science objectives described in sufficient detail to support the computational request?
- Does the request have [national?] agency or foundation supporting grants for which the science objectives in this computational request have been reviewed?
  - If not, science must be reviewed for its merits.
  - If a renewal, also consider the progress made using prior allocations, including the publication of peer-reviewed manuscripts and other communications within the community.
  - If so, the scientific merit and approach will not be subject to further review.
- Renewal requests:
  - Are publications and a progress report provided?
  - Has sufficient usage of prior allocation been made (or explanation provided)?
- PI available resources:
  - [GROUNDS FOR REJECTION] Are the researcher's available local CI resources and other non-XSEDE resources (or absence thereof) described?
  - Does the plan include how XSEDE resources will provide capabilities beyond those of local resources or why the requested XSEDE resources are required in addition to PI available resources?

### Appropriateness of Methodology

- Compute resource requests:
  - Are the choice of applications, methods, algorithms and techniques to be employed to accomplish the stated scientific objectives reasonably described and motivated?
  - Are the methods/tools appropriate and sufficient for answering the science questions?
- Storage resource requests:
  - Are the data usage, access methods, algorithms and techniques to be employed to accomplish the stated research objectives reasonably described and motivated?

## ***XRAC Research Request Rubric for Reviews***

- Shared collections:
  - Are the public or community access methods to be utilized described?

### Appropriateness of Computational Research Plan

- Does the research plan explain how the research objectives will be achieved?
- Are the computational runs described in sufficient detail to justify the request?
- Is the proposed computational work necessary and sufficient to address the science questions?
- Compute resource requests:
  - Do the proposed computations include simulation parameters (step size, time scale, ensemble parameters, etc.) sufficient to obtain accurate and meaningful results?
  - Are sufficient human resources available to devote to the task?
  - Are the amount of resources requested derived from the methodology and research plan?
- Are there serious concerns about the research plan?
  - If so, document these concerns in your review
- Are the resource requests calculated correctly from the information provided?

### Efficient Use of Resources

- Is the proposed usage for the selected resources in accordance with the recommended use guidelines of said resources?
- Compute resource request:
  - Are relevant performance and parallel scaling data provided?
  - Is a discussion of work done to improve optimization and/or parallelization of the application(s) provided?
- [GROUNDS FOR REJECTION] Does the request provide code performance and/or scaling data on the requested resources for the work proposed?
- Is the work proposed being targeted to appropriate resources?
  - If not, recommend an allocation on more appropriate resources.