

Astromaterials Allocation Review Board (AARB) Charter

Effective November 1, 2023

Introduction.

NASA solicits and receives proposals for the loan of samples for the purpose of research and public outreach from its collections of astromaterials curated at Johnson Space Center (JSC). The AARB provides unbiased peer review for such proposals, under the terms of this Charter

The conditions governing the loan of astromaterials are set by [NPR 7100.5](#) "Curation of Astromaterials." Loans may be made to qualified researchers from anywhere in the world, at no cost, as allowed by US law. Qualified researchers are defined as members of the public who meet the requirements for access to the astromaterials collections through the existing review and approval process for the relevant curated materials. Under NPR 7100.5, all loan requests are subject to peer review, unless the specific astromaterials collection has an approved policy stating certain conditions under which the collection curator may waive peer review and conduct a curatorial review instead. When peer review is required, it is performed by the AARB.

Organization of the AARB.

The AARB is convened by the **Chief Scientist for Astromaterials Curation (CSAC) within SMD**, who shall be the selecting official for all astromaterials loans. The CSAC:

- Manages and approves the Task Plan with the NRESS contractor, under which the AARB will operate;
- Concurs on loans of astromaterials specimens for research investigations, education and public display. If no response is given within three (3) business days, concurrence is assumed;
- Provides HQ oversight over all AARB procedures;
- Approves of any in-person meeting locations and schedules;
- Approves of decisions on appeals of denied loan requests.

The CSAC delegates operation of the AARB to the **Astromaterials Curator (AC)**, who:

- Approves and executes the solicitation process for proposals for astromaterials loans in accordance with NPR 7100.5;
- Approves membership and staffing of all panels under the AARB, including terms of service;
- Provides oversight of the processes by which the AARB conducts peer review;
- Approves the schedule and location of all AARB meetings (all in person meetings also require CSAC approval);
- Approves loans, with the concurrence of the CSAC, of astromaterials specimens for research investigations, education and public display;
- Handles and recommends decisions on any reconsiderations of denied loan requests.

The AC shall organize the AARB's individual peer review panels, each charged with evaluating loan proposals from one or more astromaterials collections. The size and scope of each panel is determined by the AC. Each peer review panel shall be staffed by the **JSC Collection Curator(s) (CC)** of the relevant collection, who:

- Recommends panel members to the AC for approval;
- Receives proposals for astromaterials loans;
- Communicates with the NRESS contractor regarding panel dates, attendance in advance of the panel, as well as all pertinent information necessary to ensure panelists receive honorarium for their services in a timely manner (Collection Curator shall cc the Astromaterials Curator on all correspondence with NRESS);
- Distributes the proposals to panel members;
- Distributes any other review materials to panel members appropriate to their function;
- Assigns Lead Reviewers for each proposal and notifies panelists of assignments (this may be delegated to a group chief);
- Manages conflicts of interest in panel meetings;
- Provides information about the collection as needed by the panel;
- Recommends the panel schedule and location (virtual or in person) to the AC;
- Attends all panel discussions of proposals for loan of material in their collection (in a non-voting capacity);
- Provides recommendations to the AC for approval or denial of loan proposals following peer review.

Each panel shall comprise one member designated as the **group chief** and at least three other **panelist** members, all of whom are eligible to vote following the conflict-of-interest protocols outlined below, noting that each sample request requires at least three (3) individual votes. A non-voting **executive secretary** may be selected as well. Panel members and the group chief may serve single or multiyear terms, at the discretion of the AC.

Operation of AARB panels.

An AARB panel shall be convened for all proposals that require peer review (e.g., that are not subject to curatorial review).

Planning of panel meetings.

Panels may meet on a regular or ad hoc schedule. Proposals for loans and any other materials needed for the review should be distributed to panel members at least one (1) week prior to the panel meeting. Panel members should have access to all proposals on which they have no conflict, to be discussed at the panel meeting. NRESS must be informed prior to the panel convening of the dates of the panel and anticipated attendees and service needs.

Conflict of interest at panel meetings.

Given that no funding is requested in a loan proposal, the following policies will be in place for determining conflicts of interest:

- A panel-level conflict, resulting in a potential panelist not being eligible to serve on the panel, occurs when:
 - The potential panelist has submitted their own proposal for the loan of a sample that was also requested in one or more other proposals under consideration;

- The potential panelist, or another person in a close personal relationship with that potential panelist, stands to gain financially from the decision on a loan proposal under consideration.
- A proposal-level conflict, requiring the panelist to recuse themselves from discussion and voting of that proposal, occurs when:
 - Their own proposal is being discussed;
 - The proposal was submitted by a person with whom the panelist has a close personal relationship;
 - They are involved with the project for which a loan is being requested;
 - They are conducting work in direct competition with the project for which the sample request is proposed;
 - They consider themselves biased, or a reasonable person might see them as biased, on the sample request.
- Things that are not conflicts on AARB, which might be on a regular research proposal peer review panel:
 - The panelist is at the same institution as the proposer;
 - The panelist has a proposal in the same panel;
 - The panelist has applied for a job at the proposer's institution.

Discussion process.

Every proposal before a panel will be discussed. At least one panelist shall be assigned the role of Lead Reviewer on each proposal.

Evaluation criteria for peer review.

The merit of each proposal for the loan of astromaterials will be evaluated by considering the following criteria:

- The reasonableness of the project.
 - Unlike in the review of a research proposal, proposals for the loan of astromaterials do not need to present a fully defined research plan. They are only required to state their objectives and methodology in general terms. The AARB shall assess whether these goals are reasonable and that the project constitutes a valid use of astromaterials (i.e., that there are legitimate research objectives).
- The reasonableness of the proposed methodology.
 - The AARB shall assess whether the proposed methods are well explained and could reasonably be expected to produce the anticipated measurements.
 - If techniques/instruments are to be utilized for the first time on extraterrestrial materials, the AARB shall evaluate whether the same techniques/instruments have been successfully applied to terrestrial samples.
- The appropriateness of the proposed astromaterials for loan.
 - The AARB shall assess whether the requested material is of the correct type to address the research objectives.
- The appropriateness of the requested mass and form of sample.

- The AARB shall evaluate whether the mass requested for loan is both sufficient and not excessive for the stated experiments. If the collection has an approved Sample Conservation Plan, the AARB shall evaluate whether the requested mass is consistent with that plan.
- The capabilities of the proposing team.
 - In particular, if special handling of samples is required, the AARB shall evaluate whether the proposal team has demonstrated that they are capable of proper sample handling.

Panel findings and voting.

The panel shall make findings for each individual sample requested in a loan proposal. At least three panelists must vote on the findings from each individual sample requested. Voting may be done on all the loan requests in a proposal at once, or by singling out one or more requests for separate votes. The panel must choose one of the first three ratings when a majority of voting members agree, or the fourth one when there is inadequate support for one of the first three.

- *PASS*. The project and methodology are reasonable, as are the requested mass and the specific requested sample. The request demonstrated that the team has the appropriate expertise to carry out the proposed work.
- *PASS WITH QUALIFICATIONS*. The project and methodology are reasonable. However, there may be better samples to use for the project, or a mass or form that is different from those requested should be considered for allocation by the curator. The panel may also find that the proposer should demonstrate some capability or provide other information upon which the loan should be contingent. In all cases, a note is provided explaining the qualifications being suggested.
- *DENY*. The proposal did not demonstrate reasonableness, the methods were not justified, the requested samples were not appropriate, adequate mass would not be available, or the proposal did not demonstrate capability of the proposing team. A note is provided explaining the reasons for this finding.
- *TABLE*. If a majority of panelists do not vote in favor of one of the above categories, a note is provided explaining the disagreement. If three votes are not cast, either due to conflict of interest or for some other reason, a note will be made about this as well. If a finding of “TABLE” is made, the CC shall recruit additional reviewers and conduct another review in a timely manner that produces one of the first three findings above.

Approval process.

Following a panel meeting, the CC from each panel shall collate the panel findings and develop recommendations about which samples in each proposal should be approved for loans, which should be denied, and which should be tabled pending further information.

For all collections except the Antarctic Meteorite Collection, the CC’s recommendations are forwarded to the AC for approval. If approval is not provided, the AC may iterate the approval plan with the curator for revision. Once the AC approves of the entire plan, it is forwarded to the CSAC for concurrence prior to notifications to the requesters.

For the Antarctic Meteorite Collection, the CC's recommendations are forwarded to the AC for concurrence. If concurrence is not provided, the AC may iterate the approval plan with the curator for revision. Once the AC concurs on the entire plan, it is forwarded to the CSAC as well as to the NASA and Smithsonian representatives to the Meteorite Steering Group (MSG). Approval is provided by MSG, with input from the CSAC.

The proposer shall receive a written decision from the CC regarding the outcome of their request. This decision document must include any panel findings that resulted in the determination of pass, pass with qualifications, or deny.

Debriefing, Reconsideration, and Appeal process.

Following a proposer being provided a decision regarding their sample allocation, they may choose to request a reconsideration of the decision. Reconsideration requests should be handled by the CC and the AC. Appeals should be handled by the CSAC.

Request for Debriefing.

A proposer who has received notification of the selection decision and associated written evaluation or rationale, may request additional information to be provided in the form of an oral debrief.

A debriefing is an informal exchange (generally on the phone or over video chat) between the CC and the proposer. The primary objectives of the debriefing are to help the proposer understand the evaluation process, the evaluation itself, and the process leading to the final allocation decision. Debriefings are not part of the allocation request evaluation process and will not result in changes to evaluations or allocation decisions. Assessment of the technical accuracy of the evaluation's findings do not occur in debriefings.

The debrief process is constrained by the following:

- Debriefings may be requested by a proposer until 30 days after NASA sends the evaluation and notification of the allocation decision. If the proposer has taken no action within these time limits, the CC is not required to entertain a request for debriefing.
- CCs must respond within 30 days to requests for debriefings (and are encouraged to respond more promptly) to acknowledge the request and arrange a mutually acceptable time for the debriefing, or to delay the debriefing, with an explanation of why more time is needed.
- Debriefing typically occurs by a phone call, but by mutual agreement debriefings may be conducted in writing, in person, or by video conference.
- Debriefings should only contain the proposer of the sample request and should last no more than 30 minutes.
- In instances where the proposer focuses on perceived technical inaccuracies in the evaluation, or issues with the review process, the CCs should inform the proposer of the process to request reconsideration.

Request for Reconsideration.

Having received a written evaluation and notification regarding a selection decision, a proposer who seeks to demonstrate that there were errors in the evaluation or review process may request reconsideration by providing a written request and rationale.

A request for reconsideration is a proposer's detailed, written response to the decision and/or panel evaluation that clearly and concisely lays out perceived factual or technical errors in the written evaluation, perceived problems with the proposal evaluation process, and/or perceived inconsistencies in the basis for the allocation decision.

A CC should not respond to a request for reconsideration before the written evaluation and decision letter have been sent to the proposer, other than to acknowledge the request and state that a proposer may request reconsideration only after having received notification of the decision and the written evaluation.

The process for requesting reconsideration is as follows:

- Once NASA has sent the written evaluation and the written notification of a decision to decline all or part of a sample request, the proposer has 30 days to contact the CC and request a debrief (full process described above).
- The proposer then has 30 days from the debrief to submit a written request for reconsideration to the CC. If the proposer has taken no action within these time limits, the CC is not required to entertain a request for reconsideration of the allocation decision.
- Upon receipt of a written request for reconsideration, the CC must respond within three business days, either to acknowledge the request and state that a response will follow within 30 additional days or to inform the proposer that additional time will be required. The CC must send an email to the AC informing them of the reconsideration request and must cc the CSAC on this initial response to the request for reconsideration.
- After acknowledging receipt of the reconsideration request, the CC must determine the validity of the proposer's response to the findings. To aid this determination, the CC may provide the original allocation request, the findings in question, and the actual written request for reconsideration to one or more knowledgeable and non-conflicted reviewers via a secured platform. Based on any analysis by the CC and any inputs from reviewers, the CC must generate and send to the AC a written document addressing:
 1. Justified determinations as to whether the proposer's responses to the disputed findings were found to be valid; and
 2. Justified recommendations regarding whether any changes to the allocation decision should be made.
- Discussions between the CC and the AC must lead to a decision by the AC to maintain or to modify the original allocation decision, with concurrence from the CSAC. The CC must then construct and communicate to the proposer a written response to the reconsideration request. This response must indicate whether or not all or any part of any challenged finding will be altered, and whether or not the AC has decided to reverse some or all of the original allocation decision. In cases where reviewer inputs were considered, the response to the proposer must provide a summary version (suitably edited and anonymized) of the reviewer inputs. If the original allocation decision is modified, then this should be recorded.

Request for Appeal.

After the reconsideration process has been completed, a proposer has the right to appeal beyond the AC.

If the proposer is not satisfied with the results of the reconsideration, then a written appeal may be submitted to the CSAC. This request, which summarizes the reasons for the appeal, must be made in writing within 30 calendar days of receipt of the reconsideration letter. The AC and the CC must be copied on this appeal. The CSAC must respond in writing to this appeal within 60 calendar days (and are encouraged to respond more promptly). If additional time is required to prepare a response, then the need for more time should be communicated to the proposer as soon as possible, certainly before the end of the 60 calendar days. The AC and CC must be copied on the response.