

2023 AGeS-Grad Application Review Context Statement

We received 43 complete proposals for the AGeS-Grad opportunity from students to work in participating AGeS³ Geochronology labs using a wide range of techniques. The AGeS³ Program was able to fund 22 proposals at an average cost of \$8585 this year. This was a difficult decision, as there were many excellent and deserving proposals. The panel was unanimous in its support of the rankings and awards.

The review committee was composed of *ten* geochronology experts with a broad range of backgrounds familiar with the application of geochronologic techniques. Conflicts of interest were addressed openly at the start of the review process. Proposals and reviewer comments are inaccessible for conflicted reviewers. Decision-making during review used an open and consensus-based two-stage approach. At least 2 members of the review committee scored each proposal with the rubric of review criteria, and the two scores (normalized to each panelist's mean review score) were summed, yielding a ranked list of projects. This phase was followed by panel discussion and the identification of 30 proposals to each receive 2 additional reviews.

Following this second stage of more intense review, proposal scores were again normalized, and a second panel discussion was held. The top 22 proposals in this ranked list were funded. To maximize the number of proposals and breadth of science supported, all but one of the lower half of the selected proposals were supported at 90% of the requested funding level.

All proposals were evaluated by the reviewers and awarded points according to the following metrics associated with the proposal's Intellectual Merit and Broader Impacts. These criteria were available on the AGeS³ website throughout the application process:

Intellectual Merit: Proposal Quality (70 points total)

Proposals will be evaluated based on their overall significance and intellectual merit, project design, and coordination/timeline/budget. Reviewers will use a point system that weighs the relative importance of each category and allows for direct comparison of multiple proposals. Proposals must satisfactorily address all of the following requirements and must include all of the requested application materials to be considered for funding. The panel may decide to partially fund proposals.

1. Overall significance (35 points)

General quality of the proposed research, including its scope, importance, and relevance to NSF-EAR science goals. Clarity of the proposal's central question or hypothesis.

2. Project design (25 points)

General likelihood that the research will be able to answer the central question or hypothesis of the proposal and produce useful results. Considerations can include the choice of technique, sampling strategy, and whether the proposed methods are well-established or experimental. AGeS is willing to fund well-designed, higher-risk projects.

3. Coordination, timeline, and budget (10 points)

Assessment of the proposed timeline and budget, specifically considering the time required for sample acquisition and preparation, training, analysis, and interpretation. This criterion relies partially on good coordination between the proponent and the hosting facility, evaluated based on the student proposal, the clarity of the lab plan, and the support letters. Budgetary considerations can include the availability of other sources of funding.

Broader Impacts: Expanding access and building networks (30 points total)

Proposals will additionally be assigned points based on the project's potential to foster the acquisition of new geochronology skills by the student and the project's potential to foster new research collaborations. These criteria are aimed at meeting the broader impact goals of AGeS2 to expand geochronology access and build research networks. The review committee is expected to assess these questions through a BAJEDI framework.

1. Expanding Access: Potential for fostering the acquisition of new geochronology skills by the student (15 points): The extent to which this research provides a new and otherwise unavailable opportunity for the student to obtain experience with and training in analytical work and geochronology.
 - High (15 pts) – No previous geochronology experience of any kind, no local access, and access to geochronology facilities and expertise unlikely without an AGeS award
 - Medium (10 pts) – Some previous geochronology experience but with different technique than proposed and not already situated within environment emphasizing geochronology
 - Low (5 pts) – Previous geochronology experience including with same technique in proposal or already situated within environment emphasizing geochronology
 - No credit (0 Pts) – This aspect not clearly explained in proposal and supervisor letter

2. Building networks: Potential for fostering new research collaborations (15 points): The degree to which this research will create new partnerships and opportunities, including collaborations between different institutions and/or research groups.
 - High (15 pts): Completely new collaboration for student, advisor, and lab
 - Medium (10 pts): New topic and strengthen existing ties
 - Low (5 pts): Existing topics building on existing ties
 - No credit (0 Pts) – This aspect not clearly explained in proposal and supervisor letter

Total: 100 points