

AGeS³ - Advancing Geochronology Science, Spaces, and Systems

<https://agesgeochronology.org/>

2024 AGeS-Grad application review context

We received 52 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 \$8,690 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 assigned points based on their overall significance, project design, coordination/timeline/budget, and effectiveness of the figure.

1. Overall significance (30 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.

4. Effectiveness of the figure (5 points)

The figure contributes to explaining the overall project significance, project design, or sampling plan (4 points). The figure is referred to in the proposal text and includes a clearly written caption (1 point).

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

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

1. Expanding Access: Potential for fostering the acquisition of new geochronology skills by the student. 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. (15 points)
 - 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 and a greater sense of belonging in geoscience. The degree to which this experience will increase a sense of belonging in geoscience for the student by creating new partnerships and opportunities, including new collaborations between different institutions, research groups, and individuals. (15 points)
 - High (15 pts): Completely new collaboration and experience
 - 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