

Suggested Best Practices for Assessment Group (AG) Steering Committee Selection. N. R. Izenberg¹, M. M. McAdam², K. A. Bennett³, M. C. McCanta⁴. ¹JHU Applied Physics Laboratory, Laurel, MD (noam.izenberg@jhuapl.edu). ²NASA Ames Research Center. ³USGS Astrogeology Science Center. ⁴University of Tennessee Knoxville.

Introduction: The Assessment Groups (AGs) are a key liaison between the planetary science community and NASA Headquarters. AGs are responsible for collecting community feedback and relaying that feedback formally to the Planetary Science Advisory Committee (PAC). As with any position that seeks to represent a community, it is important that all community members have equal opportunities to apply and be selected to serve as part of an AG Steering Committee. Here we describe recent steps that have been taken as a model of best practices related to selecting new AG steering committee members.

In July 2021, the Venus Exploration Assessment Group adopted new policies on Inclusion, Diversity, Equity and Accessibility including selecting new steering committee members and AG chairs. More recently, the Cross-AG Inclusion Diversity Equity and Accessibility Working Group (Cross-AG IDEA WG), has begun creating a similar best practices document for other AGs to adopt.

Selection best practices: Through discussions across different AGs and personal experiences, the Cross-AG IDEA WG is developing a number of suggestions to support other organizations, especially AGs, to use in their selection. These include:

- Transparency
- Development of a selection rubric prior to the search and then share with community
- Recruitment

Each element will promote practices that reduce bias in the selection process and help develop a strong community who trusts that the selection process is fair. Dual-anonymous review was also considered for its potential to reduce bias, as has been demonstrated in proposal reviews [1]. However, dual-anonymous review was ultimately left off the AG selection best practices list due to potential challenges that are specific to AGs (i.e., the small steering committee and relatively small community can make it challenging to effectively enact anonymity).

Transparency: Transparency is critical to developing trusted selection strategies. Every aspect of the selection process should be made clear to the community, preferably documented in writing alongside the call for applications. This includes but is not limited to the timeline for applications, the selection process, and the anticipated start date; the required

application document(s); rubric for evaluation; selection committee membership; and expectations of the role.

It is essential that the expectations of the role are clearly defined and communicated to the community. This includes the requirements, time commitment, compensation, and potential benefits of the role for the applicants.

Evaluation Rubrics: Rubrics are also helpful for the selection committee to specifically identify the qualifications required for the job. These may be difficult to define, especially for at-large positions, still an attempt to codify the work of at-large positions should be made. By discussing these in advance of releasing the call for applicants, it may be possible to clearly articulate what skillsets or expertise will be necessary for the role. This practice of intentionally identifying the selection criteria assists in removing bias because the applicants are being compared to the needs of the role rather than the implicit desires of individuals on the selection committee. It is also important to share the rubric with the applicants in advance so they can respond to each required element.

Research indicates that when job requirements are unambiguously defined, this can increase the number of applicants from diverse people, especially women who might choose not to apply for jobs if they do not feel sufficiently qualified [2].

Furthermore, it should be made clear that people who do not match every qualification could still be competitive. In general, men tend to overestimate their capabilities for stereotypically masculine roles [1 and refs. therein]. Moreover, research shows that women rate their performance as inaccurately low on masculine coded tasks (i.e., leadership roles etc.) while men do not show such a tendency for feminine coded tasks [3; also note: this paper only investigates self-identified men and women; no comments are made about other gender identities]. Women will typically apply to job announcements only if they perceive themselves to match a larger fraction of the qualification listed compared to male peers, whereas men will typically apply to job announcements even if they only match some of the requirements. This creates an inherent bias in the selection pool. Clearly defined and well-communicated selection rubrics as well as the skills and qualifications necessary for this role are effective mitigation strategies to minimize the self-selection bias [2].

The evaluation process cannot be held static once established; rubrics should be evaluated with each selection cycle to make sure they are current and to identify language that might have been confusing or vague to applicants and/or evaluators.

Recruitment: Finally, it is important to explicitly recruit people for all positions being advertised. Sometimes, especially earlier career scientists, may not know that they either can apply for roles in the AGs or they might be unsure if they are a good fit. It is essential to reach out to people with the expertise, perspectives, or experience that would augment the AG leadership and support their application to the role. Additionally, telling people that their perspective, experience, and expertise is valued by the AG Steering committee can foster a sense of belonging and validation that might be a key encouragement for their application.

During the recruitment process, it is important to stay aware of personal biases. This could include both professional biases (e.g., types of expertise or experience as in potential bias toward different approaches to science like people who work with spacecraft data compared to theoretical modelers) as well as bias rooted in other social schema (e.g., race and gender bias amongst others). Consider who is in the community and who is represented in the AG leadership and if that balance needs to be adjusted. Make it clear to the scientists you recruit that their application and participation is not obligatory or a function of their identities (i.e., do not tokenize people) but rather their whole self is valued and needed on the Steering Committee.

Positive recruitment requires relationships and trust. Consider how the AG leadership is engaging individually and as a group with the community. Consider ways to introduce more people to the AG. It is also important to respect the boundaries of scientists in the AG community. Particularly for scientists who embody historically excluded identities, they may not have the time or energy to participate in leadership. It is critical to extend the invitation to apply, to ensure that qualified candidates know they would be welcome and valued. However, recognize that it is each individual's right to choose whether they wish to devote their time to an AG. Consider how to continue to include and build relationships with scientists from underrepresented backgrounds and devise ways to help identify and build talent in your community.

VEXAG, a case study: The VEXAG Steering Committee (SC) selection process was developed between 2019 and 2021 and is being revised for 2023. The process was developed by the Chair and Deputy Chair, and reviewed, revised, and approved by SC

evaluation and vote. The process is recorded in internal VEXAG organizational documents and posted online for the public on the [VEXAG web page](#).

The VEXAG process encourages self-nomination, but current SC members can and do also solicit community members to apply. The current evaluation rubric include six categories, which committee members evaluate and rate. The experience of the 2021 and 2022 selection years have shown that a) six categories is really too many; we functionally condense them in evaluation, and that b) some of the categories, such as “desire to support community” are too vague or qualitative, and need to be made more quantifiable.

The evaluation criteria have, for the last two years, produced a reasonably clear set of highest-ranked choices, to which we apply Representation Criteria, which are designed to maintain as much balance as possible across multiple axes including career stage, field (science, engineering, and subcategories), institutions, gender identity, and underrepresented groups in STEM. This set of criteria is also under review for improvement in 2023. VEXAG has not implemented dual-anonymous review given the size of the community and applicant pool.

Additional lessons learned: Solicitation of nominations from colleagues can encourage and expand the pool of qualified candidates but may also require recusal of the recruiter if they feel they are potentially biased in favor. With small steering committees, every vote must be considered and every member as aware as possible of potential conflict.

“Balance” is an elusive goal. With a steering committee of 14–15 people, trying to become and maintain as fully representational across all axes and intersectionalities is extremely difficult. With 3-year terms, VEXAG turns over 4–5 members each year. It is somewhat easier to target balance over a longer timescale of 3–4 years, where the pool of the committee is 25–30 people. This requires institutional memory and record keeping, and a commitment to the idea/ideal of aggregate balance, while at the same time attempting to avoid too much lopsidedness in the short term of any one year.

References: [1] Johnson et al., 2020. PASP 132, 034503. Nicks et al. (2022) Gender differences in response to requirements in job adverts, Research Report, Government Equalities Office, UK. [2] Beyer et al. (1997) PSPB, 23, 157.