Report from Primarily Undergraduate Institution Working Group, Summer 2021

Including Proposals for 2022 SICB Meeting Events to Support PUI Faculty

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Rationale:

Primarily undergraduate institutions (PUIs) are home to many SICB members, and their inclusion is important to the <u>mission of SICB</u>. Despite their substantial involvement in the society, PUI faculty often report feeling less visible in society activities, and face frequent misconceptions about the nature of our jobs. Yet there is much PUI faculty can offer to SICB, and opportunities for SICB to better support PUI members.

There is a common misconception that PUI faculty exclusively teach, with primary research contributions related to teaching or pedagogy. Clearly that isn't the case, and SICB can help demystify PUI careers. PUI faculty are more likely to attend SICB as early career scientists, but potentially decrease in participation as their careers advance. Part of this may be due to an increasing disengagement from their field or shifting incentives for attending meetings post-tenure. Although many PUI faculty actively conduct research and mentor undergraduate researchers, SICB meetings do not offer the same kinds of engagement with the community as for faculty at schools with graduate programs. Students do not seek out PUI faculty as potential graduate advisors, and there is often a perceived lack of research at PUIs, resulting in fewer collaborative propositions from colleagues. Yet, SICB can serve as an important resource for PUI faculty to maintain visibility and build networks. PUI faculty can also contribute to the society, as many student and postdoc members who attend meetings will obtain a full-time position at a PUI or community college. PUI faculty can serve as mentors for early-career scientists who wish to teach at non-R1 schools and develop research programs exclusively with undergraduate students. The PUI panel that ran at SICB 2020 had more than 50 attendees (graduate students, postdocs, and faculty), indicating a clear member interest in providing this kind of information to SICB members.

We conducted a survey to understand the needs and opportunities for PUI faculty and to consider how SICB might better serve faculty from PUIs throughout their careers. An ad hoc working group was formed from the survey respondents to consider these issues and related questions. A major goal when forming the working group was to have a diversity of perspectives, so we included members from as many divisions of the society as possible and from all career stages (from graduate student to tenured professor). The working group came up with several recommendations for the Executive Committee to consider for the 2022 meeting in Phoenix, as well as for longer-term support. Below is a summary of the survey and the working group's recommendations for the 2022 meeting.

Survey results summary:

There were 59 respondents as of 8/15/21.

1. Most respondents were faculty, with very few grad students or postdocs:

What is your current position? ^{59 responses}



2. Most respondents attend meetings regularly (~88% attend most years or every year).

3. The best represented Divisions were DVM (41%), DEE (34.5%), DCB (33%), and DAB (29%). The remaining Divisions were identified by 20% or less of respondents, but ALL Divisions were represented.

4. Most respondents are already at a PUI.

Are you currently working at a PUI, or do you plan to apply for a position at a PUI? ^{59 responses}



5. Most respondents have teaching expectations that are greater than research expectations.

If currently at a PUI, what percentage of your effort is dedicated to research? ^{52 responses}



6. There was great consensus that support for PUI faculty was important to them. Many feel under-appreciated or marginalized at meetings, and many expressed that members don't understand what it means to be at a PUI. Here are some comments from the survey:

"I think that sometimes the worst part is that faculty at PUIs which serve such an important role are not taken seriously at the research table. Explaining the demands and expectations of PUIs to other faculty might encourage more collaborative grants and projects between PUIs and non-PUIs. As a participant in efforts both from NIH IDeA funding and NSF EPSCoR funding, I do know that these mechanisms offer great opportunities for junior faculty at PUIs to work with other faculty at research institutions."

"This survey and effort is really great, for a start. Just to be acknowledged is huge."

7. When asked about how SICB could support PUI faculty, the most common answers were to create networking and collaboration opportunities, build a mentoring system for new PUI faculty, increase small funding opportunities (research and travel) for undergraduate students and PUI faculty who often pay out of pocket for meeting expenses, and encourage more workshops and symposia lead by and for PUI faculty.

Proposed meeting events for Phoenix 2022:

• Workshop on funding sources for undergraduate serving institutions

- Brief description: This information session helps PIs at undergraduate-serving institutions understand access to funds available for their research. Many researchers at Primarily Undergraduate Institutions may not have the ability to apply for or the need for large grants. Others would benefit from information about how to compose a competitive large grant from a PUI. Information on the types of grants available for PUIs would be helpful. Proposed panelists include an NSF representative, funded PUI faculty, and an institutional grants office member. Co-organized by Jason Macrander, Ulrike Muller, and Shannon Gerry.
- Who it serves: faculty at PUIs, community colleges, and regional universities
- Assessment: number of participants, feedback from participants in post-workshop survey

• Booth in exhibit hall

- Brief description: This informational booth would be located in the main exhibit hall and staffed with faculty members from PUIs. Information at this booth helps provide individuals who have never been to a PUI understand their importance. There will be message boards to build connections and collaborations.
- Who it serves: grad students and postdocs seeking a job at a PUI, PUI faculty, whole society by increasing visibility of PUI members and eliminating misunderstandings
- Assessment: track visitors, quantify use of message board for connections, question in post-meeting survey
- Undergraduate presenter identification [Note: this was proposed to executive officers, but will not occur at Phoenix 2022]

- Brief description: Undergraduate poster presenters can opt-in to have an identifying label placed next to their poster number during their poster session. Oral presenters will be provided with a digital identifier for their title slide. The purpose of these is to increase visibility of undergraduate research, reduce pressure on undergraduate presenters, and make recruiting/collaboration opportunities more accessible.
- Who it serves: undergraduate students from all institutions. This also serves investigators who are searching for future graduate students to join their lab (see Tweet below).

C SICB Retweeted



Sara Lipshutz @jacanamama · 2h ··· Folks who attend @SICB_ - do you bring undergraduates? Are they looking for a master's? I'd like to advertise a fully funded master's position at Loyola University of Chicago, but I'm not sure how many undergraduates typically attend SICB.



- Assessment: track visitors to posters, gain feedback from undergraduate presenters with a unique post-meeting survey distributed immediately at the end of the meeting. Participation will be increased by offering survey responders the chance to be in a raffle for one of two \$50 gift cards.
- Social gathering for PUI faculty and grad students/postdocs interested in PUI job
 - Brief description: PUI faculty, as well as any other meeting participants, will be openly invited to an informal social gathering one evening. We will send emails to colleagues that encourage them to advertise this to their students and postdocs that may be interested in learning more about PUIs.
 - Who it serves: open to all, so serves faculty, students, and postdocs
 - Assessment: attendance at social

• Interactive poster in a poster session highlighting PUI work

- Brief description: Poster presented by working group members (and potentially others). Half of the poster will highlight PUI research, the other half will be mostly blank so that people can tag it with post-it notes with their ideas. This will also be integrated into the interactive poster such that people, especially early-career colleagues, post questions while the poster is up, and we can answer with other postits at the booth.
- Who it serves: networking for PUI faculty, early career folks who are curious about what it's like to do research at a PUI
- Assessment: engagement at poster based on interactive components

• Quantify the number of meeting participants/presenters from PUIs

 Brief description: Add a question on the meeting registration form to indicate if from a PUI. We also request that a question be added to the form for new and renewing members so that we can determine the level of engagement of PUI faculty over time. Are they members and not attending meetings, or do they leave the society altogether?

- Who it serves: this will give the Executive Committee more data on the number of PUI faculty who stand to benefit from actions taken to better support PUI faculty.
- Assessment: none necessary this is informational.

Post-meeting survey questions will help assess opinions about these specific actions

Requests from SICB:

- Booth in exhibitor hall
- Poster presented in poster session, in a visible spot in the exhibit hall
- Identifying signs/stickers for undergraduate posters [Note: will not occur in Phoenix 2022]
- 2 \$50 gift cards to encourage participation in post-meeting survey [Note: will not occur in *Phoenix 2022*]
- Space and A/V equipment for workshop
- Questions to identify as PUI faculty in conference abstract/registration form and membership form (new and renewing)
- Use of email blasts to communicate with undergraduate presenters and their faculty mentors before (to provide information) and immediately after meeting (to complete brief undergrad-specific survey)
- Addition of PUI-related survey questions to post-meeting survey

Long-Term Goals:

After we have assessed the efforts at the 2022 meeting, we will determine the best pathways forward. We believe that there is a need for a standing committee to address PUI-related concerns and opportunities, but we will wait to make additional recommendations until after our assessment.