

## **Suggested methods and processes for determining recipients of the SPR student poster awards**

This report is an attempt to standardize and systematize how the student poster awards are determined. The intended audience is future program committees and student poster award committees as well as future past-presidents of SPR, who traditionally are in charge of selecting posters, judging them, and determining the winners.

**Background and goals of this document:** Since their inception, the SPR student poster awards have been well received and many winners of the award have gone on to be active in the society as well as contributing to Psychophysiology in a meaningful way. This said, anecdotally and in recent participant feedback surveys, concerns have been raised almost annually regarding some aspect or some criteria of the awards, including how they are determined by the student poster committee. This report attempts to start a document with standardized processes and methods that hopefully can be refined by future committees. The goal of the proposed methods and processes is to heighten transparency, increase the clarity of the process for the committee members themselves, and maintain/increase fairness. The following list is numbered, in temporal order of processes, to facilitate reading and future editing.

### **Suggested processes and methods:**

- 1) **Who is eligible for the award?** Several prior complaints raised by members were centered around eligibility. I believe that the board and officers have recently discussed this question and are in favor of making all predoctoral poster presenters eligible. In my reading, this would mean everybody who is a poster presenter (typically the first author), and who does not have a doctoral degree at the time of submission, including undergraduate students, post-baccs, graduate students, lab managers. It would be worth the while of future committees to determine if this is still in line with the thinking of the society.
- 2) **Ensuring eligibility and collecting the relevant information, reliably.** The eligibility criteria above need to be collected from authors/presenters at the time of poster submission. Going through the spreadsheet of poster submissions, it would be desirable that there be clear and unambiguous information stating whether or not a poster presenter is eligible. To this end, the eligibility information from (1) above needs to be clearly communicated to the membership and to all poster presenters submitting their work.

- 3) **Preselecting a subset of eligible poster submissions.** To ensure a fair and detailed review process, not all eligible submissions can be reviewed by in-person judges at the meeting. Thus, a preselection process has been typically implemented, resulting in approximately 30 finalists whose poster will be visited by poster judges at the meeting. To find the 30 finalists, the program committee will flag promising posters that score high on their criteria. The program committee should let people know that they were selected as finalists, and they can then put that into their CV. Criteria as applied during in-person review at the annual meeting should be used for triaging (i.e., finding the approx. 30 finalists):
  - a. Relevance of the work to psychophysiological science (are physiological variables being measured, are manipulations targeting behavioral/cognitive/affective processes as they interact with physiology)
  - b. Scientific rigor (sample size, statistical/analytical approach, clear predictions/hypotheses or model definition/comparison, results supported by methods and analytical strategy)
  - c. Quality of the abstract as written, including timeliness of the research question, conceptual clarity, and completeness/details of the results as described (vague/in progress versus concrete/finished study).
  
- 4) **Forming the poster award committee.** The SPR past-president is the chair of the poster award committee. This person assembles a committee that is sufficiently staffed to allow for 2 committee members visiting each poster. In the case of 30 finalists, this means that 60 visits will have to be organized, resulting in approximately 5 posters visited by each committee member if the committee has 10-20 members. Thus, a committee size of around 10-20 is recommended. The chair will assemble a committee that represents a wide spectrum of SPR members in terms of demographics and sex or gender, ideally including PUI members, members from different geographical regions, and different career stages. A sufficient number of senior members is recommended, to leverage experience in reviewing psychophysiological science. A portion of members will be recruited from the program committee, on a volunteer basis, initiated by the poster committee chair through the program chairs.
  
- 5) **Preparing the in-person review.** Before the meeting, committee members will read this document, and will be given access to the evaluation criteria and scale (see below). The chair will meet with committee members at the meeting and before the first poster session to discuss questions and emphasize the goal of the process, which is a controlled, standardized review of all finalists' work.

- 6) **Preparing the scoring sheet.** The scoring will be performed using a google sheet accessible to each committee member (i.e., each poster judge). The google form will have the name of the finalist (presenter), the poster number, and fields for scoring on the following criteria, each to be rated on a 1-9 scale, where 1 is “outstanding” and 9 is “needs improvement”. The criteria are as follows:
- a. Quality of the poster, visually (figures, text, clarity of visual presentation)
  - b. Quality of the oral presentation (completeness, clarity, presenters’ knowledge of field and research question as well as methods and results)
  - c. Quality of the responses to questions (one standardized question is the question about next steps in this line of research)
  - d. Relevance of the work to psychophysiological science (are physiological variables being measured, are manipulations targeting behavioral/cognitive/affective processes as they interact with physiology)
  - e. Scientific rigor (sample size, statistical/analytical approach, clear predictions/hypotheses or model definition/comparison, results supported by methods and analytical strategy)
  - f. Quality of the abstract as written, including timeliness of the research question, conceptual clarity, and completeness/details of the results as described (vague/in progress versus concrete/finished study).
- 7) **In-person evaluation at the meeting.** Each finalist poster will be visited by three committee members, i.e. the judges. The judges introduce themselves as poster judges and ask for a short 2-5 minute walk-through. After the walkthrough, they ask questions as appropriate, one of which is about next steps in this line of research. If a finalist is not present at the poster when the judge arrives, one additional attempt will be made to visit the poster at a later time. The judge will then give scores on the 6 criteria on the google sheet and move to the next finalist’s poster where the process is repeated.
- 8) **Aggregation of scores.** The chair will aggregate the scores, making sure that there are no data entry mistakes and no missing values. When in doubt the chair will contact judges for clarification. Finalists are then ranked by the compound score, smaller values resulting in higher ranks.
- 9) **Announcement at the SPR meeting.** The winners are announced at the business meeting by the chair of the committee and given certificates and checks.

**10)The chair shares any notes with the next chair, provides and asks for feedback.**