PREPARING THE COMMUNITY FOR THE DUAL ANONYMOUS REVIEW

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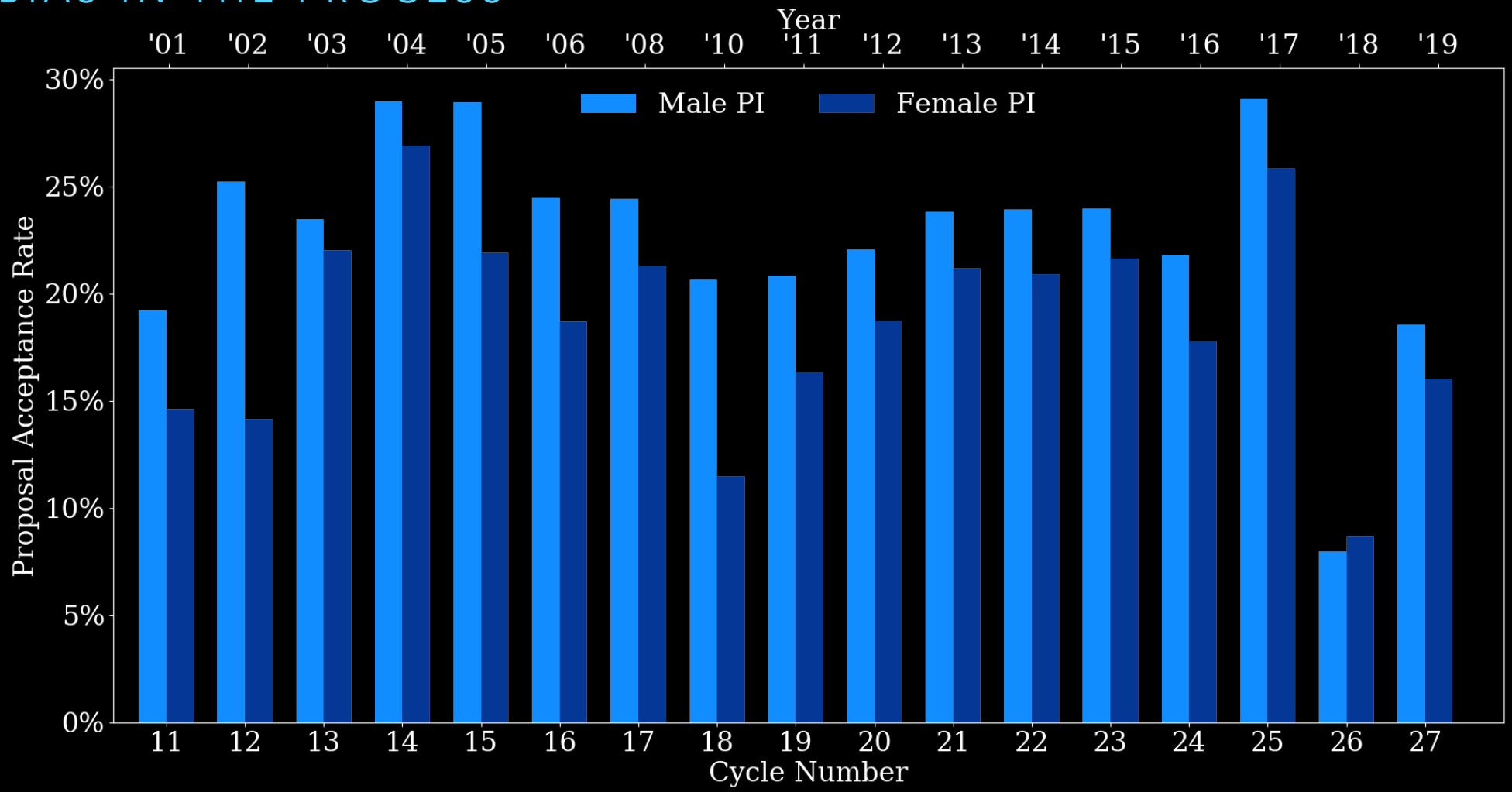
BIAS IN THE PROCESS



- C22: No PI name on cover page
- C23: Alphabetical list of investigators
- C24 & C25: Johnson & Kirk process review, note deficiencies in focus of panel discussions
- C26: 1st dual-anonymous proposal review, requiring anonymized proposals

DISCUSSION, ADVICE, AND WORKING GROUP

- Discussion with STUC, STIC, and other advisors
- Decision to constitute the Working Group on Anonymous Proposal Review:
    - Identify a process for an anonymous review; modifications to the current proposal review process
    - Engage in a dialog with the community to solicit input; identify and mitigate concerns
    - Provide guidelines to community for writing and for reviewing proposals
- Feedback solicited from broader user community via on-line forums, email, etc., and a few meetings.

RECOMMENDATION OF THE WORKING GROUP ON ANONYMOUS PROPOSAL REVIEWS

Based on the available literature, feedback from the community, and the discussions of the Working Group, it is our recommendation that the Institute move toward a dual-anonymous proposal process beginning with Cycle 26 HST in late 2018. We understand that a fully anonymous process requires active participation from community, and that there is notable apprehension as to what the effect of anonymizing will do to the scientific productivity of the observatory. We therefore recommend a phased approach, in which most of review is done anonymously with a sensibility check done at the very end of the review.

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* Tom Brown and Neill Reid (STScI; Ex-officio)

PROPOSAL SUBMISSION AND REVIEW PROCESS

- Proposers craft and submit their proposals with the Astronomers Proposal Tool (APT) to include the technical description of their request (instrument setups, orbit planning and scheduling constraints, etc.) and a separate Scientific Justification and Observation Description (PDF) section.
- Proposals are distributed to reviewers a few weeks after the proposal deadline for preliminary grading.
    - results of the grading determine what proposals are carried forward to the in-person review (triage).
- In person review discusses proposals not eliminated in the triage, to arrive at a scientific ranking, recommending awards up to a nominal orbit allocation.
- The Director makes awards based on these recommendations.

ADOPTED CHANGES TO THE PROPOSAL SUBMISSION PROCESS

- Proposers craft their PDFs (scientific justification and description of observations) to be anonymous.
  - Exclude names and affiliations of the proposing team, including in figures and references to personal websites.
  - Do not claim ownership of past work, e.g., "my successful HST program (GO-######)…" or "Our analysis shown in Strolger et al. 2012…"
  - Rather, cite references in passive third person, e.g., "The HST program GO-##### did…", or "Analysis shown by Strolger et al. 2012…". This includes references to proprietary data and software.
  - Do describe the work proposed, e.g., "We propose to do the following…" or "We will measure the effects of…"

Proposers ***can*** provide reviewers with all the relevant information

COMPLIANCE WITH ANONYMIZING GUIDELINES

- Proposals that have egregiously violated these rules should have already been brought to the attention of the SPG and flagged for disqualification prior to the meeting.
- Less serious cases (a stray “we” or “our”) should be also be pointed out. Panelists should attempt to ignore these less flagrant errors whenever possible, and keep focused on the scientific merits.
- Cases that are too difficult to ignore (levelers could be important in making that decision), or not sufficiently anonymized, should be commented on in the recommendations to the Director, and may be disqualified.
- Panelists should provide specific feedback in their comments to proposers if a proposal was not sufficiently made anonymous.

ADOPTED CHANGES TO THE PROPOSAL SUBMISSION PROCESS

- Proposers must submit a Team Expertise and Background exposition with their Phase I submission. This section is separated from the main body of the proposal, not anonymous, and will be used in a final stage of the review after the scientific ranking is completed.
- Proposers are no longer required to submit detailed Management Plans for Large, Treasury, or Archival programs at Phase I. These will be required and reviewed in budget proposal process.

CONSIDERATIONS FOR THE PEER REVIEW

- **Consider proposals solely on the scientific merit of what's proposed.**
- Do not spend any time attempting to identify the PI or the team. Even if you think you know, discuss the science and not the people.
- In the panel discussions leading up to the scientific ranking, do not make guesses on identities, insinuate the likely identities, or instigate discussion on a possible team's past work.
  - Levelers will be present in each room to help insure this doesn't happen.
- Keep in mind that language can be very important. Utilize the appropriately neutral pronouns (e.g.,"what they propose", or "the team has evaluated data from a C25 program").

CONSIDERATIONS FOR THE PEER REVIEW

- Proposals that have not been sufficiently anonymized should be considered non-compliant and flagged for possible rejection.
- Proposers will have done their job if it is reasonably ambiguous who submitted the proposal.
- However, as this is new, and there may be an occasional "slip-up". If these can be ignored and not impact the anonymity of the review or discussion, then do so. However, if the mistakenly revealed identity simply cannot be ignored, the proposal should be flagged.
  - Science Policy Group personnel should be notified (at any point in the review process) if a proposal is not adequately anonymized
  - Levelers will be present in each discussion room and can help with that decision.

THE ROLE OF LEVELERS

- Levelers are present to keep the panel discussions focused on scientific merit. Unlike the chairs, they are not listening for issues pertaining to the science, rather they are focused on the discussion itself.
- If the discussion veers to comments on the proposing team, their past work, their validity, or their identities, the leveler's job is to refocus that discussion.
- They have the authority to stop the discussion on a proposal.
- If, in the deliberation of a given proposal, an investigator's self-revealed identity becomes impossible to ignore, and that identity has a clear impact on the discussion, the proposal should be flagged for disqualification. The levelers may bring this to the attention of the panel if they feel this threshold has been crossed.

CONFLICTS OF INTEREST

- In some ways conflicts are easier— no need for “major” and “minor” categories. When a reviewer is conflicted, they leave the room.
- We rely more on self-identified conflicts (e.g., interpersonal, close collaborators, and competitors/competing proposals). We will continue to track collaborative/competitive conflicts, and may declare some conflicts in advance of the review.
- As a panelist, if you **strongly** suspect you have a conflict with a given proposal, **you are conflicted** and should leave the room during the discussion.
- However, keep in mind that the anonymizing process makes it very tough to know for certain who the proposers are.

AND A FINAL CHECK

- HST time is openly available to any scientists who presents a highly compelling scientific case. However that time is a highly valued resource that must be used responsibly.
- After the scientific ranking is complete, the panel be given the list of investigators (alphabetized) and the Team Expertise and Background sections for those proposals above their nominal orbit-allocation line.
- Panelists should raise specific proposals for discussion. If there are clear, compelling deficiencies in the expertise required to see through the goals of the proposal, panel must decide by consensus to flag the submission for disqualification, and provide a detailed justification in their comments to the Director.

AND A FINAL CHECK

- The criteria for sufficient expertise is left to the panels in order to evaluate cases as necessary (e.g., particularly difficult datasets, difficult analyses, or programs of exceptionally high risk).
- General inexperience with HST data should not, in itself, be a disqualifier. Nor should the failure to publish past datasets, unless there's an extraordinary issue with the team's publication history.
- **Proposals can only be eliminated in this final review. It will not be used to re-evaluate or upgrade programs below the nominal allocation line.**
- If a panel should chose to essentially disqualify a proposal after the scientific ranking, that panel effectively loses those orbits.
- Comments to the proposers should be based on scientific discussion, i.e., the discussion leading to the scientific ranking. It should not include comments on the team or their expertise.

SUMMARY AND 'TAKE AWAY' POINTS

- STScI has made efforts to understand the potential of biases, and made efforts to improve accessibility
- Text classification machine learning is a excellent method for matching proposals to qualified reviewers.
- Dual-anonymous reviews improves the objectivity in the evaluation of scientific merit. Other steps can be taken to review technical feasibility and responsibility of use.
- There are fewer rationales for not adopting these tools and processes in every peer-reviewed allocation process.

Thanks!