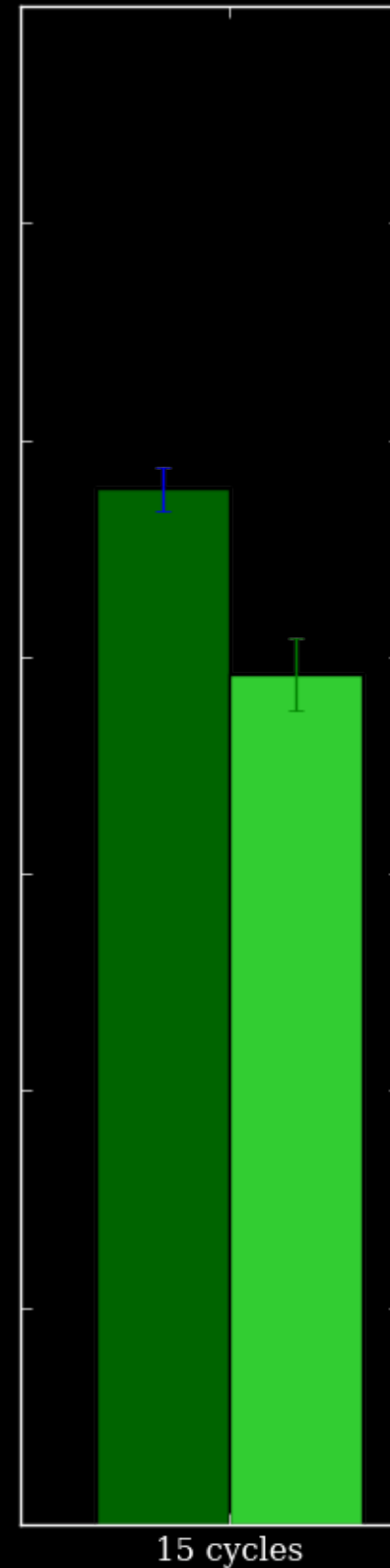
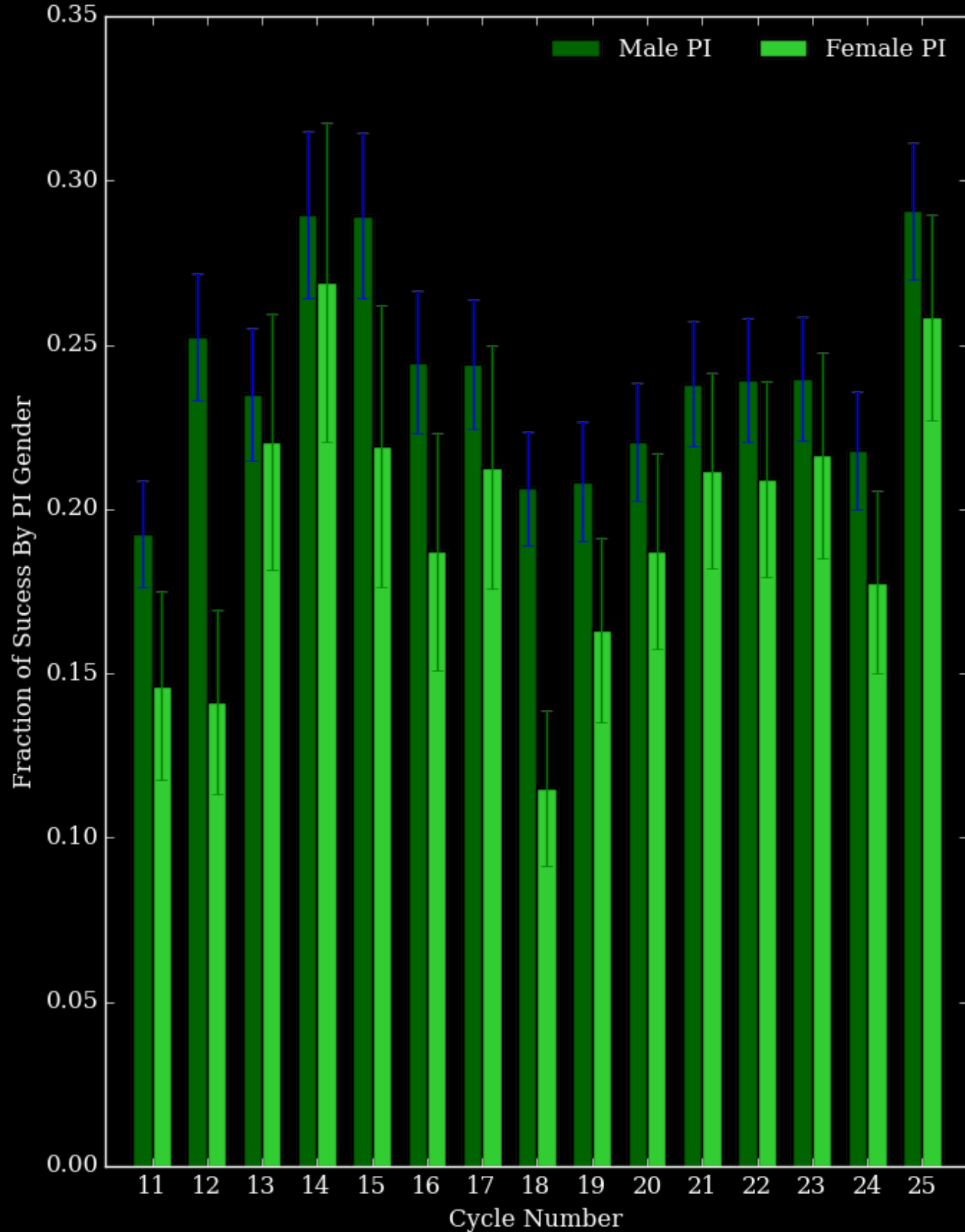


RECOMMENDATIONS OF THE WORKING GROUP ON ANONYMIZING PROPOSALS

Lou Strolger (STScI, Chair), Peter Garnavich (U. Notre Dame),
Stefanie Johnson (U. Colorado), Mercedes Lopez-Morales (CfA,
STUC), Andrea Prestwich (CfA/Chandra), Christina Richey (JPL),
Paule Sonnentrucker (STScI), Michael Strauss (Princeton U.),
and Brian Williams (STScI)

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

WORKING GROUP ON ANONYMOUS PROPOSAL REVIEWS



- ▶ Removed PI names from front-page material in Cycle 22
- ▶ Started listing all investigators alphabetically in Cycle 23
- ▶ S. Johnson's review of Cycles 24 & 25 TAC interestingly found no systematic biases in preliminary grading rounds, and panel conversations focused on qualifications of the team.

WORKING GROUP ON ANONYMOUS PROPOSAL REVIEWS

Based on these findings, it was decided that a WG should evaluate the implications for adopting a fully anonymous proposal process

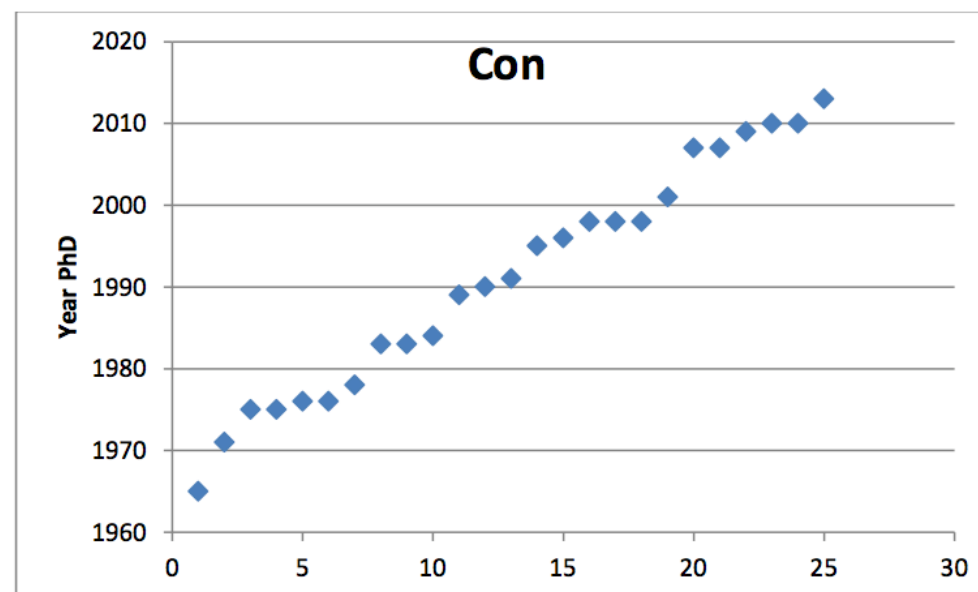
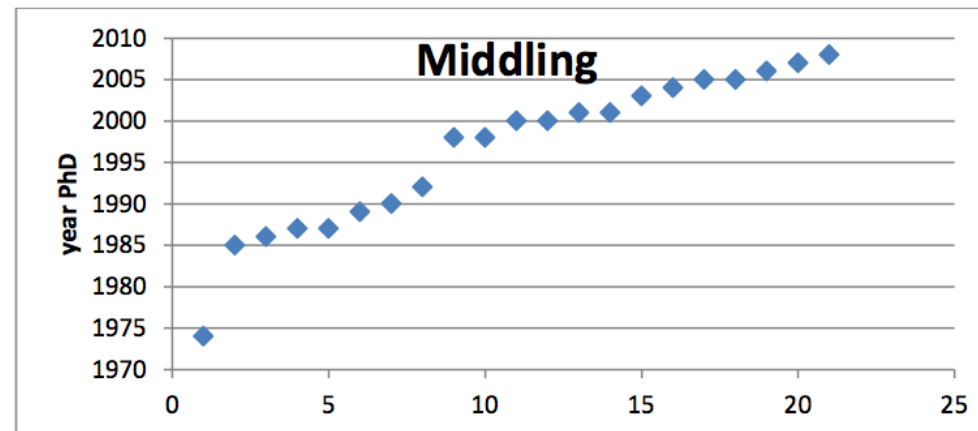
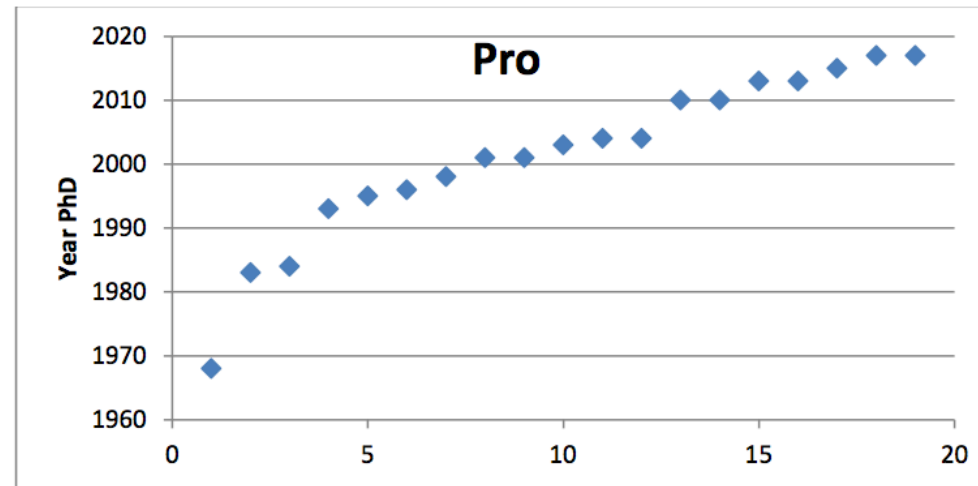
- ▶ charge tasked us with identifying an appropriate process for rendering proposals anonymous including modifications to the current proposal format.
- ▶ providing instructions and guidelines to the community and to reviewers for writing and reviewing proposals.
- ▶ soliciting (and integrating) input from the community; identifying, and mitigating, concerns.

On <https://outerspace.stsci.edu/display/APRWG>, we provide more detail on the literature and websites we used in our review

FEEDBACK FROM THE COMMUNITY

- ▶ After reviewing literature on dual-anonymous reviews, and some discussion, we drafted an (anticipated) FAQ noting the benefits and implications, and drafted guidelines for proposers and reviewers.
- ▶ in February we solicited feedback from the community. Received approx. 60 responses in the requested timeframe.
- ▶ 19 responses in favor, 16 "middling", and 26 opposed.
- ▶ Notable seniority and gender differences in responses.

March 7, 2018



RESPONSE FEEDBACK FROM THE COMMUNITY

Much of the negative feedback could be characterized philosophically — proposals should be judged on BOTH the scientific merit of the proposal AND the reputation of the PI/team.

The community has to ensure that we're not awarding time to teams that are unqualified or underprepared to do the work proposed, or have a bad track records.

The WG considered this feedback carefully, but the consensus was that these are separable quantities that can be judged accordingly.

The WG also recognized that the TAC themselves need to verify that the teams can do what they propose, to maintain community confidence in the process. The WG took this into consideration in finalizing our recommendations.

RECOMMENDATIONS

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.

RECOMMENDED CHANGES TO THE PROPOSAL PROCESS

- ▶ Proposers will craft their PDF submissions to be anonymous in accordance with proposer guidelines.
- ▶ Proposers will be required to submit a Team Expertise and Background section with their Phase I submission. This section will not be anonymous, and will be used in a final sensibility check.
- ▶ Proposers will no longer be required to submit detailed Management Plans for Large, Treasury, or Archival programs at Phase I. These should be required in budget proposals.

RECOMMENDED GUIDELINES

Proposers should:

- ▶ Not include names of the proposing team members or affiliations in the PDF submission. This includes figures and references to personal websites.
- ▶ Cite all references in the 3rd person ("as Williams et al. showed" rather than "as we showed in Williams et al."). Includes references to data (HST or elsewhere) and software.
- ▶ Make reasonable effort to anonymize their submissions.

Reviewers should:

- ▶ Consider proposals solely on the scientific merit of the proposal.
- ▶ Not spend time attempting to identify the PI or the team.
- ▶ Identify (and flag) proposals that are not compliant with the anonymizing guidelines.

COMPLIANCE WITH ANONYMIZING GUIDELINES

- ▶ Egregious cases and flagrant violations should be removed from consideration before the panel discussion
- ▶ Less serious cases (a stray “we” or “our”) should be flagged by panelists for review by the Science Policies Group. Every effort should be taken to ignore the violation and resulting knowledge (Levelers, described later, could be important here).
- ▶ Cases that are too difficult to ignore, or not sufficiently anonymized, should be commented on in the recommendations to the Director.
- ▶ Panelists should provide specific feedback to proposers if their proposal was not sufficiently made anonymous.

CONFLICTS OF INTEREST

- ▶ Generally, conflicts are somewhat easier—no need for “major” and “minor” categories.
- ▶ Rely more on self-identified conflicts. We will continue to track collaborative/competitive conflicts, institutional, etc. and may declare some conflicts in advance
- ▶ As a panelist, if you suspect you have a conflict with a given proposal, you are conflicted.
- ▶ What action needs to happen, e.g., leave the room, not grade, etc. left to the decision of the SPG.

THE ROLE OF LEVELERS

- ▶ Levelers are panel discussion observers tasked with ensuring the discussions stay focused on the science and the merit of the proposal, not the PI or the team.
- ▶ They would have the authority to stop the discussion on a proposal.
- ▶ They will probably be some mix of staff at the Institute and externally-recruited folks.
- ▶ Before the TAC/panels meet, reviewers and levelers will be briefed on the expectations for discussing the anonymized proposals and receive training in avoiding unconscious bias.

AND A FINAL CHECK

- ▶ Once the review is nearly complete and the proposals are scientifically ranked, the panel will then do a review of the proposing teams on the proposals they recommend. Panels will be given
 - ▶ The list of proposal investigators, alphabetized
 - ▶ A short Team Expertise and Background section.

Team Expertise and Background

Dr. Marge Simpson has expertise in HST data reduction for ACS and COS, the prime instruments used in these proposed observations. Dr. Simpson is an expert in galaxy formation and evolution, and has led several past HST observing campaigns with 7 papers published in the past decade on data analysis carried out with HST observations. Dr. Tony Stark is an expert in exoplanet detection via transit events, and has experience in the computational simulations that will be required to interpret these data. Dr. Nancy Drew is an expert in photometric measurements of point sources and stellar evolution codes. Mr. Abraham Lincoln is a graduate student working with Dr. Simpson.

- ▶ If there are clear, compelling deficiencies in the expertise required to see through the goals of the proposal, panel may chose to flag submission for disqualification, and comment to the Director. Proposals cannot be resurrected (upgraded) in this final review.

ASSESSMENT

- ▶ The institute should continue to monitor the productivity, fairness, and overall scientific impact of peer-review process, utilizing its resources in the STScl Library and MAST
- ▶ It will likely take a number of cycles for the impact of these changes to be realized in real metrics, e.g., publication rates and citation rates. However, these figures should be shared periodically with the STUC.
- ▶ Shorter term metrics could provide some insight on improvements to participation: e.g., the number of new proposers (PIs) each cycle, and the success rates of Senior and Junior PIs.
- ▶ We recommend the Institute and the STUC remain aware of additional community feedback. Love it? Hate it? Is this something the community is willing to accept?

FINAL THANKS!

We'd like to thank the STScI Chief Librarian, Jenny Novacescu, for compiling a large number of articles on dual-anonymous peer reviews that have been highly useful in our discussions. We also thank Jessica Kirk (U. Colorado) for her contributions to the discussion, and to the final report.